Appendix 5.3

Air Quality Technical Report

ENVIRON International Corporation

February 2015

Air Quality Technical Report
Entrada South
Los Angeles County, California

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Acronyms and Abbreviations

AB	Assembly Bill
ACC	Advanced Clean Car
AERMIC	AMS/EPA Regulatory Model Improvement Committee
AERMOD	AERMIC Model
AMS	American Meteorological Society
AQMP	Air Quality Management Plan
BTU	British Thermal Units
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal/EPA	California Environmental Protection Agency
CalEEMod®	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAR	California Climate Action Registry
CEQA	California Environmental Quality Act
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CP	Cancer Potency
CTR	Commute Trip Reduction
DBR	Daily Breathing Rate
DOGGR	Division of Oil and Gas and Geothermal Resource
DPM	Diesel Exhaust Particulate Matter
DTSC	Department of Toxic Substances Control
EF	Emission Factor
EIR	Environmental Impact Report
EMFAC	EMission FACtors Model
ENVIRON	ENVIRON International Corporation
EVF	Exposure Value Factor
FIND	Facility INformation Detail
FIP	Federal Implementation Plan
GHG	Greenhouse Gas

HI	Hazard Index
HQ	Hazard Quotient
HRA	Health Risk Assessment
LOS	Level of Service
LST	Localized Significance Threshold
MATES	Multiple Air Toxics Exposure Study
MMRP	Mitigation Monitoring and Reporting Program
MP	Multi-Pathway
MPH	Miles per Hour
NAAQS	National Ambient Air Quality Standards
NED	NED National Elevation Dataset
NHTSA	National Highway Traffic Safety Administration
NO_2	Nitrogen Dioxide
NO_X	Oxides of Nitrogen
NRSP	Newhall Ranch Specific Plan
O_3	Ozone
OEHHA	Office of Environmental Health Hazard Assessment
OFFROAD	Off-road Emissions Inventory Program model
Pb	Lead
PDF	Project Design Features
PM	Particulate Matter
$PM_{2.5}$	Particulates 2.5 Microns or Smaller
PM_{10}	Particulates 10 Microns or Smaller
PVMRM	Plume Volume Molar Ratio Method
REL	Reference Exposure Level
ROG	Reactive Organic Gasses
RTP	Regional Transportation Plan
SCAB	South Coast Air Basin
SCAG	South Coast Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SCVCTM	Santa Clarita Valley Consolidated Traffic Model

SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SO_X	Sulfur Oxides
TAC	Toxic Air Contaminant
TAZ	Traffic Analysis Zone
TDM	Transportation Demand Management
USEPA	United States Environmental Protection Agency
USGS	United States Geologic Survey
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
VTTM	Vesting Tentative Tract Map
WRP	Water Reclamation Plant

Units of Measurements

cy	Cubic Yard
g/bhp-hr	Grams per Horsepower-Hour
g/L	Gram per Liter
gal	Gallon
hr	Hour
L	Liter
lb	Pound
m	Meter
m^3	Cubic Meter
ppb	Parts Per Billion
ppm	Parts Per Million
sqft	Square Feet
$\mu g/m^3$	Microgram per Cubic Meter
yr	Year

Executive Summary

The Entrada South Project includes 339 single-family units, 1,235 multi-family units, and 730,000 square feet (sqft) of commercial uses anticipated to be comprised of approximately 435,000 sqft of office uses and approximately 295,000 sqft of commercial retail uses. In addition, the Project includes a 9.4-acre elementary school, a 5.6-acre public neighborhood park, 101.7 acres of open space areas, two private recreational centers within 2.9 acres, and a 27.2-acre preserve for spineflower.[1] The entire Project site encompasses approximately 382.3 acres within the Vesting Tentative Tract Map area (VTTM 53295), and approximately 119.1 acres of supportive/infrastructure improvements referred to as the External Map Improvements. Facilities and infrastructure proposed as part of the Project consist of a network of roads and trails, drainage and water quality improvements, dry utilities systems, a potable water system, a recycled water system, and a sanitary sewer system. The construction of Entrada South is assumed to occur from 2015 to 2024. This Executive Summary includes a short description of the analysis' scope and methodology and the results of the analysis to assess air quality impacts of the Project.

The Project will result in emissions of criteria pollutants, such as nitrogen oxides (NO_X), carbon monoxide (CO), volatile organic compounds (VOCs), sulfur oxides (SO_X), and particulate matter (PM) of aerodynamic diameter less than 10 micrometers (PM_{10}) or less than 2.5 micrometers ($PM_{2.5}$). This report provides an inventory surveying the emissions that would result from the Project. The Project will also result in emissions of toxic air contaminants (TACs), including diesel particulate matter (DPM). This report provides an evaluation of human health impacts from these TACs that would result from the Project construction.

The California Emission Estimator Model (CalEEMod®) version 2013.2.2 program[2] and other methods based on the regulatory and scientific literature were used to estimate criteria pollutant and TAC emissions for both construction and operation of the Project. Air dispersion modeling of construction emissions and a health risk assessment were performed using methods recommended by regulatory agencies, including the United States Environmental Protection Agency (USEPA), California Air Resources Board (CARB), and South Coast Air Quality Management District (SCAQMD or District). The Project operational emissions were analyzed based on the full build-out in the year 2024.

For Project construction, the mass daily criteria pollutant emissions are less than the significance thresholds for CO, sulfur dioxide (SO_2), PM_{10}, and $PM_{2.5}$, and greater than the significance thresholds for VOC, and NO_X, as shown in **Table ES-1**. The VOC emissions are estimated to exceed the significance threshold in eight of the years during which construction is estimated to occur (i.e., 2017 to 2024) and is primarily due to emissions from architectural coatings. The Project will comply with SCAQMD Rules and Regulations that require the use of

[1] The entire Project site encompasses approximately 382 acres of VTTM area, and approximately 119 acres of the External Map area.

[2] SCAQMD. 2013. California Emissions Estimator Model®. Available at: http://www.CalEEMod.com/. Accessed: May 2014.

low VOC containing coatings to minimize the potential VOC emissions. The NO_X emissions are estimated to exceed the significance threshold in only one of the years during which construction is estimated to occur (i.e., 2016) and is primarily due to the operation of off-road equipment during the grading phase.

The evaluation of the Project construction activities on ambient air quality shows that the Project construction emissions would not exceed the ambient air quality standard California Environmental Quality Act (CEQA) significance thresholds adopted by SCAQMD for nitrogen dioxide (NO_2) 1-hour and annual, CO 1-hour and 8-hour, PM_{10} 24-hour and annual, and $PM_{2.5}$ 24-hour standards, as shown in **Table ES-2-1**. The evaluation of the Project construction activities on ambient air quality also shows that the Project construction emissions would not result in an exceedance of National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS), as shown in **Table ES-2-2** for all pollutants except for the State annual PM_{10} and $PM_{2.5}$ standards and the federal annual $PM_{2.5}$ standard. These exceedances are primarily due to the background concentrations which already exceed each standard. For PM_{10} and $PM_{2.5}$, the SCAQMD established incremental change significance thresholds (see **Table ES-2-1**), and therefore the comparison to the federal and state PM_{10} and $PM_{2.5}$ standards shown in **Table ES-2-2** is provided for informational purposes only. Note also that the primary construction activities that contribute to the estimated ambient air quality impacts are fuel combustion sources (i.e., off-road construction equipment) and fugitive dust. As shown in **Table ES-2-1**, the impacts of the construction activities on local air quality are less than significant. Furthermore the estimated construction emissions are based on conservative assumptions to represent the maximum level of construction activity that may occur on the Project site. The construction modeling results are based on the combination of maximum emissions that may occur with the worst-case meteorological conditions. Thus, while it is possible that these estimates of ambient air quality concentrations may occur, these are conservatively high estimates and may be even less than that estimated.

For Project operations, the mass daily criteria pollutant emissions are estimated to be less than the significance thresholds for SO_2, and greater than the significance thresholds for VOC, NO_X, CO, PM_{10} and $PM_{2.5}$ as shown in **Table ES-3**. The primary source of the operational emissions is the traffic-related mobile sources, except for VOC which has a larger contribution from area sources than from mobile sources. The emissions from traffic-related mobile sources are expected to decline in the future as vehicles are required to become more fuel efficient due to existing regulations (i.e., Pavley Standard and the Advanced Clean Cars (ACC) program). The Project has also incorporated Transportation Demand Management (TDM) programs to help reduce trip generation. The mixed-use design of the Project will help reduce total vehicle miles traveled (VMT) by shortening potential trips. The VOC emissions are due to traffic-related mobile sources and consumer products that are expected to be used by residents in the Project. The Project would not exceed the CO hotspots significance thresholds for any intersections.

The evaluation of the Project construction activities on human health shows that the Project construction would not exceed the cancer and chronic non-cancer significance thresholds as shown in **Table ES-4**.

The Project site in its existing condition emits a minimal amount of criteria pollutants, as shown in **Table ES-5**. As described in the SCAQMD CEQA Handbook, the operational incremental emissions, calculated by subtracting future Project emissions from emissions under existing conditions, should be compared to the significance threshold. Because the Project site emits minimal emissions in its existing condition, the Project emissions were conservatively evaluated assuming a zero existing emissions inventory as shown in **Table ES-3**.

The Project-on-Project onsite criteria air pollutant emissions are summarized in **Table ES-6**. This analysis evaluated the onsite criteria air pollutant emissions that may occur during construction once residential or commercial buildings are completed (estimated to be in 2018). The emissions are conservatively compared to the SCAQMD mass rate localized significance thresholds (mass rate LSTs). The analysis shows that the construction emissions will not exceed the mass rate LSTs, and thus the Project construction will not exceed the ambient air quality significance thresholds established by SCAQMD at new receptors created by the Project. Furthermore, a conservative approach shows that the Project-on-Project onsite criteria air pollutant emissions will not exceed the federal 1-hour NO_2 standard.

Table ES-1. Summary of Regional Project Criteria Air Pollutant Construction Emissions in Comparison to SCAQMD's Maximum Daily Emission Thresholds[1]
Entrada South
Los Angeles County, California

Year	VOC[2]	NOx	CO	SO_2[3]	PM_{10}[4]	$PM_{2.5}$[4]
	Maximum (lbs/day)[1]					
2015	3	32	23	0.06	15	3
2016	24	286	176	0.25	81	21
2017	119	50	50	0.09	32	6
2018	118	30	40	0.08	5	3
2019	119	34	61	0.15	9	4
2020	121	40	90	0.24	15	5
2021	117	21	33	0.08	4	2
2022	116	18	23	0.05	2	1
2023	116	16	21	0.04	2	1
2024	116	15	23	0.05	2	1
Maximum Daily Emissions	121	286	176	0.25	81	21
SCAQMD Threshold[5]	75	100	550	150	150	55
Above Threshold?	**Yes**	**Yes**	No	No	No	No

Notes:
[1] Emissions estimated using CalEEMod®.
[2] ROG as defined by CalEEMod® is assumed to be equal to VOC as defined by SCAQMD.
[3] SO_2 as defined by CalEEMod®. is assumed to represent SOx emissions.
[4] Consistent with SCAQMD Rule 403, fugitive PM_{10} / $PM_{2.5}$ emissions from onsite trucks controlled by watering the construction site three times per day (estimated to reduce emissions by 61%), and by limiting onsite trucks speed to 15 mph.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CEQA - California Environmental Quality Act
CO - carbon monoxide
lbs - pounds
mph - miles per hour
NOx - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
ROG - reactive organic gases
SCAQMD - South Coast Air Quality Management District
SO_2 - sulfur dioxide
SOx - sulfur oxides
VOC - volatile organic compound

Reference:
[5] SCAQMD Air Quality CEQA Significance Thresholds. Available at: http://sfprod.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed: June, 2014.

Table ES-2-1. Summary of Localized Project Criteria Air Pollutant Construction Impacts in Comparison to SCAQMD's CEQA Significance Thresholds
Entrada South
Los Angeles County, California

Pollutant	Averaging Time	Maximum Impact from Project Emissions ($\mu g/m^3$)	Background Pollutant Concentration ($\mu g/m^3$)	Maximum Project + Background Concentration ($\mu g/m^3$)	SCAQMD CEQA Threshold ($\mu g/m^3$)[3]	Maximum Project > Threshold?
Off-Site Receptors (Residential/Sensitive)						
NO_2[1]	1-hour	49	164	213	339	No
	Annual	1.7	37	39	57	No
CO[2]	1-hour	32	2,292	2,324	23,000	No
	8-hour	15	1,261	1,276	10,000	No
PM_{10}	24-hour	2.53	N/A	N/A	10.4	No
	Annual	0.51	N/A	N/A	1.0	No
$PM_{2.5}$	24-hour	0.53	N/A	N/A	10.4	No

Notes:
[1] Background NO_2 concentrations based on monitoring results from Santa Clarita Valley station for the years 2005-2009.
[2] Background CO concentrations based on monitoring results from Santa Clarita Valley station for the years 2008-2010 for 1-hour and 2010-2012 for 8-hour.

Abbreviations:
$\mu g/m^3$ - micrograms per cubic meter
CEQA - California Environmental Quality Act
CO - carbon monoxide
N/A- Not Applicable
NO_2 - nitrogen oxide
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
SCAQMD - South Coast Air Quality Management District

Reference:
[3] SCAQMD Air Quality CEQA Significance Thresholds. Available at: http://sfprod.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed: June, 2014.

Table ES-2-2. Summary of Localized Project Criteria Air Pollutant Construction Impacts in Comparison to NAAQS/CAAQS
Entrada South
Los Angeles County, California

Pollutant	Averaging Time	Maximum Impact from Project Emissions ($\mu g/m^3$)	Background Pollutant Concentration ($\mu g/m^3$)[2]	Maximum Project + Background Concentration ($\mu g/m^3$)	CAAQS Threshold ($\mu g/m^3$)[3]	Maximum Project > CAAQS?	NAAQS Threshold ($\mu g/m^3$)[4]	Maximum Project > NAAQS?
NO_2[1]	1-hour (98th percentile, averaged over 3 years)	23	121	144	N/A	N/A	188	No
	1-hour	49	164	213	339	No	N/A	N/A
	Annual	1.7	37	39	57	No	100	No
SO_2	1-hour	0.045	39	39	655	No	196	No
	24-hour	0.005	14	14	105	No	N/A	N/A
PM_{10}	24-hour	2.5	45.0	48	50	No	150	No
	Annual	0.51	**20.5**	21	20	**Yes**	N/A	N/A
$PM_{2.5}$	24-hour	0.53	31.2	32	N/A	N/A	35	No
	Annual	0.14	**12.6**	13	12	**Yes**	12	**Yes**

Notes:

[1] The modeling analysis for NO_2 was performed using the Plume Volume Molar Ratio Method.

[2] Existing background concentrations for SO_2, PM_{10} and $PM_{2.5}$ are based upon the concentration measured at the nearest air monitoring stations between 2010 and 2012. The 1-hr and 24-hr concentrations are the maximum values measured during that period, except for $PM_{2.5}$. The PM_{10} and $PM_{2.5}$ annual background concentrations are the average values measured over the three years. Existing background concentrations for NO_2 are based upon the concentration measured at the same station, but for years 2005-2009, to be consistent with the ozone data used in the air dispersion modeling. For the 1-hour NO_2 NAAQS, the background is conservatively estimated as the yearly average of the 98th percentile 1-hour concentrations available from 2005-2009. For the 24-hr $PM_{2.5}$ NAAQS, the background is defined as the 98th percentile 24-hour concentration, averaged over 2010-2012. Bold values indicate that the background pollutant concentration exceeds the relevant CAAQS and/or NAAQS threshold.

Abbreviations:

$\mu g/m^3$ - micrograms per cubic meter
CAAQS - California Ambient Air Quality Standard
hr - hour
N/A - Not applicable
NAAQS - National Ambient Air Quality Standards
NO_2 - nitrogen oxide
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
SO_2 - sulfur dioxide

References:

[3] CAAQS. Available at: http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm. Accessed: May 2014.

Table ES-3. Summary of Regional Project Operational Criteria Air Pollutant Emissions in Comparison to SCAQMD's Maximum Daily Emission Thresholds
Entrada South
Los Angeles County, California

Source[1]	VOC[2]	NO_x	CO	SO_2[3]	PM_{10}	$PM_{2.5}$
	(lbs/day)					
Area	97	22	139	0.14	2.4	2.4
Energy (Natural gas use)	0.8	6.8	3.4	0.0	0.5	0.5
Traffic	87	222	984	4	255	72
Total	185	252	1,127	4.1	258	75
SCAQMD Threshold[4]	55	55	550	150	150	55
Above Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**

Notes:
[1] Emissions estimated using CalEEMod®.
[2] ROG as defined by CalEEMod® is assumed to be equal to VOC as defined by SCAQMD.
[3] CalEEMod® reported SO_2 emissions are assumed to represent SO_X emissions.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CEQA - California Environmental Quality Act
CO - carbon monoxide
lbs - pounds
NOx - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
ROG - reactive organic gases
SCAQMD - South Coast Air Quality District Management
SO_2 - sulfur dioxide
SO_x - sulfur oxides
VOC - volatile organic compounds

Reference:
[4] SCAQMD Air Quality CEQA Significance Thresholds. Available at: http://sfprod.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed: June, 2014.

Table ES-4. Summary of Project Construction Health Risk Assessment
Entrada South
Los Angeles County, California

Risk Category	Maximum Impact from Project Emissions	SCAQMD CEQA Threshold[2]	Maximum Project > Threshold?
Off-Site Receptors (Residential/Sensitive)			
Cancer Risk (# in one million)	0.62	10	No
Chronic HI (unitless)	0.02	1.0	No
Acute HI[1] (unitless)	Not Calculated	1.0	No

Notes:

[1] Acute HI associated with Project construction was not quantified since no inhalation Reference Exposure Level (REL) has been determined by OEHHA for DPM.

Abbreviations:

CEQA - California Environmental Quality Act
DPM - diesel particulate matter
HI - Hazard Index
OEHHA - Office of Environmental Health Hazard Assessment
REL - reference exposure level
SCAQMD - South Coast Air Quality Management District

Reference:

[2] SCAQMD Air Quality CEQA Significance Thresholds. Available at: http://sfprod.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed: June 2014.

Table ES-5. Summary of Criteria Air Pollutant Emissions under Existing Conditions
Entrada South
Los Angeles County, California

Category	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing Conditions	(lbs/day)					
	0.08	1.0	0.22	0.07	0.07	0.07

Abbreviations:
CO - carbon monoxide
lbs - pounds
NOx - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
SO_2 - sulfur dioxide
VOC - volatile organic compound

Table ES-6. Summary of Project-on-Project Onsite Criteria Air Pollutant Construction Emissions[1]
Entrada South
Los Angeles County, California

Year	NOx[2]	CO	PM_{10}[3]	$PM_{2.5}$[3]
	Maximum (lbs/day)[1]			
2018	25.3	19.4	1.6	1.6
2019	22.8	19.0	1.4	1.3
2020	20.8	18.6	1.2	1.2
2021	18.9	18.4	1.0	1.0
2022	16.9	18.1	0.9	0.8
2023	15.6	18.0	0.8	0.7
2024	14.6	17.9	0.7	0.6
Maximum Daily Emissions	25.3	19.4	1.6	1.6
SCAQMD Threshold[4,5]	246	1,644	12	6
Above Threshold?	No	No	No	No

Notes:

[1] Onsite emissions estimated using CalEEMod®. The first year of potential Project-on-Project impacts are based on the estimated time of completion of the initial residential or commercial buildings.

[2] It is also estimated that these emissions would below a similar screening threshold for the federal 1-hour NO_2 NAAQS. As a conservative approximation, the screening mass rate threshold for the federal 1-hour NO_2 NAAQS would be 45% lower than that estimated by SCAQMD. This estimate is based on a ratio of the federal threshold (188 $\mu g/m^3$) to the 1-hour NO_2 SCAQMD/CAAQS threshold (339 $\mu g/m^3$). Since the federal threshold is based on the 98th percentile and on a 3-year average, this ratio is a conservatively low estimate.

[3] Consistent with SCAQMD Rule 403, fugitive PM_{10} / $PM_{2.5}$ emissions from onsite trucks controlled by watering the construction site three times per day (estimated to reduce emissions by 61%), and by limiting onsite trucks speed to 15 mph.

[4] SCAQMD Mass Rate LST conservatively chosen for a receptor distance of 25 meters, and for a Project less than or equal to five acres using the receptor area of Santa Clarita Valley. Per a phone discussion with Ian MacMillan at SCAQMD (August 29, 2014), this mass rate LST can be conservatively used to assess Project's greater than 5- acres in size.

Abbreviations:

$\mu g/m^3$ - microgram per cubic meter
CalEEMod® - CALifornia Emissions Estimator MODel
CO - carbon monoxide
CAAQS - California Ambient Air Quality Standard
lbs - pounds
LST - Localized Significance Threshold
mph - miles per hour
NO_2 - nitrogen dioxide
NOx - nitrogen oxides
NAAQS - National Ambient Air Quality Standards
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
SCAQMD - South Coast Air Quality Management District

Reference:

[5] SCAQMD Mass Rate Localized Significance Thresholds. 2008. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2. Accessed: August, 2014.

1 Introduction

The purpose of this technical report is to present the quantitative analyses that were used to evaluate the Project's air quality emissions and health risk impact. Emissions during both construction and operations of the Project were quantified. In addition, air dispersion modeling and a health risk assessment (HRA) of construction emissions was performed, and the results were used to evaluate ambient air impacts and human health impacts associated with construction of the Project.

1.1 Project Description

The Entrada South Project, located on a 501.4-acre site, includes 339 single-family units, 1,235 multi-family units, and 730,000 square feet (sqft) of commercial uses anticipated to be comprised of approximately 435,000 sqft of office uses and approximately 295,000 sqft of commercial retail uses. In addition, the Project includes a 9.4-acre elementary school, a 5.6-acre public neighborhood park, 101.7 acres of open space areas, two private recreational centers within 2.9 acres, and a 27.2-acre preserve for spineflower.[3] Facilities and infrastructure proposed as part of the Project consist of a network of roads and trails, drainage and water quality improvements, dry utilities systems, a potable water system, a recycled water system, and a sanitary sewer system. The construction of Entrada South is assumed to occur between 2015 and 2024. **Table 1** summarizes the land uses for the Project.

Analysis of the Project's criteria pollutant emissions incorporates the following regulatory measures, design elements, and Project design features (PDF):

Regulatory Measures

- <u>Compliance with SCAQMD Rule 403 regarding fugitive dust.</u> The construction emission estimates include a fugitive dust control factor, which is a conservative representation of the level of fugitive dust control expected through compliance with South Coast Air Quality Management District (SCAQMD) Rule 403. Specifically, the Applicant or its successor shall implement control measures in accordance with SCAQMD Rule 403. The Applicant or its successor shall include in construction contracts the fugitive dust control measures in accordance with SCAQMD Rule 403. This analysis quantifies the following aspects of compliance with SCAQMD Rule 403:
  - Watering active construction areas at least three times daily to minimize fugitive dust emissions[4];
  - Limiting vehicle speeds to 15 miles per hour (mph) or less in staging areas and on haul roads.

[3] Open space acreage refers to lots within the tract map designated as open space. Additional open space areas, such as natural drainage courses, roadway medians, and landscaped parkways adjacent to on-site roadways, in addition to the proposed park, recreation centers, and Spineflower Preserve, bring the total open space area to approximately 153 acres.

[4] Note that the control efficiency of watering is dependent on numerous variables such as soil/ground conditions, temperature, and vehicle travel specifics. For unpaved roads, increased frequency and/or water amounts are expected to improve the control efficiency. The control effectiveness in this analysis is based on the CalEEMod® default for this watering assumption.

- Compliance with SCAQMD Rule 1113 regarding Architectural Coatings. This rule limits the volatile organic compound (VOC) content of architectural coatings used in the SCAQMD. The rule provides various standards for the coating category. California Emission Estimator Model (CalEEMod®) includes assumptions regarding the requirements of SCAQMD Rule 1113 (amended September 6, 2013) ;[5]
- The Project will meet the statewide 2013 Building Energy Efficiency Standards, formally known as Title 24, Part 6.

Design Elements

- **Transit System Improvements, Expand Transit Network:** As discussed in Section 3.0 of this Draft Environmental Impact Report (EIR), Santa Clarita Transit service would be expanded to service the Project Site. Specifically, existing routes would be expanded or new routes added to provide transit access from the Project Site to the Valencia Commerce Center area, Valencia Industrial Center area and Newhall Metrolink Station, resulting in a net increase in transit service of approximately 21.8 miles.
- **Neighborhood/Site Design, Provide Pedestrian Network Improvements:** As shown in **Figure 3-13**, Project Trails Plan, in Section 3.0, Project Description, of this Draft EIR, the Project includes an extensive community trail system throughout the Project Site, which would be linked to the Newhall Ranch Specific Plan trail system to the west and the existing community of Westridge to the south. As illustrated, the proposed trail system would include community trails, bike lanes, paseos, and recreational trails. Overall, the Project would include approximately 33,150 linear feet of trails and paseos with direct connections between the proposed residential uses, commercial uses, the elementary school site, recreational centers, and park uses. In addition, approximately 8,090 linear feet of Class II bike lanes would be provided.
- **Neighborhood/Site Design, Traffic Calming Measures:** As discussed above, the Project includes community trails, bike lanes, paseos, and recreational trails that would not only provide the actual infrastructure to facilitate non-vehicular travel, but would also provide a more attractive walking environment through the reduction and slowing of roadway traffic volumes (e.g., marked crosswalks, count-down signal timers, curb extensions, median islands, on-street parking, planter strips with street trees, and chokers). For example:
  - The community trails would be paved pedestrian/bicycle routes in landscaped parkways and located adjacent to major roads in order to connect the existing and proposed communities in the area;
  - Paseos would be paved pedestrian/bicycle routes and would provide pedestrian access between residential neighborhoods and the neighborhood park, the private recreation centers, the elementary school, the community and local trails, and the larger commercial area; and,
  - Recreational trails would provide pedestrian/bicycle access and may or may not be paved.

[5] Available at: http://sfprod.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf?sfvrsn=15. Accessed: June 2014.

- The approximate combined length of these trails is 13,740 linear feet.

Project Design Features

- **PDF-1:** No more than 80 percent of all residential units shall contain natural gas-fired fireplaces;
- **PDF-2:** The Project will use solar water heaters to provide 100 percent of the heating needs for the public pool at the community recreational center. (This PDF is consistent with and implements MM RMDP/SCP GCC-6.);
- **PDF-3:** The Project Applicant or its designee shall prepare a voluntary Commute Trip Reduction (CTR) program to discourage single-occupancy vehicle trips and encourage alternative modes of transportation, such as carpooling, taking transit, walking, and biking. The voluntary CTR program will then be utilized by employers to provide employees with assistance in using alternative modes of travel, and provide both “carrots” and “sticks” to encourage employees. The voluntary CTR program should include all of the following to secure the effectiveness reported by California Air Pollution Control Officers Association (CAPCOA) guidance:
  - Carpooling encouragement
  - Ride-matching assistance
  - Preferential carpool parking
  - Flexible work schedules for carpools
  - Half time transportation coordinator
  - Vanpool assistance
  - Bicycle end-trip facilities (parking, showers and lockers)
- **PDF-4:** Commercial builders/property owners shall promote ride-sharing through a multi-faceted approach that includes, but is not limited to, the measures below:
  - Designating a certain percentage of parking spaces for ride-sharing vehicles that is equivalent to at least one dedicated parking space per 25,000 square feet of office space (verified by County of Los Angeles prior to issuance of building permit(s));
  - Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles (verified by County of Los Angeles prior to issuance of building permit(s)); and
  - Providing a web site or message board for coordinating rides (implemented during operational phase by property owners).
- **PDF-5:** The Project Applicant or its designee shall require employers with 100 or more employees within the Project Site to develop and implement a telecommuting program consisting of the following elements: (1) appointment of a telecommuting coordinator; (2) identification of specific categories of employment positions that are appropriate for telecommuting; (3) provision of required equipment (e.g., hardware, software, and security); and (4) establishment of communications strategies to facilitate satisfaction of employment responsibilities (e.g., instant messaging); and

- **PDF-6:** The Project Applicant or its designee shall work with the applicable agency(ies) with jurisdiction over the local roadway network to facilitate traffic signal coordination along Magic Mountain Parkway from Commerce Center Drive to The Old Road and along The Old Road from Skyview Lane to the signalized Shopping Center Driveway just south of Magic Mountain Parkway).

These regulatory measures, design elements, and project design features are included in the analysis of the Project's criteria pollutant emissions. In addition, the report also developed a Project with project design features scenario to show the emission reductions of the project design features and design elements.

In addition, the following PDF has been incorporated into the Project's design, but not quantitatively factored into the analysis presented herein because of the inherent uncertainty regarding what percentage of home buyers will elect to install solar energy systems on their single-family residences. This PDF will be included, however, in the MMRP to ensure implementation:

- **PDF-7:** Consistent with the Governor's Million Solar Roofs Plan, the Project Applicant or its designee, acting as the seller of any single-family residence constructed as part of the development of at least 50 homes that are intended or offered for sale, shall offer a solar energy system option to all customers who enter negotiations to purchase a new production home constructed on land for which an application for a tentative subdivision map has been deemed complete. The seller shall disclose the total installed cost of the solar energy system option, and the estimated cost savings. (This PDF is consistent with and implements MM RMDP/SCP GCC-5.)

The above regulatory measures, design elements, and project design features are quantifiable, and thus were incorporated in the air quality analysis. A few regulations adopted on the federal and/or state level were not incorporated due to the difficulty in quantifying the reductions consistent with the analysis assumptions. They are:

Regulatory Measures – Non-quantified Reductions

- Heavy-duty Engines and Vehicles Fuel Efficiency Standards adopted by the United States Environmental Protection Agency (USEPA) and the National Highway Traffic Safety Administration (NHTSA) for model year 2014-2018 as described in Section 2.2.1.
- The Pavley regulation mandating higher fuel efficiency standards for cars and light-duty vehicles and the Advanced Clean Cars regulation are not included in the vehicle emissions estimate for the Project since CalEEMod® does not incorporate this benefit for criteria pollutant emissions;[6]

[6] The analysis does not incorporate the potential emission reductions from the USEPA/NHTSA advanced fuel economy and GHG standards for medium and heavy duty trucks for model years 2014-2018 as part of this analysis. If incorporated, it would reduce the estimated emissions for the affected vehicles by 9 to 23 percent over the 2010 baselines. Available at: http://www.epa.gov/otaq/climate/documents/420f11031.pdf. Accessed: May 2014.

Incorporating these regulations for the Project analysis will further reduce the Project's emissions.

1.2 Existing Conditions

The Project site is generally comprised of vacant land, some agricultural uses, a small plant nursery used by the adjacent Six Flags Magic Mountain, and abandoned oil wells and associated access roads. The agricultural area is approximately 7.45 acres in size and used as pasture. The Project site is periodically leased to the movie industry for set locations. All existing emission sources would be eliminated during Project buildout. Appendix A of this report describes in detail the existing land use and associated criteria pollutant emissions. The existing conditions emissions inventory is estimated to be approximately 2.5 pounds per year (lbs/yr) for VOC, 31 lbs/yr for nitrogen oxides (NO_X), 6.7 lbs/yr for carbon monoxide (CO), 2.0 lbs/yr for sulfur dioxides (SO_2), 2.2 lbs/yr for particulate matter (PM) of aerodynamic diameter less than 10 micrometers (PM_{10}), and 2.2 lbs/yr for PM of aerodynamic diameter less than 2.5 micrometers $PM_{2.5}$. If we assume 30 days of operation per year, the daily emissions would be approximately 0.08 lbs/day for VOC, 1.0 lbs/day for NO_X, 0.22 lbs/day for CO, 0.07 lbs/day for SO_2, 0.07 lbs/day for PM_{10}, and 0.07 lbs/day for $PM_{2.5}$.

2 Environmental and Regulatory Setting

2.1 Environmental Setting

2.1.1 Local Air Quality Monitoring Data

The Project site is located within the SCAQMD jurisdiction. The SCAQMD maintains ambient air quality monitoring stations throughout the South Coast Air Basin (SCAB). The Santa Clarita Valley air monitoring station is the station closest to the Project site. The Santa Clarita Valley air monitoring station monitors CO, nitrogen dioxides (NO_2), ozone (O_3), and PM_{10}. However $PM_{2.5}$ and SO_2 are not monitored at this station. As a result the $PM_{2.5}$ and SO_2 concentrations from the East San Fernando Valley station are shown since this monitor is the next closest to the Project site with such data.[7]

Table 2 list the most recent five years of published data at the Santa Clarita Valley monitoring station for CO, NO_2, O_3, and PM_{10}, and at the East San Fernando Valley station for SO_2 and $PM_{2.5}$ which shows:

- O_3 levels have exceeded the State 1-hour, 8-hour standards and the federal standard in all of the past five years;
- CO levels are below the State and federal standards;
- NO_2 levels are below the State and federal standards;
- PM_{10} levels exceeded the State 24-hour standard in 2008 and 2009, and the State annual standards in 2008 through 2011; PM_{10} levels are below the federal 24-hour standard;
- SO_2 levels are below the State and federal standards; and
- $PM_{2.5}$ levels are below the federal 24-hour standard, but exceeded the State and federal annual standards in 2008 through 2012.

2.1.2 Climate and Meteorology

Climate within the SCAB is determined by its terrain and geographical location. The SCAB is a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern border, and high mountains surround the rest of the SCAB. The region lies in the semi-permanent high-pressure zone of the eastern Pacific. The resulting climate is mild and tempered by cool ocean breezes. It maintains moderate temperatures and comfortable humidity, and limits precipitation to a few storms during the winter-wet season. This weather pattern is rarely interrupted. However, periods of extremely hot weather, winter storms, or Santa Ana winds do exist.

Although the SCAB has a semi-arid climate, air near the surface is generally moist because of the presence of a shallow marine layer. With very low average wind speeds, there is a limited capacity to disperse air contaminants horizontally. The typical wind flow pattern fluctuates only

[7] The SCAQMD West San Fernando Valley station is at approximately the same distance from the site compared to the East San Fernando Valle station, and measured lower $PM_{2.5}$ concentration. Therefore, East San Fernando Valley station was conservatively chosen for $PM_{2.5}$ background concentration.

with occasional winter storms or strong northeasterly Santa Ana winds from the mountains and deserts northeast of the SCAB. Summer wind flow patterns represent worst-case conditions, as this is the period of higher temperatures and more sunlight, which results in ozone formation.

2.2 Regulatory Setting

2.2.1 Federal and State Standards

The Federal Clean Air Act (CAA) requires the adoption of national ambient air quality standards (NAAQS), which are periodically updated, to protect the public health and welfare from the effects of air pollution. Current federal standards are set for SO_2, CO, NO_2, O_3, PM_{10}, $PM_{2.5}$, and Lead (Pb).[8]

The State of California also has established additional standards, known as the California Ambient Air Quality Standards (CAAQS),[9] which are generally more restrictive than the NAAQS. The current NAAQS and CAAQS are shown in **Table 3**.

Specific geographic areas are classified as either "attainment" or "non-attainment" areas for each pollutant based upon the comparison of measured data with the NAAQS and CAAQS. Those areas designated as “non-attainment” for purposes of NAAQS compliance are required to prepare regional air quality plans, which set forth a strategy for bringing an area into compliance with the standards. These regional air quality plans developed to meet federal requirements are included in an overall program referred to as the State Implementation Plan (SIP).

Whenever the USEPA revises or establishes a new NAAQS, the State and the USEPA have specific obligations to ensure that the NAAQS is met.[10] These are listed below:

- The USEPA must designate areas as meeting (attainment areas) or not meeting (non-attainment areas) the NAAQS within two years after its promulgation.
- States must submit “infrastructure SIPs” to show that they have the basic air quality management program components in place to implement the NAAQS within three years after its promulgation.
- States must submit non-attainment area SIPs that outline the strategies and emission control measures that will improve air quality and make the area meet the NAAQS within 18 to 36 months after designation.

The steps involved in the SIP process are described below.[11]

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8 NAAQS. Available at: http://www.epa.gov/air/criteria.html. Accessed: May 2014.

9 CAAQS. Available at: http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm. Accessed: May 2014.

10 USEPA. State Implementation Plan Development Process. Available at: http://www.epa.gov/airquality/urbanair/sipstatus/process.html. Accessed: May 2014.

11 USEPA. State Implementation Plan Development Process. Available at: http://www.epa.gov/airquality/urbanair/sipstatus/process.html. Accessed: May 2014.

- SIPs must be developed with public input and be formally adopted by the state and submitted to the USEPA by the Governor's designee (California Air Resources Board [CARB] in California).
- The USEPA reviews each SIP and proposes to approve or disapprove all or part it. The public is then provided with an opportunity to comment on the USEPA's proposed action. The USEPA considers public input before taking final action on a state's plan.
- If the USEPA approves all or part of a SIP, those control measures are enforceable in federal court. In the event a state fails to submit an approvable SIP or if the USEPA disapproves a SIP, the USEPA is required to develop a Federal Implementation Plan (FIP).

Table 4, NAAQS and CAAQS Attainment Status,[12] summarizes the attainment status of Los Angeles County for the pollutants regulated by the NAAQS and CAAQS. As seen in **Table 4**, Los Angeles County is currently in attainment (or unclassified or maintenance) for: the federal, 24-hour PM_{10} standard; the federal and State CO standards; the federal NO_2 standards; the federal and State SO_2 standards; and, the State hydrogen sulfide, vinyl chloride, sulfates, and visibility-reducing particles standards. However, as also shown in **Table 4**, Los Angeles County is currently designated as nonattainment for the federal and State O_3 standards ("extreme"); the State PM_{10} standards; the federal and State $PM_{2.5}$ standards; the federal and State Pb standards; and, the State NO_2 standards.[13,14]

2.2.2 Heavy-duty Engines and Vehicles Fuel Efficiency Standards

On August 9, 2011, the USEPA and the NHTSA announced fuel economy and greenhouse gas (GHG) standards for medium- and heavy-duty trucks, which apply to vehicles from model year 2014-2018.[15] USEPA and NHTSA have adopted standards for carbon dioxide (CO_2) emissions and fuel consumption, respectively, tailored to each of three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to USEPA, this program will reduce GHG emissions and fuel consumption for affected vehicles by 9 percent to 23 percent over the 2010 baselines. These emissions reductions were not included in the Project emissions inventory due to the difficulty in quantifying the reductions consistent with other analysis assumptions. Excluding these reductions results in a more conservative (i.e., higher) Project emissions inventory. While this regulation focuses on the reduction of GHG emissions, it is anticipated that this regulation would also help reduce criteria air pollutants.

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[12] USEPA. The Green Book Non-Attainment Areas for Criteria Pollutants. Available at: http://epa.gov/oaqps001/greenbk/. Accessed: May 2014.

[13] USEPA. The Green Book Non-Attainment Areas for Criteria Pollutants, Available at: http://epa.gov/oaqps001/greenbk/. Accessed: May 2014.

[14] California standard attainment status based on CARB website. Available at: http://www.arb.ca.gov/desig/adm/adm.htm. Accessed: May 2014.

[15] USEPA. 2011. Office of Transportation and Air Quality. EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium-and Heavy-Duty Vehicles. August. Available at: http://www.epa.gov/otaq/climate/documents/420f11031.pdf. Accessed: May 2014.

2.2.3 Mobile Source Reductions (AB 1493)

Assembly Bill (AB) 1493 ("the Pavley Standard" or AB 1493) required CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 through 2016. AB 1493 also required the California Climate Action Registry (CCAR) to develop and adopt protocols for the reporting and certification of GHG emissions reductions from mobile sources for use by CARB in granting emission reduction credits. AB 1493 further authorized CARB to grant emission reduction credits for reductions of GHG emissions prior to the date of enforcement of regulations, using model year 2000 as the baseline for reduction.

In 2004, CARB applied to the USEPA for a waiver under the federal Clean Air Act (CAA) to authorize implementation of the AB 1493 regulations. Subsequently, on June 30, 2009, the USEPA granted the waiver to California for its GHG emission standards for motor vehicles. As part of this waiver, USEPA specified the following provision: CARB may not hold a manufacturer liable or responsible for any noncompliance caused by emission debits generated by a manufacturer for the 2009 model year.

CARB's approach to passenger vehicles (cars and light trucks), under AB 1493, combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. This new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California. These standards will apply to all passenger and light duty trucks used by customers, employees of and deliveries to the Proposed Project. While AB 1493 focuses on the reduction of GHG emissions, it is anticipated that this regulation would also help reduce criteria air pollutants.

2.2.4 Advanced Clean Cars

In January 2012, CARB approved the Advanced Clean Cars (ACC) program,[16] a new emissions-control program for model year 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions. While ACC focuses on the reduction of GHG emissions, it is anticipated that this regulation would also help reduce criteria air pollutants.

2.2.5 Local Regulatory Agencies: South Coast Air Quality Management District and Southern California Association of Governments

The SCAQMD was created by the 1977 Lewis-Presley Act, which merged four county air pollution control bodies (i.e., Los Angeles, Orange, and Riverside Counties, and the non-desert portion of San Bernardino County) into one regional district for the SCAB. In SCAB, the SCAQMD is the agency responsible for protecting public health and welfare through the administration of federal and State air quality laws, regulations, and policies. Included in the SCAQMD's tasks are the monitoring of air pollution, the preparation of the Air Quality

[16] Advanced Clean Car program information. Available at: http://www.arb.ca.gov/msprog/consumer_info/advanced_clean_cars/consumer_acc.htm. Accessed: May 2014.

Management Plan (AQMP) for the SCAB, and the promulgation of rules and regulations. The AQMP includes strategies and tactics to be used to attain the NAAQS and CAAQS standards in SCAB, whereas the rules and regulations include procedures and requirements to control the emission of pollutants and to prevent adverse impacts.

Within the Project area, Southern California Association of Governments (SCAG) is the federally-designated Metropolitan Planning Organization and the state-designated transportation planning agency for six counties: Riverside, San Bernardino, Los Angeles, Ventura, Imperial, and Orange Counties.

The SCAQMD and SCAG are jointly responsible for preparing the AQMP for the SCAB. In particular, the 2012 AQMP is based on demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by SCAG for their 2012 RTP, which forms part of SCAG's SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Thus, consistency with the planning assumptions contained within the RTP/SCS demonstrates consistency with SCAQMD's 2012 AQMP. SCAG's 2012-2035 RTP/SCS was adopted in April 2012.[17] The goals and policies of the RTP/SCS that reduce vehicle miles traveled (VMT) focus on transportation and land use planning that include building infill projects, locating residents closer to where they work and play, and designing communities so there is access to high quality transit service. The 2012-2035 RTP/SCS is expected to reduce per capita transportation emissions by 9 percent by 2020 and 16 percent by 2035.

Pursuant to Government Code Section 65080(b)(2)(K), SCAG's Sustainable Communities Strategy does not: (i) regulate the use of land, (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it.

2.2.6 State Implementation Plan Status

The AQMP and SIP processes generally occur concurrently: The SIP is required under the CAA to provide the framework for non-attainment areas to come into attainment, and the AQMP is prepared by the SCAQMD, in part, to satisfy the requirement for a SIP. The AQMP traditionally evaluates all criteria pollutants; portions of the AQMP represent the required SIP elements, which are then transmitted to the CARB for review, approval, and transmittal to the USEPA for inclusion in the overall California SIP.

The SCAQMD has been preparing AQMPs (and related SIP elements) since the 1989 AQMP. The following table lists the AQMPs prepared by the SCAQMD and a short summary of included SIP elements.

AQMP	SIP Elements (major elements with federal deadlines only)
1989 AQMP	1-hour O_3 SIP elements.

[17] SCAG. 2012. 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy. April. Available at: http://rtpscs.scag.ca.gov/Pages/default.aspx. Accessed: May 2014.

AQMP	SIP Elements (major elements with federal deadlines only)
1991 AQMP	1-hour O_3 SIP elements (attainment demonstration).
1994 AQMP	1-hour O_3 SIP elements designed to forestall a potential FIP and PM_{10} SIP elements describing Best Available Control Measures.
1997 AQMP	PM_{10} SIP elements (attainment demonstration) and updated 1-hour O_3 SIP elements.
1999 AQMP amendment	Revisions to 8-hour O_3 SIP elements as part of the 1997 AQMP lawsuit settlement agreement.
2003 AQMP	Update of some PM_{10} and 1-hour O_3 SIP elements.
2007 AQMP	New federal standards requiring 8-hour O_3 and $PM_{2.5}$ SIP elements (including new attainment demonstrations and control measures).
2012 AQMP	New federal 24-hour $PM_{2.5}$ standard requiring 24-hour $PM_{2.5}$ SIP elements (attainment demonstration).
2016 AQMP	In development. Will address 2006 8-hour O_3 standard (75 ppb) requirements, including a 2032 attainment demonstration, as well as several 1997 8-hour O_3 standard (80 ppb) anti-backsliding provisions.

As previously mentioned, **Table 4** shows that Los Angeles County is currently designated as nonattainment for the federal and State O_3 standards ("extreme"); the State PM_{10} standards; the federal and State $PM_{2.5}$ standards; the State NO_2 standards.[18,19] The current status of the SIPs for these non-attainment pollutants are shown below:

- The 2007 AQMP provides attainment demonstrations for the annual $PM_{2.5}$ standard by April 5, 2015 and of the 8-hour O_3 standard by December 31, 2023; SCAQMD and CARB submitted the amendments to the USEPA. In 2009 and 2011, respectively, at the request of the USEPA, CARB provided clarifying revisions to the annual $PM_{2.5}$ and 8-hour O_3 SIP amendments. In 2011, the USEPA approved the control strategy, emission reduction commitment, and attainment demonstration of the annual $PM_{2.5}$ standard by April 5, 2015. In 2012, the USEPA approved the Basin's control strategy, emission reduction commitment, and attainment demonstration of the annual 8-hour O_3 standard by June 15, 2024.[20]
- The 2012 AQMP provides attainment demonstrations for the 24-hour $PM_{2.5}$ standard by 2019 and the 1-hour O_3 standard by 2023.[21,22] In addition, it provides supplemental

[18] USEPA. The Green Book Non-Attainment Areas for Criteria Pollutants. Available at: http://epa.gov/oaqps001/greenbk/. Accessed: May 2014.

[19] California standard attainment status based on CARB website. Available at: http://www.arb.ca.gov/desig/adm/adm.htm. Accessed: May 2014.

[20] CARB. 2013. "South Coast Air Basin 2012 $PM_{2.5}$ and Ozone State Implementation Plans, Resolution No. 13-3." Available at: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-carb-epa-sip-submittal-(december-2012)/2012-aqmp-carb-epa-sip-submittal-board-agenda-item.pdf. Accessed: June 2014.

[21] SCAQMD. 2012. Air Quality Management Plan Main Document. December. Available at: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-

information for the approved 8-hour O_3 SIP. On January 25, 2013, CARB approved the 2012 AQMP,[23] which was subsequently submitted to the USEPA. To date, the 2012 AQMP has not been formally approved by the USEPA.[24] However, the 2012 AQMP is still considered by the SCAQMD as the current and approved AQMP.

  – Recent court and USEPA decisions regarding SIP Implementation Guidance and the annual average $PM_{2.5}$ standard (12 microgram per cubic meter [µg/m^3]) have created uncertainty about whether the 2012 AQMP (24-hour $PM_{2.5}$ SIP) will be reviewed by USEPA. (USEPA withdrew its 24-hour $PM_{2.5}$ Implementation Guidance in June 2013.) A SIP for the annual average $PM_{2.5}$ standard will likely be required in the 2017/2018 time frame.

- The 2016 AQMP was supposed to provide the first attainment demonstration for the 8-hour O_3 standard (0.075 parts per million [ppm]). However, court decisions have resulted in changes to the USEPA's proposed Ozone Implementation Guidance (released June 2013). It is likely that SCAQMD will opt for the "Proposed Modified Schedule" with the AQMP (and O_3 SIP) due before July 2016.
  – As with previous O_3 SIP amendments, the major policy issue will be "filling the black box" of emission reductions necessary for attainment but for which no technology/control measure has been identified. SCAQMD calls for developing policy papers related to this issue in mid-2015, but this will likely be a discussion among AQMP Advisory Group members much earlier.

The applicable emission budgets in SCAB are established by non-attainment (or maintenance) criteria pollutants by years of analysis (milestone, attainment, and planning horizon years) and are presented in several USEPA-approved SIP amendments and SCAQMD's adopted AQMPs. These emission budgets also serve as emission limits for projects included in the SCAG RTP.

2.3 Significance Thresholds

The SCAQMD has established significance thresholds[25] to assess the impacts of project-related construction and operational emissions on regional and local ambient air quality. **Table 5** shows the mass daily thresholds for construction and operations as adopted by the SCAQMD for criteria pollutant emissions and toxic air contaminants (TACs). The analysis summarized in this

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management-plan/final-2012-aqmp-carb-epa-sip-submittal-(december-2012)/2012-aqmp-carb-epa-sip-submittal-main-document.pdf. Accessed: June 2014.

[22] SCAQMD. 2012. Air Quality Management Plan Appendix VII – 1-hour Ozone Attainment Demonstration. Available at: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-carb-epa-sip-submittal-(december-2012)/2012-aqmp-carb-epa-sip-submittal-appendix-vii.pdf. Accessed: June 2014.

[23] Available at: http://www.arb.ca.gov/planning/sip/planarea/scabsip.htm#2012_plan. Accessed: May 2014.

[24] CARB. 2013. "South Coast Air Basin 2012 $PM_{2.5}$ and Ozone State Implementation Plans, Resolution No. 13-3." Available at: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-carb-epa-sip-submittal-(december-2012)/2012-aqmp-carb-epa-sip-submittal-board-agenda-item.pdf. Accessed: June 2014.

[25] SCAQMD. 2011. Air Quality Significance Thresholds. March. Available at: http://sfprod.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed: June 2014.

report estimates project-related construction and operational mass emissions and compares the emissions to these mass daily significance thresholds. This report also compares the ambient air quality impacts and human health impacts from onsite construction activities to the federal, state, and local ambient air quality and risk standards and/or incremental change thresholds, consistent with the significance thresholds SCAQMD has established. For PM_{10} and $PM_{2.5}$, the SCAQMD established incremental change significance thresholds based on SCAQMD Rule 1303. The Project does not include an evaluation of ambient air impacts for operational emissions because the Project does not include any of the land uses that typically require such an analysis to be performed based on SCAQMD's methodology.[26] The primary emissions from operational activities that would require an evaluation of project emissions relative to ambient air quality significance thresholds include, but are not necessarily limited to, nitrogen oxide (NO_X) and CO combustion emissions from stationary sources such as flares and turbines, and/or significant on-site mobile sources such as earth-moving equipment.

[26] SCAQMD. 2008. Final Localized Significance Threshold Methodology. July. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2. Accessed: June 2014.

3 Criteria Pollutant Emission Inventories

This section describes the methodology that ENVIRON International Corporation (ENVIRON) used to develop the criteria pollutant emission inventories associated with the Project, which include construction and operational emissions. Sub-categories of the operational emissions include: area sources, natural gas use, and mobile sources. As discussed above, the criteria air pollutant emissions inventory for the existing conditions is described in Appendix A.

3.1 Methodology for Calculating Mass Emissions

This analysis focuses on the potential change in air quality due to implementation of the Project. The Project would result in criteria pollutant emissions from construction and operational sources. Construction activities would generate emissions at the site from off-road construction equipment, architectural coating and paving, and on roadways resulting from construction-related truck hauling, vendor deliveries, and worker commuting. Operational activities would also generate emissions at the Project site from miscellaneous onsite sources, such as natural gas combustion for cooking and comfort heating and landscaping equipment, and from operational-related traffic.

To estimate the criteria pollutant emissions from the Project, ENVIRON directly or indirectly relied primarily on emissions estimation guidance from government-sponsored organizations, energy surveys, Project specific studies (e.g., traffic study), and emission estimation software.

3.1.1 CalEEMod®

ENVIRON primarily utilized the CalEEMod® version 2013.2.2[27] to assist in quantifying the criteria pollutant emissions in the inventories presented in this report for the Project. CalEEMod® is a statewide program designed to calculate both criteria and GHG emissions from development projects in California. This model was developed under the auspices of the SCAQMD and received input from other California air districts and is currently supported by several lead agencies for use in quantifying the emissions associated with development projects undergoing environmental review. CalEEMod® utilizes widely accepted models for emission estimates combined with appropriate default data that can be used if site-specific information is not available. These models and default estimates use sources such as the USEPA AP-42 emission factors,[28] CARB's on-road and off-road equipment emission models such as the EMission FACtor model (EMFAC) and the Off-road Emissions Inventory Program model (OFFROAD).

CalEEMod® is based upon CARB-approved Off-Road and On-Road Mobile-Source Emission Factor models (OFFROAD and EMFAC, respectively), and is designed to estimate construction and operational emissions for land use development projects and allows for the input of project

[27] SCAQMD. 2013. California Emissions Estimator Model®. Available at: http://www.caleemod.com/. Accessed: May 2014.

[28] The USEPA maintains a compilation of Air Pollutant Emission Factors and process information for several air pollution source categories. The data is based on source test data, material balance studies, and engineering estimates. Available at: http://epa.gov/ttnchie1/ap42/. Accessed: May 2014.

specific information. OFFROAD[29] is an emission factor model used to calculate emission rates from off-road mobile sources (e.g., construction equipment, agricultural equipment). EMFAC[30] is an emission factor model used to calculate emissions rates from on-road vehicles (e.g. passenger vehicles, haul trucks). The off-road diesel emission factors used by CalEEMod® are based on the CARB OFFROAD 2011 program.

CalEEMod® provides a simple platform to calculate both construction emissions and operational emissions from a land use project. It calculates both the daily maximum and annual average for criteria pollutants as well as total or annual GHG emissions. Specifically the model aids the user in the following calculations:

- Short term construction emissions associated with demolition, site preparation, grading, building, utility installation, coating, and paving from off-road construction equipment, on-road mobile equipment associated with workers, vendors, and hauling, and fugitive dust associated with grading, demolition, truck loading, and roads, and volatile emissions of reactive organic gasses (ROG) from architectural coating and paving. Fugitive dust from windblown sources such as storage piles are not quantified in CalEEMod® which is consistent with approaches taken in other comprehensive models.
- Operational emissions associated with the fully built out land use development, such as on-road mobile vehicle traffic generated by the land uses, fugitive dust associated with roads, volatile emissions of ROG from architectural coating, off-road emissions from landscaping equipment, volatile emissions of ROG from consumer products and cleaning supplies, wood stoves and hearth usage, natural gas usage in the buildings, electricity usage in the buildings, water usage by the land uses, and solid waste disposal by the land uses.

In addition, CalEEMod® contains default values and existing regulation methodologies to use in each specific local air district regions. ENVIRON used default factors for Los Angeles County for the emission inventory, unless otherwise noted in the methodology descriptions below. Details regarding the specific methodologies used by CalEEMod® can be found in the CalEEMod® User's Guide and associated appendices.[31] The CalEEMod® output files are provided for reference in Appendix B to this report.

3.2 Construction Emissions

This section describes the estimation of emissions from construction activities at the Project site. The proposed plan for constructing the Project anticipates construction to occur from 2015 to 2024. The major construction phases included in this analysis are:

- Site Preparation: involves clearing vegetation (e.g., grubbing and tree/stump removal) and stones prior to grading.

[29] CARB. 2011. Off Road Mobile Source Emission factors. Available at: http://www.arb.ca.gov/msei/msei.htm. Accessed: May 2014.

[30] CARB. 2011. EMFAC 2011 Release. Available at: http://www.arb.ca.gov/msei/modeling.htm. Accessed: May 2014.

[31] SCAQMD. 2013. California Emissions Estimator Model®. Available at: http://www.caleemod.com/. Accessed: May 2014.

- Grading: involves the cut and fill of land to ensure the proper base and slope for the construction foundation.
- Utilities Installation: involves trenching and associated activities to install vital utilities.
- Building Construction: involves the construction of structures and buildings.
- Architectural Coating: involves the application of coatings to both the interior and exterior of buildings or structures.
- Paving: involves the laying of concrete or asphalt such as in parking lots or roads.

There will not be a demolition phase for this development since the construction will occur on previously undeveloped land. Site preparation, grading, utilities installation, and some paving are expected to happen within the Vesting Tentative Tract Map (VTTM) and External Map areas, while the new building development will only occur within the VTTM area.

In addition, Project grading would require the removal and recompaction of approximately 7.8 million cubic yards of existing material in a balanced cut and fill operation. Grading would include mass grading for the development areas, along with fine grading for development pads. Mass grading would consist of rough grading operations that would provide for major roads and infrastructure, including improvements outside of VTTM 53295 (i.e., the External Map Improvements), establish drainage patterns, and create building pads for the various land uses within the Project Site. In addition to mass grading and fine grading, remedial grading of approximately 2.0 million cubic yards of material may also be required depending upon future site-specific soils and geotechnical investigations. Specifically, remedial grading may be required for alluvial removal and re-compaction; landslide conditions; stabilization fills; slope wash conditions (i.e., unsuitable soils that need to be removed and recompacted prior to the placement of fill materials; and lot and street over-excavation in cut areas. Graded slopes would be landscaped and irrigated pursuant to County recycled water from the Valencia WRP. Recycled water would be delivered to the Project grading and erosion control requirements.

Emissions from these construction phases are largely attributable to fuel combustion by construction equipment and worker commuting vehicles.

Construction-related emissions of ROGs[32], NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ were estimated using CalEEMod®. PM emissions are composed of exhaust emissions and fugitive emissions. Exhaust emissions are typically given out by a combustion engine of on-road vehicles and/or off-road equipment. Fugitive emissions are PM dust suspended in the air by wind action and construction related activities.

The construction schedule, off-road equipment lists and equipment specifications were Project specific estimates for all phases except for the equipment lists and specifications for the building construction and architectural coating phases. The off-road equipment lists and equipment specifications for building construction and architectural coating phases were based on CalEEMod® defaults as an estimate for the Project. In addition, the daily trip counts for workers,

[32] ROG as defined by CalEEMod® is assumed to be equal to VOC as defined by SCAQMD.

and vendors were also based on CalEEMod® defaults taking into account the number of residential dwelling and commercial square footages to be built each year. CalEEMod® default values were used for equipment and vehicle emission factors, equipment load factors and vehicle trip lengths. The emission calculations are intended to estimate maximum daily emissions. The analysis assumed that equipment operates for 6 or 8 hours a day[33], 5 days a week for site preparation, grading utility installation, and paving phases based on Project specific estimates, and 6, 7, or 8 hours a day, 5 days a week for building construction and architectural coating phases based on CalEEMod® default. The construction was assumed to start in 2015 and will be completed in 2024. The construction schedule, equipment lists, and on-road vehicle trips are shown in **Tables 6 through 8b**, respectively.

While the exact construction schedule and equipment mix may vary from the analysis, the maximum daily emissions are not expected to be higher than that estimated given the conservative assumptions included in this analysis. Due to the complexity of the construction schedule and equipment lists, multiple CalEEMod® runs were performed to estimate the construction emissions. The outputs from the various CalEEMod® runs were compiled to estimate the overall construction emissions. The CalEEMod® output files are included in Appendix B.

3.2.1 Emissions from Construction Equipment

The emission calculations associated with construction equipment are from off-road equipment engine use based on the equipment list and phase length. The fugitive emissions from off-road equipment performing work are also included in this analysis.

Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod® assumes all of the equipment operates on diesel fuel. The calculations associated with this screen include the running exhaust emissions from off-road equipment. Since the equipment is assumed to be diesel, there are no starting or evaporative emissions associated with the equipment as these are *de minimis* for diesel-fueled equipment. CalEEMod® calculates the exhaust emissions based on CARB's OFFROAD2011 methodology using the equation presented below.[34]

$$Emissions_{Diesel} = \sum_{i} (EF_i \times Pop_i \times AvgHP_i \times Load_i \times Activity_i)$$

Where:

EF = Emission factor in grams per horsepower-hour (g/bhp-hr) as processed from OFFROAD2011

Pop = Population, or the number of pieces of equipment

[33] Because the Project specific estimates are partial units(e.g., 0.5) for some of the equipment, the daily operating hours per equipment used in CalEEMod® was revised to conserve the total daily operating hours while keeping the equipment unit integer.

[34] SCAQMD. 2013. California Emissions Estimator Model® User's Guide, Appendix A. Available at: http://www.CalEEMod.com/. Accessed: May 2014.

AvgHp = Maximum rated average horsepower

Load = Load factor

Activity = Hours of operation

i = equipment type

CalEEMod® was also used to calculate fugitive dust associated with the site preparation and grading phases from three major activities: haul road grading, earth bulldozing, and truck loading. As mentioned above, there will be no soil import/export. As recommended by SCAQMD, the fugitive dust emissions from the grading phase are calculated using the methodology described in USEPA AP-42. PM_{10} and $PM_{2.5}$ emissions from fugitive dust will be controlled by watering the construction site three times a day and were estimated to be reduced by 61%.

The emissions associated with off-road construction equipment are shown in **Table 9**. Most of the emissions occur during the grading and building construction phases.

3.2.2 Emissions from On-Road Trips

Construction generates on-road vehicle exhaust, evaporative, and dust emissions from personal vehicles for worker and vendor commuting, and trucks for soil and material hauling. These emissions are based on the number of trips and VMT along with emission factors from EMFAC2011. As mentioned above, there will be no soil hauling trucks for the Project. There will conservatively 64 trips a day of vegetation waste hauling trip during the site preparation phase.

The emissions from mobile sources were calculated in CalEEMod® with the trip rates, trip lengths, and emission factors for running from EMFAC2011 as follows:[35]

$$\text{Emissions}_{\text{pollutant}} = \text{VMT} * \text{EF}_{\text{running,pollutant}}$$

Where:

$\text{Emissions}_{\text{pollutant}}$ = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

$\text{EF}_{\text{running,pollutant}}$ = emission factor for running emissions

Evaporative emissions, starting and idling emissions were also calculated in CalEEMod® by multiplying the number of trips by the respective emission factor for each pollutant.

CalEEMod® was also used to calculate on-road fugitive dust associated with paved and unpaved roads consistent with the method discussed in the traffic section. All vehicle miles traveled from worker commuting, vendor commutes, and the vegetation hauling trips are accounted for. The Project does not expect to have any soil or demolition hauling trips.

[35] SCAQMD. 2013. California Emissions Estimator Model® User's Guide, Appendix A. Available at: http://www.CalEEMod.com/. Accessed: May 2014.

On-road vehicles that will be used on-site to transport construction supervisors in each phase were modeled in CalEEMod® as off-site on-road vehicles to represent the emissions associated with these vehicles. Fugitive dust associated with these on-site on-road vehicles was calculated assuming 100% unpaved roads.

The emissions associated with off-site on-road activities are shown in **Table 10**. The emissions associated with the on-site on-road trips are shown in **Table 9**.

3.2.3 Emissions from Architectural Coating

VOC or ROG off-gassing emissions result from evaporation of solvents contained in surface coatings. The program calculates the VOC evaporative emissions from application of residential and non-residential surface coatings using the following equation:[36]

$$E_{AC} = EF_{AC} \times F \times A_{paint}$$

Where:

E = emissions (lb VOC)

EF = emission factor (lb/ sqft)

A = building surface area (sqft). The total surface for painting was assumed to equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage. All of the land use information provided by a metric other than square footage was converted to square footage using the default conversions or user defined equivalence. For surface parking lot, the painted area was assumed to be 6 percent of the parking lot area.

F = fraction of surface area. The default values based on SCAQMD methods used in their coating rules are 75% for the exterior surface and 25% for the interior.

The emission factor (EF) is based on the VOC content of the surface coatings and is calculated estimated using the equation below:

$$EF_{AC} = C_{VOC}/454(g/lb) \times 3.785(L/gal)/180*sqft)$$

Where:

EF = emission factor (lb/sqft)

C = VOC content (g/L or gram per liter).

The emission factors for coating categories were calculated using the equation above based on default VOC content from provided by the air districts or CARB's statewide limits in CalEEMod®. The emissions associated with architectural coating are shown in **Table 11**.

[36] SCAQMD. 2013. California Emissions Estimator Model® User's Guide, Appendix A. Available at: http://www.CalEEMod.com/. Accessed: May 2014.

3.2.4 Emissions from Paving

While there is no specific screen associated with asphalt paving emissions, CalEEMod® estimates VOC off-gassing emissions associated with asphalt paving of parking lots using the following equation:[37]

$$E_{AP} = EF_{AP} \times A_{parking}$$

Where:

E = emissions (lb)

EF = emission factor (lb/acre). The Sacramento Metropolitan Air Quality Management District (SMAQMD) default emission factor is 2.62 lb/acre.

A = area of the parking lot (acre)

The emissions associated with paving are shown in **Table 11**.

3.2.5 Maximum Daily Emissions from Construction

The daily emissions estimated due to construction of the Project are summarized in **Table 12**. Since construction phases may overlap in time, the analysis adds together the maximum daily emissions for each construction phase that are estimated to overlap in time to identify the maximum daily emissions (as shown in the construction schedule assumptions, **Table 6**). The estimated emissions show that the regional daily emissions for construction are less than the SCAQMD mass daily significance thresholds for CO, SO_2, PM_{10}, and $PM_{2.5}$, and greater than the SCAQMD mass daily significance thresholds for VOC and NO_X.

The construction emission estimates are assumed to conservatively represent the maximum emissions for the Project. While the exact construction schedule and equipment mix may vary from the current analysis, the maximum daily emissions are not expected to be higher than that estimated given the conservative assumptions included in this analysis. The VOC emissions are estimated to exceed the significance threshold in two of the ten years that construction is estimated to occur and is primarily due to emissions from architectural coatings. The Project will comply with SCAQMD Rules and Regulations that require the use of low VOC containing coatings to minimize the potential VOC emissions. The NO_X emissions are estimated to exceed the significance threshold during the construction primarily due to the operation of off-road equipment during the grading phase.

The Project-on-Project onsite criteria air pollutant emissions are summarized in **Table ES-6**. This analysis evaluated the onsite criteria air pollutant emissions that may occur during construction once residential or commercial buildings are completed (estimated to be in 2018). The emissions are conservatively compared to the SCAQMD mass rate localized significance

[37] SCAQMD. 2013. California Emissions Estimator Model® User's Guide, Appendix A. Available at: http://www.CalEEMod.com/. Accessed: May 2014.

thresholds (mass rate LSTs)[38], chosen for the shortest receptor distance of 25 meters, and for a Project less than or equal to five acres using the receptor area of Santa Clarita Valley.[39] The analysis shows that the construction emissions will not exceed the mass rate LSTs, and thus the Project construction emissions will not exceed the ambient air quality significance thresholds established by SCAQMD at new receptors created by the Project. Onsite NO_X emissions were also compared to a similar screening threshold for the federal 1-hour NO_2 NAAQS, since this threshold was introduced after the mass LSTs were published. As a conservative approximation, the screening mass rate threshold for the federal 1-hour NO_2 NAAQS would be at least 45% lower than that estimated by SCAQMD. This estimate is based on a ratio of the federal threshold (188 µg/m^3) to the 1-hour NO_2 SCAQMD/CAAQS threshold (339 µg/m^3), on which the NO_2 mass rate LST is based. Since the federal threshold is based on the 98th percentile and on a 3-year average, this estimate is a conservatively low estimate. This approach shows that the Project-on-Project onsite criteria air pollutant emissions will not exceed the federal 1-hour NO_2 standard.

3.3 Operational Emissions

The criteria air pollutant operational mass emissions of ROGs, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ were estimated using CalEEMod® assuming the build-out year of 2024. The CalEEMod® output can be found in Appendix B. The source categories considered include area sources (e.g. landscaping-related fuel combustion sources and natural gas fireplaces), natural gas use, and mobile sources.

3.3.1 Area Sources

Area sources are those emissions that are generally too small to be uniquely identified as point sources, and are thus generally aggregated as a group. CalEEMod® estimates emissions for the following sources, which are included under the category of “area” sources: landscaping equipment (e.g., lawn mowers), hearths, consumer products, and architectural coatings. Criteria pollutant emissions due to natural gas combustion in buildings, except for hearths, could also be considered area sources, but are reported by CalEEMod® in the emissions associated with building energy use (described below). The criteria pollutant emissions generated by the Project were calculated using CalEEMod® defaults, based upon the land uses that will be included in each project.

3.3.1.1 Hearths

The criteria air pollutant emissions for the Project were calculated using CalEEMod® defaults, except as noted below.

- All cooking stoves and fireplaces were assumed to be natural gas burning, based on SCAQMD Rule 445;

[38] Available at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds. Accessed: August 2014.

[39] Per a phone discussion with Ian MacMillan at SCAQMD (August 29, 2014), this mass rate LST can be conservatively used to assess Project's greater than 5 - acres in size.

- Only 80% of the residential dwelling units will contain fireplaces based on one of the project design features.

The criteria pollutant emission factors are based on USEPA AP-42. The average heating rate in British Thermal Units (BTU) per hour for fireplaces in homes is 60,000 BTU/hr. Default values for annual fireplace usage is specific to Los Angeles County. Natural gas is assumed to have 1,020 BTU per standard cubic foot.[40] Due to an error in CalEEMod®, the NO_X, CO, and SO_2 emissions were estimated separately.

The Project without PDFs scenario assumes the CalEEMod® default percentage of dwelling units (90 percent) will contain fireplaces.

3.3.1.2 Consumer Products

Consumer products are chemically formulated products used by household and institutional consumers, including, but not limited to, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings. SCAQMD did an evaluation of consumer product use compared to the total square footage of buildings using data from CARB consumer product Emission Inventory. To calculate the VOC emissions from consumer product use, the following equation was used in CalEEMod®:[41]

$$\text{Emissions} = \text{EF} \times \text{Building Area}$$

Where:

EF = pounds of VOC per building square foot per day

The factor is 1.98×10^{-5} lbs/sqft/day for SCAQMD areas.

Building Area = the total square footage of all buildings including residential square footage

3.3.1.3 Architectural Coatings

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers. The operational emission methodology from architecture coating is the same as the construction. All land use buildings are assumed to be repainted at a rate of 10 percent of area per year. This is based on the assumptions used by SCAQMD.

[40] SCAQMD. 2013. California Emissions Estimator Model® User's Guide, Appendix A. Available at: http://www.CalEEMod.com/. Accessed: May 2014.

[41] SCAQMD. 2013. California Emissions Estimator Model® User's Guide, Appendix A. Available at: http://www.CalEEMod.com/. Accessed: May 2014.

3.3.1.4 Estimated Emissions from Area Sources

The Project scenario, assuming 80 percent of the residential dwelling units with natural gas fireplaces, was estimated to result in the following emissions: 97 lbs/day of VOC, 22 lbs/day of NO_X, 139 lbs/day of CO, 0.14 lbs/day of SO_2, 2.4 lbs/day of PM_{10}, and 2.4 lbs/day of $PM_{2.5}$.

The Project without PDFs scenario, assuming 90 percent of the residential dwelling units with natural gas fireplaces was estimated to result in the following emissions: 98 lbs/day of VOC, 25 lbs/day of NO_X, 140 lbs/day of CO, 0.16 lbs/day of SO_2, 2.6 lbs/day of PM_{10}, and 2.6 lbs/day of $PM_{2.5}$. Detailed criteria pollutant emissions for Project and Project without PDFs scenarios are shown in **Tables 13a and 13b**, respectively. The primary source of VOC (or ROG) emissions are consumer products, and the primary source of NO_X, PM_{10}, and $PM_{2.5}$ emissions are the hearths. The primary source of CO emissions is due to landscaping equipment.

3.3.2 Building Energy Use

Criteria pollutants are emitted as a result of activities in buildings for which natural gas is typically used as an energy source. Combustion of any type of fuel emits criteria pollutants directly into the atmosphere; when this occurs in a building, this is a direct emission source associated with that building. Unless otherwise noted, CalEEMod® default parameters were used. For both residential and non-residential land-uses, climate zone 9, which best represents the County of Los Angeles, was selected based on the CalEEMod® forecast climate zone map. The estimated emissions reflect the Project's commitment to construct buildings that meet the 2013 Title 24 part 6 building code.[42] Because the 2013 Title 24 will be 25 percent more efficient than the 2008 Title 24 for residential construction and 30 percent better for nonresidential construction, these percentage reductions were applied to the relevant CalEEMod® default energy intensity factors to estimate the energy demand for the Project.

In addition, the estimated emissions for the Project scenario also reflect the Project's commitment to use solar water heaters for the recreational center pools. The estimated emissions for the Project without PDFs scenario assumed natural gas heated pools.

Tables 14a and 14b summarizes the total natural gas use, and total criteria pollutant emissions for Project. The Project scenario, assuming solar water heaters for the pool, was estimated to result in the following emissions: 0.79 lbs/day of VOC, 6.8 lbs/day of NO_X, 3.4 lbs/day of CO, 0.04 lbs/day of SO_2, 0.55 lbs/day of PM_{10}, and 0.55 lbs/day of $PM_{2.5}$. The Project without PDFs scenario, assuming natural gas-heated pool scenario, was estimated to result in the following emissions: 0.96 lbs/day of VOC, 8.4 lbs/day of NO_X, 4.7 lbs/day of CO, 0.05 lbs/day of SO_2, 0.66 lbs/day of PM_{10}, and 0.66 lbs/day of $PM_{2.5}$. The primary source of emissions is natural gas usage in the residential land use.

3.3.3 Mobile Source Emissions

The emissions associated with on-road mobile sources are generated from residents, workers, customers, and delivery vehicles visiting the land use types in the project. The emissions

[42] CEC. News Release. 2013. Available at: http://www.energy.ca.gov/releases/2012_releases/2012-05-31_energy_commission_approves_more_efficient_buildings_nr.html. Accessed: May 2014.

associated with on-road mobile sources includes running and starting exhaust emissions, evaporative emissions, idling emissions, brake and tire wear, and fugitive dust from paved and unpaved roads. Starting, idling, and evaporative emissions are associated with the number of starts or time between vehicle uses and the assumptions used in determining these values are described below. All of the other emissions are dependent on VMT. ENVIRON estimated traffic emissions using the trip rates specified in the Traffic Study[43], trip reduction consistent with the CAPCOA guidance[44], and trip length from the Santa Clarita Valley Area Plan (also called OVOV plan),[45] and CalEEMod®. These components are discussed below.

The analysis for criteria pollutants does not include the benefit of reductions from the regulatory programs such as Pavley and ACC. AB 1493 ("the Pavley Standard") requires CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 and thereafter. The CalEEMod® model includes GHG emission reductions for non-commercial passenger vehicles and light-duty trucks of model year 2017 – 2025. While there is an expectation that the increased fuel efficiency would also help reduce criteria pollutant emissions, CalEEMod® does not incorporate a specific estimate or the benefits to criteria air pollutants. The ACC program introduced in 2012, combines the control of smog, soot causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2015 through 2025. This regulation has also not been incorporated into CalEEMod®.

There are other regulations that may also further reduce mobile source related emissions such as the USEPA/NHTSA advanced fuel economy and GHG standards for medium and heavy duty trucks for model years 2014-2018. The analysis does not incorporate the potential emission reductions from the USEPA/NHTSA advanced fuel economy and GHG standards for medium and heavy duty trucks. Excluding these reductions results in a more conservative (i.e., higher) Project emissions inventory given the likely decreases in GHG emissions associated with the USEPA/NHTSA standards.

Thus, if these programs were incorporated, the traffic mobile related emissions would be expected to be lower than that estimated here. While these programs focus on the reduction of GHG emissions, it is anticipated that this regulation would also help reduce criteria air pollutants.

3.3.3.1 Trip Type

As discussed in the Project's Traffic Study, future year traffic forecasts are derived using the Santa Clarita Valley Consolidated Traffic Model (SCVCTM) taking into account the six trip types as described below:

- H-W: Home-based worker trips

[43] Stantec. 2014. Entrada South (VTTM 053295) Traffic Impact Analysis. June.

[44] Stantec. 2014. CAPCOA GHG Reduction Strategies for Transportation – Entrada South (VTTM 53295). July.

[45] Los Angeles County Department of Regional Planning. Santa Clarita Valley Area Plan. Available at: http://planning.lacounty.gov/ovov. Accessed: May 2014.

- H-S: Home-based shopping trips
- H-O: Home-based "other" (i.e., non-work, non-shopping) trips
- O-W: Other-based work trips
- O-O: Other-based other trips

Each trip type has unique characteristics, which are reflected in the model. All trips that are generated within the model limits are first categorized into one of the five trip types. The model then calculates the distribution of each traffic analysis zone based on the trip type. The final step of the trip distribution process aggregates all the trips together into a single trip table matrix that includes all five trip types. Since the emissions ultimately depend on the total VMT, the Project analysis used the aggregated trip rate provided in the Project Traffic Study. Additional description regarding the trip types evaluated for the Project is included in Appendix C.

3.3.3.2 Trip Length

As discussed in the Project's Traffic Study, the trip length was developed consistent with the trip distribution process described above. The appropriate trip length characteristics of the various types of trip are reflected in the traffic forecasting process with the SCVCTM. The SCVCTM has been utilized in a number of prior transportation planning studies for the Santa Clarita Valley, such as the Santa Clarita Valley Area Plan/City General Plan update (also called the OVOV Plan).[46] That study effort produced average trip length estimates for various land use and transportation network scenarios. The OVOV plan adopted by the County and City estimates an average trip length of 11.6 miles[47]. This average trip length represents an aggregated trip length of the five trip types discussed above and was used in this analysis for all external trips. External trips are those that may begin or end outside of the Project site. Note that some of the external trips are expected to originate and end within the Westside Area (as defined to include Mission Village, Homestead South, Entrada North, Landmark Village, Legacy Village, Potrero Village, Homestead North and Valencia Commerce Center). External trips beginning or ending in the Westside Area would have a shorter average trip length than the average trip length of 11.6 miles. The current analysis conservatively does not include this shorter average trip length for trips beginning or ending in the Westside Area.

The analysis also incorporates an estimate for internal trip lengths (i.e., trips that originate and end within the Project boundaries). An internal trip length of one mile was estimated based on

[46] Los Angeles County Department of Regional Planning. Santa Clarita Valley Area Plan. Available at: http://planning.lacounty.gov/ovov. Accessed: May 2014.

[47] As discussed in the main text, the County's and City's OVOV plan assumes that the average trip length for the Project area is 11.6 miles; and, the analysis conducted here utilizes that trip length assumption for all external trips associated with the Project. Note that, prior to the adoption of the OVOV plan, the SCVCTM identified 16.6 as the average home-work trip length outside of the Project area and 10.7 miles as the average home-work trip length within the Project area. (See RMDP/SCP Final EIS/EIR (November 2010; SCH No. 2000011025), pages RTC-F02-42 – RTC-F02-43.) Accordingly, in comparison to other portions of the Santa Clarita Valley, the trip length reduction benefits of the Applicant's Westside Project Area development plans, which provide for the creation of planned communities that integrate job-creating and community-serving uses in an interconnected geographic area, have long been recognized in the traffic model used in the Santa Clarita Valley. (See Appendix F of this technical report for a definition of what constitutes the geographic area associated with the Westside Project Area.)

the average distance between residential and commercial locations within the Project site. The overall trip length was estimated using a weighted average trip length of the external and internal trip lengths. The weighting factor was the average daily trips estimated in the Project Traffic Study for external and internal trips. Since CalEEMod® generally relies upon trips (not tripends) as the basis for inputs to estimate traffic related emissions, the tripend data in the Project Traffic Study were converted to trips in order to develop the CalEEMod® model inputs consistent with the information in the Project Traffic Study. This conversion was performed by dividing the internal tripends by two, to estimate the number of internal trips because each internal trip has two tripends. The results of this analysis are shown in **Table 15**.

3.3.3.3 Trip Reductions

The Project will reduce trip generation based on its implementation of the traffic-related design elements and project design features, collectively referred to as Transportation Demand Management (TDM) features. The estimates of the trip reductions from the TDM measures are shown in **Tables 16a and 16b** for the Project. The reductions are based on an evaluation consistent with the CAPCOA guidance[48] (see Appendix D).

3.3.3.4 Pass-by and Diverted Trips

Trip link types further describe the characteristics of the trip attracted to each land use, whether it is a primary trip, a diverted link trip, or a pass-by trip. For example, a commercial customer pass-by trip could be a person going from home to shop on his/her way to work. In addition, a commercial customer diverted-link trip could be a person going from home to work, and on its way making a diversion to shop. Pass-by trips generate virtually no additional running emissions but could generate additional resting and startup emissions. Diverted trips generate less running emissions compared to primary trips, and can also generate additional resting and startup emissions.

The trip distribution and trip assignment processes utilized in SCVCTM estimates primary trip, pass-by trips, and diverted trips. When utilizing traffic forecasts produced by the SCVCTM, it is unnecessary to undertake additional steps to estimate the number of diverted trips or pass-by trips since they are reflected in the total trip forecasts produced by the model. The mobile source inputs are reported in **Table 17** for the Project.

3.3.3.5 Estimated Emissions from Mobile Sources

The Project scenario incorporating the TDM measures was estimated to generate approximately 100,721,105 VMT/yr and was estimated to result in the following emissions: 87 lbs/day of VOC, 222 lbs/day of NO_X, 984 lbs/day of CO, 3.9 lbs/day of SO_2, 255 lbs/day of PM_{10}, and 72 lbs/day of $PM_{2.5}$.

The Project without PDFs scenario, assuming no commitment to the TDM measures, was estimated to generate approximately 110,519,000 VMT/yr and was estimated to result in the following emissions: 95 lbs/day of VOC, 244 lbs/day of NO_X, 1,080 lbs/day of CO, 4.2 lbs/day of SO_2, 280 lbs/day of PM_{10}, and 79 lbs/day of $PM_{2.5}$.

[48] Stantec. 2014. CAPCOA GHG Reduction Strategies for Transportation – Entrada South (VTTM 53295). July.

Detailed mobile source emissions are reported in **Tables 18a and 18b** for Project and Project without PDFs scenarios, respectively. The primary sources of emissions are due to the residential and commercial land uses.

3.3.4 Operational Emissions Results

The regional daily emissions estimated due Project operations are summarized in **Tables 19a and 19b** for Project and Project without PDFs scenario, respectively. These emissions were estimated using the methodology as described above. The estimated emissions include onsite emissions from stationary sources and offsite emissions from on-road sources.

The estimated emissions show that the operational maximum daily emissions for both Project and Project without PDFs scenarios are less than the SCAQMD mass daily significance thresholds for SO_2 and greater than the SCAQMD mass daily significance thresholds for VOC, NO_X, CO, PM_{10}, and $PM_{2.5.}$ The primary source of the operational emissions is the traffic mobile sources. The emissions from traffic mobile sources are expected to gradually decline in the future as cars become more fuel efficient due to existing regulations (i.e., Pavley Standard and the ACC program).[49] The Project has also incorporated TDM programs to help reduce trip generation. The mixed-use design of the Project will also help reduce total VMT by shortening potential trips. The VOC emissions are primarily due to the consumer products that are expected to be used by residents in the Project.

[49] This analysis does not quantify emissions reduction from the Pavley Standard or the Advanced Clean Cars program, which are expected to reduce the emissions estimated from mobile sources.

4 Compliance with Ambient Air Standards

4.1 Air Dispersion Modeling Methodology

AERMOD was used to evaluate the air dispersion of pollutants from the Project site in order to evaluate compliance with Ambient Air Standards. As of December 9, 2006, USEPA promulgated AERMOD as a replacement for ISCST3 as the recommended dispersion model.

4.1.1 AERMOD

The AMS/EPA Regulatory Model Improvement Committee (AERMIC) Model (AERMOD) (Version 12345) was used to estimate offsite ambient air concentrations. This model, which has been approved for use by USEPA, CARB, and SCAQMD, incorporates multiple variables in its algorithms including:

- Meteorological data representative of surface and upper air conditions;
- Local terrain data to account for elevation changes;
- Physical specification of emission sources including information such as:
  - Location;
  - Release height; and
  - Source dimensions.

Dispersion model averaging times are specified based on the averaging times of ambient air quality standards and the air quality significance thresholds established by the appropriate regulatory agencies. Averaging times include 1-hour, 8-hour, 24-hour, and annual for the various pollutants (see **Table 5**). Dispersion modeling was performed using the maximum daily emissions and the complete 365-day meteorological data set to evaluate short-term impacts, thereby ensuring that all likely meteorological conditions are considered. This approach is conservative, since it assumes that maximum daily emissions could occur on any day, even though there is a low probability that worst-case meteorological conditions would occur at exactly the same time as when the maximum emissions would occur.

The following other options in AERMOD were also selected for use in this analysis. The regulatory default option except for the NO_2 modeling was selected based the SCAQMD modeling recommendations[50], which established the settings for variables such as building downwash, urban modeling dispersion option, receptor heights, off-site receptor grid spacing, and project boundary receptor spacing. The air dispersion model was run using a unit emission factor approach except for the NO_2 modeling which uses actual emission rate and the Plume Volume Molar Ratio Method (PVMRM), which is considered a non-regulatory default option. The model output based on a unit emission factor approach was incorporated into a post-processing calculation with the emission rates to estimate the air concentrations at each receptor.

[50] SCAQMD. 2005. SCAQMD Modeling Guidance for AERMOD. Available at: http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/modeling-guidance. Accessed: June 2014.

4.1.1.1 Source Characterization

Two different types of emission sources are used in the air dispersion model; area sources and volume sources. Sources that can be reasonably represented as emitting at a uniform rate over a two-dimensional surface, such as dust from a lot, are modeled as area sources. Sources that can be reasonably represented as emitting at a uniform rate from a three-dimensional space, such as exhaust from a group of construction vehicles, are modeled as volume sources. Polygon area sources and volume sources covering the planned construction areas were used to represent fugitive emissions and combustion sources, respectively, for the construction modeling (see **Figure 1**). Consistent with the SCAQMD Localized Significance Threshold Methodology, the specific sources used to characterize construction phases are described below.

Volume Sources for Off-road Equipment

- Dimension of the volume source – 20 meter (m) x 20 m
- Release Height – 5 m (center of volume source above the ground)
- Initial Lateral Dimension – 4.7 m (length of side/4.3)
- Initial Vertical Dimension – 1.4 m

Area Sources for Fugitive Dust

- Release Height – 0 m ground based
- Initial vertical dimension – 1 m

4.1.1.2 Meteorology

SCAQMD provides AERMOD model-ready meteorological data sets for use in air quality and risk impact analyses in the SCAB. SCAQMD's Santa Clarita meteorological data set was selected based on that station's close geographic proximity to the Project site. The SCAQMD meteorological data set for January 1, 2005 to December 31, 2009 was used for the analysis.[51] **Figure 2** depicts the wind rose for these data.

4.1.1.3 Land Use

The land uses surrounding the Project site are somewhat undeveloped, with some residential uses to the south and the Six Flags Magic Mountain amusement park to the north. The closest residential land uses are located adjacent to the Project site along the southern boundary. AERMOD offers the option of using either rural or urban dispersion characteristics. Selection of rural or urban dispersion characteristics depends on the predominant land use within a three-kilometer radius of the site. SCAQMD recommends that the urban land use option be chosen for this area.[52]

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[51] SCAQMD Meteorological Data for AERMOD. Available at: http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data. Accessed: June 2014.

[52] SCAQMD. 2005. Risk Assessment Procedures for Rules 1401 and 202. Available at: http://sfprod.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf?sfvrsn=4. Accessed: June 2014.

Data specifying terrain elevations of sources and receptors are imported into the model. Elevations are based on National Elevation Datasets (NEDs) and consist of an array of regularly spaced points on a horizontal plane for which an elevation is specified. NEDs used in this analysis were obtained from the United States Geologic Survey (USGS) and are spaced at 10 meters by 10 meters.[53]

4.1.1.4 Receptors

The following receptors are included in the AERMOD mode per SCAQMD guidance[54, 55]:

- Fence line Receptors 25 m apart (SCAQMD Guidance)[56]
- Fine Grid 25 m x 25 m up to 200 m from the fence line
- Coarse Grid 100 m x 100 m from 200 m to 1000 m from the fence line
- Sensitive Receptors are discrete receptors placed in up to ¼-mile from the fence line
- SCAQMD identifies the following as sensitive receptors: long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, child care centers, and athletic facilities[57].

The locations of all receptors are illustrated on **Figure 3**. Criteria pollutant impacts were evaluated at receptors where a person can be situated for an hour or longer at a time, consistent with SCAQMD guidance.[58] The fence line receptors were included to evaluate for the 1-hour and 8-hour thresholds. Consistent with SCAQMD guidance, the fence line receptors were not included for the annual and 24-hour thresholds since it is not expected that a person will be at the fence line receptors for such lengths of time. Receptor heights were assumed to be one meter based on currently available documentation from SCAQMD and Office of Environmental Health Hazard Assessment (OEHHA).[59]

A search for non-residential sensitive receptors (such as daycare centers, schools, hospitals, and other care facilities[60]) showed that there are two schools located within ¼-mile of the Project

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[53] USGS NED. Available at: http://viewer.nationalmap.gov/viewer/. Accessed: June 2014.

[54] SCAQMD. 2005. SCAQMD Modeling Guidance for AERMOD. Available at: http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/modeling-guidance. Accessed: June 2014.

[55] SCAQMD. 2011. Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act (AB2588). June. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588_guidelines.pdf?sfvrsn=0. Accessed: June 2014

[56] Fenceline receptors were only included when evaluating CO 1-hr and 8-hour concentrations because it is unlikely that a person will be at the fenceline for longer period of time (i.e., 24-hour, or annual).

[57] SCAQMD. 1993. CEQA Air Quality Handbook. April.

[58] SCAQMD. 2008. Final Localized Significance Threshold Methodology. July. Pg 3-2. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2. Accessed: June 2014.

[59] Cal/EPA. 2003. The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Office of Environmental Health Hazard Assessment. August. Available at: http://www.oehha.org/air/hot_spots/pdf/HRAguidefinal.pdf. Accessed: June 2014.

[60] For purposes of this analysis, retirement homes are included in this grouping of nonresidential sensitive receptors.

site, West Ranch High School and New Edge Academy. Non-residential sensitive receptor locations were identified from searches of the following on-line public databases:

- California Community Care Licensing Division (http://ccld.ca.gov/docs/ccld_search/ccld_search.aspx)
- California Department of Education, California School Directory (http://www.cde.ca.gov/re/sd)
- California Office of Statewide Health Planning and Development, Automated Licensing Information and Report Tracking System (http://alirts.oshpd.ca.gov/AdvSearch.aspx)

Databases were searched for all zip codes surrounding the Project site.

4.1.1.5 Background Concentrations

In order to determine if the concentrations of CO and NO_2 would be below the ambient air quality standards in **Table 21**, the maximum concentrations for NO_2 from 2005-2009, for 1-hour CO from 2008-2010, and for 8-hour CO from 2010-2012 at the Santa Clarita Valley monitoring station were determined. The NO_2 data from 2005-2009 was used to conservatively represent the background concentration and to be consistent with other data used in the NO_2 analysis.[61] The column entitled "Background Pollutant Concentration" in **Table 21** reports the background concentrations from the Santa Clarita Valley monitoring station.[62] These concentrations were then added to the maximum modeled concentrations for these pollutants to determine the combined modeled and background concentrations. The other pollutants evaluated (i.e., PM_{10}, $PM_{2.5}$) have incremental SCAQMD thresholds and thus the results are not added to background concentrations. Similarly, the background concentrations for NO_2, SO_2, PM_{10}, and $PM_{2.5}$ were added to the modeled concentrations to determine the total concentrations in **Table 22**. In **Tables 21 and 22**, the background concentrations are based on the 2010-2012 data from the Santa Clarita Valley monitoring station, except for the NO_2 data which is from 2005-2009, the CO 1-hour data which is from 2008-2010, and the $PM_{2.5}$ and SO_2 data is from the East San Fernando Valley station. The $PM_{2.5}$ data was not monitored at the Santa Clarita Valley station and the East San Fernando Valley station was higher than the West San Fernando Valley station, thus the East San Fernando Valley station was used as a conservative estimate for the $PM_{2.5}$ background value.

4.2 Construction Air Dispersion Modeling Results

The construction emissions for CO, SO_2, PM_{10}, and $PM_{2.5}$ used in the air dispersion modeling for averaging periods of 1-hour, 8-hour, and 24-hour are based on the maximum daily emissions summarized in **Table 9**. The construction emissions for PM_{10} and $PM_{2.5}$ used in the air dispersion modeling for the annual averaging period are summarized in **Table 20**.

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[61] As shown in Table 2, NO_2 concentrations have declined subsequent to the 2005-2009 period.

[62] The 3-year peak background concentration for CO and the 5-year peak background concentration for NO_2 was downloaded from http://www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year. Accessed: June 2014.

The ambient air quality results from Project construction are summarized in **Tables 21 and 22**. The primary construction activities that contribute to the estimated impacts are fuel combustion sources (i.e., off-road construction equipment) and fugitive dust. Air quality impacts from construction would not exceed SCAQMD air quality significance thresholds and, therefore, impacts would be less than significant.

Air quality impacts from construction also would be below the State 1-hour and 24-hour SO_2 standard, the federal 1-hour SO_2 standard, the State and federal 24-hour PM_{10} standard, the federal 24-hour $PM_{2.5}$ standard, the State 1-hour and annual NO_2 standards, the federal 1-hour NO_2 standard (0.100 ppm or 188 μg/m^3) using the 98th percentile background value as required for this standard, and the federal annual NO_2 standard.[63] Air quality impacts from construction would exceed the State annual PM_{10} and $PM_{2.5}$ standards and the federal annual $PM_{2.5}$ standard primarily due to the background concentrations which already exceed both standards. The comparison to the PM_{10} and $PM_{2.5}$ NAAQS and CAAQS; however, is provided for informational purposes since these are not the significance thresholds established by SCAQMD. As discussed in Section 2.3, the SCAQMD has established significance thresholds based on the federal, state, and local ambient air quality and risk standards. For PM_{10} and $PM_{2.5}$, the SCAQMD established incremental change significance thresholds based on SCAQMD Rule 1303.

The primary construction activities that contribute to the estimated ambient air quality impacts are fuel combustion sources (i.e., off-road construction equipment) and fugitive dust. The construction emissions are based on conservative assumptions to represent the maximum level of construction activity that may occur on the Project site. Furthermore, the construction modeling results are based on the combination of maximum emissions that may occur with the worst-case meteorological conditions. Therefore, while the exact construction schedule and equipment mix may vary from the current analysis, the maximum daily emissions are not expected to be higher than that estimated given the conservative assumptions included in this analysis. Further, while it is possible that these estimates of ambient air quality concentrations may occur, these are conservatively high estimates and thus they may never occur.

4.3 Localized CO Impacts

Based on the analysis presented below, a CO “hot spots” analysis is not needed to determine whether the change in the level of service (LOS) of an intersection in the Project would have the potential to result in exceedances of the CAAQS or NAAQS.

It has long been recognized that CO exceedances are caused by vehicular emissions,[64] primarily when idling at intersections.[65,66] Accordingly, vehicle emissions standards have become increasingly more stringent. Before the first vehicle emission regulations, cars in the 1950’s

[63] The 98th percentile background concentration for NO_2 was calculated by averaging the 8th highest 1-hour concentration for each year of the five-year period (2005-2009). The maximum 98th percentile background concentration for NO_2 was 121 μg/m^3.

[64] USEPA. 2000. Air Quality Criteria for Carbon Monoxide. EPA 600/P-099/001F. June.

[65] SCAQMD. 1993. CEQA Air Quality Handbook. Section 4.5. April.

[66] SCAQMD. 2003. Air Quality Management Plan. August.

were typically emitting about 87 grams of CO per mile.[67] Since the first regulation of CO emissions from vehicles (model year 1966) in California, vehicle emissions standards for CO applicable to light duty vehicles have decreased by 96 percent for automobiles,[68],[69] and new cold weather CO standards have been implemented, effective for the 1996 model year.[70] Currently, the CO standard in California is a maximum of 3.4 grams/mile for passenger cars (with provisions for certain cars to emit even less).[71] With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in the SCAQMD have steadily declined.

The analysis prepared for CO attainment in the South Coast Air Basin by the SCAQMD can be used to assist in evaluating the potential for CO exceedances in the SCAB. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan).[72] As discussed in the 1992 CO Plan, peak CO concentrations in the SCAB are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of 1992 CO Plan and subsequent plan updates and air quality management plans.

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: Long Beach Blvd. and Imperial Highway (Lynwood); Wilshire Blvd. and Veteran Ave. (Westwood); Sunset Blvd. and Highland Ave. (Hollywood); and La Cienega Blvd. and Century Blvd. (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Blvd. and Veteran Ave., which has a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day.[73] The Los Angeles County Metropolitan Transportation Authority evaluated the LOS in the vicinity of the Wilshire Blvd/Veteran Ave.

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[67] USEPA. Available at: http://yosemite.epa.gov/R10/airpage.nsf/webpage/Milestones+in+Auto+Emissions+Control. Accessed: May, 2014.

[68] National Academy Board on Energy and Environmental Systems. 2008. Review of the 21st Century Truck Partnership. Appendix D: Vehicle Emission Regulations [excerpt from. Available at: http://books.nap.edu/openbook.php?record_id=12258&page=107]. Accessed: May 2014.

[69] Kavanagh, Jason. 2008. Untangling U.S. Vehicle Emissions Regulations.

[70] Title 13. California Code of Regulations. Section 1960.1(f)(2) [for 50,000 mile half-life

[71] CARB. 2010. Available at: http://www.arb.ca.gov/msprog/levprog/cleandoc/ldtps_clean_complete_warranty_12-10.pdf. Accessed: May 2014.

[72] SCAQMD. 1992. Federal Attainment Plan for Carbon Monoxide.

[73] Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

intersection[74] and found it to be Level E at peak morning traffic and Level F at peak afternoon traffic.[75]

At buildout of the Project, the highest average daily trips at an intersection would be approximately 102,600 at the Bouquet & Newhall Ranch intersection[76], which is below the daily traffic volumes that would be expected to generate CO exceedances as evaluated in the 2003 AQMP. This daily trip estimate is based on the peak hour conditions of the intersection. There is no reason unique to SCAB meteorology to conclude that the CO concentrations at the Bouquet & Newhall Ranch intersection would exceed the 1-hour CO standard if modeled in detail, based on the studies undertaken for the 2003 AQMP. The supporting data for this analysis is included in Appendix E.

4.4 Odors

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source, the wind speeds and direction, and the sensitivity of the receiving location each contribute to the intensity of the impact. While offensive odors rarely cause any physical harm, they can be unpleasant and cause distress among the public and generate citizen complaints. According to the SCAQMD, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project does not include any uses identified by the SCAQMD as being associated with odors, and thus the Project does not anticipate any odor impacts.

Note that there is a proposed water reclamation plant within the Newhall Ranch Specific Plan (NRSP) area, but this facility is not part of the Project. A separate EIR was developed/certified for the water reclamation plant.[77]

Additionally, the abandoned oil wells currently on the project site are not expected to be a source of odors. The California Department of Conservation, Division of Oil and Gas and Geothermal Resource (DOGGR) regulates the abandonment of oil wells. DOGGR requires that they be notified prior to the plugging and abandoning of any oil and gas well as part of a permit requirement and the California Code of Regulations incorporates the requirements for abandoning oil wells.[78, 79] DOGGR must be notified at various steps during the abandonment process so that DOGGR staff can oversee the abandonment process. Upon completion of a well abandonment, DOGGR will issue a Report of Plugging and Abandonment or Report of Well Abandonment and change the well status to “Plugged and Abandoned”. These requirements help ensure that abandoned oil wells are not a source of odors.

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[74] The Metropolitan Transportation Authority measured traffic volumes and calculated the LOS for the intersection Wilshire Blvd/ Sepulveda Ave. which is a block west along Wilshire Blvd., still east of Highway 405.

[75] Metropolitan Transportation Authority. 2004. Congestion Management Program for Los Angeles County. Exhibit 2-6 and Appendix A. July 22.

[76] Stantec. 2014. Entrada South (VTTM 053295) Traffic Impact Analysis. June.

[77] GSI Water Solutions, Inc. 2014. Water Demand Projections for Entrada Village South. May 19.

[78] Available at: ftp://ftp.consrv.ca.gov/pub/oil/laws/PRC01.pdf. Accessed: October 2014.

[79] Available at: ftp://ftp.consrv.ca.gov/pub/oil/publications/PRC04_January_11.pdf. Accessed: October 2014.

If re-abandonment of wells is required during buildout of the Project, DOGGR will ensure that state regulations are followed to minimize the potential for odors during the re-abandonment process and also once the abandonment is completed. The oil well abandonment procedures may result in some odors due to the removal of oil well components (e.g., cement plugs or the casing). However, the oil well abandonment procedures are expected to be short, localized, and intermittent, and thus any resulting odors from these procedures are not expected to create odors that will impact a substantial number of people.

5 Compliance with Health Risk Standards

5.1 Methodology

The HRA was conducted in accordance with CARB's Air Toxics Hot Spots Program Risk Assessment Guidelines[80] and is consistent with risk assessment guidance documents by USEPA[81] and California Environmental Protection Agency's (Cal/EPA's) Department of Toxic Substances Control (DTSC).[82] Simplifying assumptions were obtained from the SCAQMD risk assessment guidelines.[83] Toxicity factors for each TAC are obtained from Attachment L of the SCAQMD's Risk Assessment Procedures for Rules 1401 and 212.[84] TAC modeled concentrations were used to calculate cancer risk and chronic hazard index (HI) at each relevant receptor. The acute hazard index was not quantified since no inhalation Reference Exposure Level (REL) has been determined by OEHHA for diesel particulate matter (DPM).

5.1.1 Hazard Assessment

Identification of chemicals of potential concern and specification of their toxicities are described below.

5.1.1.1 Chemicals of Potential Concern

The TACs were identified based on the emission inventory for the onsite construction of the proposed Project.

5.1.1.2 Toxicities

Compounds were evaluated for their potential health effects in two categories, carcinogenic and non-carcinogenic. Almost all toxic compounds produce non-carcinogenic effects at sufficiently high doses, but only some compounds are associated with carcinogenic effects. Most regulatory agencies consider carcinogens to pose a risk of cancer at all exposure levels (i.e., a "no-threshold" assumption); that is, any increase in dose is assumed to cause an increase in the probability of developing cancer. In contrast, non-carcinogens generally are thought to produce adverse health effects only when above some minimum exposure level (i.e., a threshold).

Toxicity studies with laboratory animals or epidemiological studies of human populations are relied upon to develop toxicity criteria. Toxicological values used in this assessment, which are

[80] Cal/EPA. 2003. The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Office of Environmental Health Hazard Assessment. August.

[81] USEPA. 1989. Risk Assessment Guidance for Superfund Volume I, Human Health Evaluation Manual (Part A). USEPA 540/1-89-002, Office of Emergency and Remedial Response, Washington, DC. December.

[82] Cal/EPA. 1994. Preliminary Endangerment Assessment Guidance Manual. Department of Toxic Substances Control. January.

[83] SCAQMD. 2005. Risk Assessment Procedures for Rules 1401 and 212. Version 7.0. July.

[84] SCAQMD. 2012. Permit Application Package "L". For use in conjunction with Risk Assessment Procedures for Rules 1401 and 212. Version 7.0. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/attachment-l.pdf?sfvrsn=4. Accessed: July 2014.

taken from SCAQMD's Risk Assessment Procedures for Rules 1401 and 212, are listed in **Table 23**.[85]

The toxicity values typically are assigned by OEHHA for each compound. However, the currently accepted approach is the use of DPM as a surrogate to calculate the cancer and chronic non-cancer impacts associated with diesel exhaust. This health risk analysis uses this toxicity value for DPM. Since DPM does not have an acute non-cancer reference exposure level, this analysis does not evaluate the acute non-cancer risk.

5.1.1.3 Exposure Assessment

The health risk posed by the identified TACs requires an assessment of the fate and transport of potential emissions to receptors and an estimation of exposure at a receptor(s). The fate and transport of TACs are estimated using air dispersion modeling tools. Exposure is characterized by pathways. Primary and secondary exposure pathways include inhalation, non-inhalation primary, and non-inhalation secondary exposure pathways. The primary non-inhalation pathways include dermal (skin) exposure, water ingestion, crop ingestion (direct deposition), and soil ingestion. The secondary non-inhalation pathways include ingestion of mother's milk, fish, dairy products, all types of meat and eggs, and crop ingestion (root uptake). All of these exposure pathways are conservatively included and evaluated using the SCAQMD multi-pathway factors.

The water ingestion pathway is not likely to be a significant factor considered since the drinking water supply in the vicinity of the project site is not derived from local surface water. Exposure pathways for ingestion of fish, dairy, animal, and agricultural produce are also not likely to be significant factors because recreational fishing areas, animal and dairy farms, and commercial agricultural areas are beyond the proposed Project's likely zone of impact. Inhalation, dermal absorption, and soil ingestion pathways are the most likely pathways for residential and sensitive receptors.

Additional assumptions are also made to estimate cancer risk exposure. Per SCAQMD HRA guidance[86], continuous exposure of 24-hours per day 350 days/year for the entire construction period is assumed for residents. This is a highly conservative assumption, since most people do not remain at home all day, and residents typically change residences every 5 to 7 years[87]. The SCAQMD also suggests specific daily breathing rates and exposure value factors for estimating cancer risks. The exposure assumptions used in this analysis are shown in **Table 24**.

Based on this approach, the potential excess cancer risk associated with exposure to a carcinogen is estimated to be the product of the annual average concentration (AvgC) and the

[85] SCAQMD. 2009. Permit Application Package "L". For use in conjunction with Risk Assessment Procedures for Rules 1401 and 212. Version 7.0. Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/attachment-l.pdf?sfvrsn=4. Accessed: July 2014.

[86] SCAQMD. Risk Assessment Procedures for Rules 1401 and 212, Version 7.0 (Latest Version) Procedures, Equations, and Assumptions Effective On or After July 1, 2005.

[87] Elizabeth Weintraub, 15 Reasons Why Home Owners Sell & Move. Available at: http://homebuying.about.com/od/sellingahouse/qt/0207WhyMove.htm. Accessed: May 2014.

cancer potency (CP) for that carcinogen, the daily breathing rate (DBR), the exposure value factor (EVF), and the multi-pathway factor (MP) for chemicals having impacts due to multiple pathways. The equation used to calculate the potential excess cancer risk is:

$$Risk_i = AvgC_i \times CP_i \times DBR \times EVF \times MP_i$$

Where:

$Risk_i$	=	Lifetime excess cancer risk from exposure to chemical "i" (unitless)
$AvgC_i$	=	Annual average concentration for chemical "i" ($\mu g/m^3$)
CP_i	=	Cancer potency for chemical "i" $(mg/kg\text{-}day)^{-1}$
DBR	=	Daily breathing rate (L/kg body weight-day)
EVF	=	Exposure value factor (unitless)
MP_i	=	Cancer risk multi-pathway factor for chemical "i" (unitless)

An estimate of an individual's incremental excess cancer risk from exposure to proposed Project emissions is calculated by summing the chemical-specific excess cancer risks. To obtain an estimate of total risk from all carcinogens emitted from the proposed Project, cancer risks were summed across all exposure pathways for potential carcinogens of concern. Cancer risks are calculated for long-term exposures.

The potential for non-carcinogenic (chronic) health effects is evaluated by calculating the total HI for the proposed Project emissions. This HI represents the sum of the hazard quotients (HQs) developed for each individual chemical, where a HQ is the ratio of the representative air concentration of the chemical to the chemical-specific non-cancer REL. The non-cancer RELs represent the daily average exposure concentration at (or below) which no adverse health effects are anticipated.

The equations used to calculate the chronic HI are:

$$HIC = \sum_i \frac{AvgC_i \times ChronicMP_i}{ChronicREL_i}$$

Where:

HIC	=	Chronic hazard index (unitless)
$AvgC_i$	=	Annual Average concentration for chemical "i" ($\mu g/m^3$)
ChronicMPi	=	Chronic multi-pathway factor for chemical "i" (unitless)
$ChronicREL_i$	=	Chronic reference exposure level for chemical "i" ($\mu g/m^3$)

5.1.1.4 Risk Characterization

The results from the health risk calculations provide an estimate of the potential risks and hazards to individuals through inhalation of ambient air and other selected pathways as discussed above. The estimated risks and hazards include: lifetime incremental cancer risk estimates and cumulative chronic HI estimates for the receptor locations of concern.

The cancer risks from exposure to multiple carcinogens and multiple pathways are summed across all exposure pathways for all sources contributing to the overall exposure that may potentially impact the receptor.[88] Incremental cancer risks are compared to the risk significance threshold of ten in a million (1×10^{-5}) pursuant to the SCAQMD CEQA Significance Thresholds, which is also consistent with the California Air Toxics "Hotspots" Assessment and Information Act (AB2588).

The Chronic HI, which represents the exposure to multiple contaminants summed across all exposure pathways, is compared to an acceptable hazard threshold of one (1.0) pursuant to the SCAQMD CEQA Significance Thresholds. An HI greater than one indicates that exposure to contaminants from the proposed Project may cause adverse health effects in exposed populations. Typically, compound-specific HQs are summed to calculate organ-specific HI values. Thus, the result shown here is a conservative representation of the maximum HI.

5.1.1.5 Uncertainty Characterization

In any risk evaluation, a number of assumptions are made in order to estimate human exposure and to calculate potential risks. These assumptions may, however, introduce uncertainty in risk calculations. Regulatory guidance requires that conservative assumptions be used to provide an upper-bound estimate of the risk and to avoid underestimating the potential exposures and associated health risks. The key sources of uncertainty in this health risk evaluation include:

- Identification of Project-related chemicals
- Estimation of exposure concentrations
- Identification of exposure pathways
- Exposure assumptions
- Chemical toxicity.

In all of these cases, conservative assumptions are made in this assessment. Thus, estimated excess cancer risks are upper-bound estimates and the actual incidence of cancer is likely to be lower.

5.2 Results

The health risk impacts from construction are shown in **Table 25**. The results indicate that the health risk impacts from the proposed Project are below the SCAQMD significance thresholds. Since the cancer risk is less than one in a million, it is unnecessary to estimate the cancer burden for the proposed Project.

[88] USEPA. 1989. Risk Assessment Guidance for Superfund Volume I, Human Health Evaluation Manual (Part A). USEPA 540/1-89-002, Office of Emergency and Remedial Response, Washington, DC. December.

6 Cumulative Analysis

The cumulative analysis for air quality is based on the guidance provided by SCAQMD.[89] "As Lead Agency, the [SCAQMD] uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the HI significance threshold for TAC emissions. Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

6.1 Construction Impacts

As discussed above, if the project exceeds the SCAQMD's recommended significance thresholds for project-specific construction air emissions, then the project would have a cumulatively considerable increase in emissions for those pollutants. For the Project, construction related daily emissions are less than the SCAQMD mass daily significance thresholds for CO, SO_2, PM_{10}, and $PM_{2.5}$, and greater than the SCAQMD mass daily significance thresholds for VOC and NO_X. Thus, the Project would have a cumulatively considerable increase in emissions due to construction-related VOC and NO_X. As Project-specific impacts with respect to all other construction-related regional emissions of criteria pollutants (i.e., CO, SO_X, PM_{10}, and $PM_{2.5}$) would be less than significant, the Project's contribution to cumulative regional air emissions of these pollutants would not be cumulatively considerable and, therefore, would be less than significant.

In terms of localized air quality concentrations of NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$, construction of the Project would have a less-than-significant impact. Therefore, according to SCAQMD's guidance, the Project's contribution to cumulative localized air quality concentrations of these pollutants would not be cumulatively considerable and, therefore, less than significant.

For purposes of assessing toxic emissions, the greatest potential for construction-related TAC emissions generally involves diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. As discussed above, construction of the Project would have a less-than-significant impact associated with TAC impacts because it would not exceed SCAQMD's maximum incremental cancer risk threshold or the acute/chronic hazard index threshold. Therefore, according to SCAQMD's guidance, the Project's construction-related contribution to toxic emission impacts would not be cumulatively considerable, and, therefore, would be less than significant.

Odor impacts are addressed below.

[89] Available at: http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed: July 2014.

6.2 Operational Impacts

As discussed above, if the project exceeds the SCAQMD's recommended significance thresholds for project-specific operational air emissions, then the project would have a cumulatively considerable increase in emissions for those pollutants. For the Project, operational emissions would exceed the SCAQMD's threshold for VOC, NO_X, CO, $PM_{10,}$ and $PM_{2.5}$ emissions. Thus, the Project would have a cumulatively considerable increase in emissions due to operational-related VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$ emissions.

With respect to TAC emissions, the Project is not a substantial source of TAC emissions, as such emissions are typically associated with large-scale industrial, manufacturing, and transportation hub facilities based on the CARB Handbook. While the Project would likely generate minimal TAC emissions related to the use of consumer products and landscape maintenance activities, among other things, these sources are regulated by CARB and SCAQMD. Pursuant to California AB 1807, which directs CARB to identify substances as TACs and adopt airborne toxic control measures to control such substances, SCAQMD has adopted numerous rules (primarily in Regulation XIV) that specifically address TAC emissions. These SCAQMD rules have resulted in and will continue to result in substantial Basin-wide TAC emissions reductions. Additionally, the Project would be consistent with the recommended screening level siting distances for TAC sources, as set forth in the CARB Handbook. In light of the above, and consistent with the SCAQMD's guidance on the assessment of cumulative impacts, the Project would not result in a cumulative impact relative to TAC emissions.

6.3 Odor Impacts

With respect to potential odor impacts, the Project does not have a high potential to generate odor impacts during construction or operations. As discussed above, construction and operations (including the abandoned oil wells) within the Project Site are not expected to be a source of odors. Furthermore, the Project would be required by SCAQMD Rule 402 (Nuisance) to implement BACT requirements to limit potential objectionable odor impacts to a less-than-significant level. Thus, potential odor impacts from the Project are anticipated to be less than significant and, consistent with the SCAQMD approach to assessing cumulative impacts, the Project would not result in a cumulative impact for odors.

6.4 AQMP Consistency

The cumulative analysis can also be evaluated in terms of consistency with SCAQMD's AQMP. As discussed above in Section 2, SCAQMD and SCAG are jointly responsible for formulating and implementing the AQMP for the SCAB. SCAG's Regional Mobility Plan and Growth Management Plan form the basis for the land use and transportation control portion of the AQMP. SCAG's 2012-2035 RTP/SCS was adopted in April 2012. Thus consistency with the RTP/SCS would demonstrate consistency with SCAQMD's 2012 AQMP.

The consistency of the Project's land use assumptions with SCAG's 2012 RTP/SCS was evaluated by reference to the number of households in SCAG's traffic analysis zones (TAZs). (See Appendix F). Based on that evaluation, the Project is consistent with SCAG's 2012 RTP/SCS and thus will not impair the region's ability to achieve the SCAQMD's goals for

attainment of air quality standards because the land use development pattern proposed by the Project is in line with SCAG's 2012 RTP/SCS growth patterns.

7 Siting Evaluation for Sensitive Receptors

7.1 Health Risks within the Air Basin

The following section discusses background mobile emissions within the SCAB to help inform the decision-makers and the public. SCAQMD has conducted several phases of the Multiple Air Toxics Exposure Study (MATES) to characterize health risks potentially posed by TACs in the SCAB. The first such study (MATES-I) was conducted in 1987. During 1998-1999, MATES-II was conducted as part of the Environmental Justice Initiatives adopted by SCAQMD's Governing Board in October 1997. MATES-II was a landmark urban air toxics monitoring and evaluation study that included a comprehensive monitoring program, compilation of an updated TAC emissions inventory, and urban and local scale air quality modeling to characterize SCAB risk.[90]

During 2004-2006, SCAQMD conducted the MATES-III study. In September 2008, SCAQMD released a final MATES-III report.[91] Based on these data, SCAQMD estimated that basin wide cancer risk was about 1,200 in a million, with TACs from mobile sources accounting for 94 percent of this risk on average.

SCAQMD also conducted air quality modeling to calculate TAC concentrations and thus risk throughout the basin for 2005. Interactive maps showing model-calculated cancer risks are available on SCAQMD's website.[92] The map shows that SCAQMD calculated that TAC cancer risk in the area ranges from 454 to 559 in a million. Note that as described in the MATES-III Final Report[93], "the assumptions [made in the Study] are consistent with current scientific knowledge, but are often designed to be conservative and on the side of health protection in order to avoid underestimation of public health risks…Thus the risk estimates should not be interpreted as actual rates of disease in the exposed population, but rather as estimates of potential risk, based on current knowledge and a number of assumptions."

In October 2014, SCAQMD released a draft MATES-IV report[94], which concludes that that cancer risk in the basin has decreased more than 50% between the study periods for MATES-III and MATES-IV. The draft report further concludes that, while DPM exposure has decreased by approximately 70 percent, DPM still dominates the overall cancer risk from air toxics; and the highest risks are seen to occur near ports and transportation corridors. An interactive map

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[90] SCAQMD. 2000. "Multiple Air Toxics Exposure Study (MATES-II)." Final Report. South Coast Air Quality Management District, Diamond Bar, California. March.

[91] SCAQMD. 2008. "Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-III)." Final Report. South Coast Air Quality Management District, Diamond Bar, California. September. Available at: http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iii/mates-iii-final-report. Accessed: July 2014.

[92] SCAQMD. 2008. "Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-III)." MATES III Interactive Carcinogenicity Map. Available at: http://www3.aqmd.gov/webappl/matesiii/. Accessed: May 2014.

[93] SCAQMD. 2008. MATES III Final Report. Available at: http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iii/mates-iii-final-report. Accessed: September 22, 2014.

[94] SCAQMD. 2014. MATES IV Draft Report. Available at: http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iv. Accessed: October 14, 2014.

showing model-calculated cancer risks [95], based on MATES-IV, estimated that TAC-related cancer risk in the Project area ranges from 128 to 165 in a million.

7.2 SCAQMD CEQA Handbook Land Use Siting Criteria

This section provides an overview of the SCAQMD CEQA Handbook land use siting criteria for sensitive receptors.

7.2.1 Residential Units

Residential uses are generally considered "sensitive receptors," meaning that they are particularly sensitive to adverse effects associated with environmental impacts (including air pollution). The analysis below addresses the SCAQMD CEQA Handbook siting criteria.

Will a sensitive receptor be located within a quarter-mile of an existing facility that emits toxic air contaminants? Answer: Yes

Figure 4 shows existing TAC-emitting sources located within ¼ mile of the Project site where future residential units are located. The SCAQMD Facility INformation Detail (FIND) web tool was used to search for facilities with known TAC emissions inside this ¼-mile radius. The SCAQMD FIND web tool indicated that several existing potential sources of TACs are located with ¼-mile from the residential units, including gasoline dispensing facilities (Chevron USA Inc., and ExxonMobil Oil Corp), restaurants (El Torito, Red Lobster, Hamburger Hamlet (closed), and Marie Calendar's), and a research and development facility (Precision Dynamics Corporation). Six Flags Magic Mountain is also listed and part of that property falls within ¼ mile of the Project site where future residential units are located.

Limited information was available regarding the specific types of TAC-emitting sources and no information was available on the exact location of the emission sources. Further information regarding the potential emissions from these facilities also was not readily available.

Nonetheless, based on the information available for these facilities, it is concluded that the potential for toxic air contaminant emissions that would lead to significant health risk impacts on the residential areas is low. Also, as relatedly discussed in Section 7.3, the distance from the sensitive receptors to the existing gas dispensing facilities is greater than the minimum distance of 300 feet recommended in the CARB Air Quality and Land Use Handbook for large gas dispensing facility.

Will a sensitive receptor be located adjacent to a congested roadway or in an area with high background concentrations of CO? Answer: No

[95] SCAQMD. 2014. "Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-IV)." MATES IV Interactive Carcinogenicity Map. Available at: http://www3.aqmd.gov/webappl/OI.Web/OI.aspx?jurisdictionID=AQMD.gov&shareID=73f55d6b-82cc-4c41-b779-4c48c9a8b15b. Accessed: October 14, 2014.

An analysis of CO "hotspots" showed that the proposed Project would not cause any significant CO impacts at the most congested intersections. These areas are typically the location of the highest CO concentrations due to roadway traffic.

Will a sensitive receptor be located downwind of an existing source of odors, or will a proposed use associated with odors be located upwind of an existing sensitive receptor? Answer: No

Information on Project related odors is provided in the Section 4.4, which did not identify substantial Project sources of odor emissions. The existing facilities within a quarter-mile of the sensitive receptors are also not expected to generate odors that will impact the sensitive receptors. Thus, no odor impacts are expected.

7.2.2 Elementary School

The SCAQMD CEQA Handbook also identifies schools as a land use that should be considered as a "sensitive receptor."[96] The proposed Project addresses the SCAQMD CEQA Handbook siting criteria below.

Will a sensitive receptor be located within a quarter-mile of an existing facility that emits toxic air contaminants? Answer: No

Figure 5 shows existing TAC-emitting sources located within ¼ miles of the Project site where a future elementary school is located. The SCAQMD FIND web tool was used to search for facilities with known TAC emissions inside this ¼-mile radius. The SCAQMD FIND web tool indicated that no existing source of toxic air contaminants is located with ¼-miles from the elementary school

Will a sensitive receptor be located adjacent to a congested roadway or in an area with high background concentrations of CO? Answer: No

An analysis of CO "hotspots" showed that the proposed Project would not cause any significant CO impacts at the most congested intersections. These areas are typically the location of the highest CO concentrations due to roadway traffic.

Will a sensitive receptor be located downwind of an existing source of odors, or will a proposed use associated with odors be located upwind of an existing sensitive receptor? Answer: No

Information on Project related odors is provided in the Section 4.4, which did not identify substantial sources of odor emissions. Thus, no odor impacts are expected.

[96] SCAQMD CEQA Handbook (1993), pg. 4-12.

7.2.3 Recreational Areas

The SCAQMD CEQA Handbook also identifies recreational areas as a land use that should be considered as a "sensitive receptor."[97] The proposed Project addresses the SCAQMD CEQA Handbook siting criteria below.

Will a sensitive receptor be located within a quarter-mile of an existing facility that emits toxic air contaminants? Answer: No

Figure 6 shows existing SCAQMD permitted, TAC-emitting sources located within ¼ miles of the Project site potential recreational areas. The Project site may include recreational uses in the middle of the site, to the west of the elementary school. The SCAQMD FIND web tool was used to search for facilities with known TAC emissions inside this ¼-mile radius (**Figure 5**). The SCAQMD FIND web tool indicated that no existing source of toxic air contaminants is located with ¼-miles from the recreational areas.

Will a sensitive receptor be located adjacent to a congested roadway or in an area with high background concentrations of CO? Answer: No

An analysis of CO "hotspots" showed that the proposed Project would not cause any significant CO impacts at the most congested intersections. These areas are typically the location of the highest CO concentrations due to roadway traffic.

Will a sensitive receptor be located downwind of an existing source of odors, or will a proposed use associated with odors be located upwind of an existing sensitive receptor? Answer: No

Information on Project related odors is provided in the Section 4.4, which did not identify substantial sources of odor emissions. Thus, no odor impacts are expected.

7.3 CARB Handbook Land Use Siting Criteria

In addition to the SCAQMD CEQA Handbook land use siting criteria, the CARB Air Quality and Land Use Handbook also recommends siting criteria for sensitive receptors. The recommended minimum distances from sensitive receptors to the relevant sources applicable to the Project are 500 feet from a freeway, and 300 feet from a large gas dispensing facility (or 50 feet from a typical gas dispensing facility). The Project's sensitive receptors are not within these minimum distances recommended in the Handbook.

[97] SCAQMD CEQA Handbook (1993), pg. 4-12.

8 Summary of Results

For construction, the mass daily criteria pollutant emissions for both Project are estimated to be less than the significance thresholds for CO, SO_2, PM_{10}, and $PM_{2.5}$, and greater than the significance thresholds for VOC, NO_X. The VOC emissions are estimated to exceed the significance threshold in eight of the ten years that construction is estimated to occur and is primarily due to emissions from architectural coatings. The Project will comply with SCAQMD Rules and Regulations that require the use of low VOC containing coatings to minimize the potential VOC emissions. The NO_X emissions are estimated to exceed the significance threshold during the construction primarily due to the operation of off-road equipment during the grading phase. Based on the air dispersion modeling analysis, the Project's construction emissions would not exceed any of the SCAQMD ambient air quality significance thresholds. Air quality impacts from construction would exceed the State annual PM_{10} and $PM_{2.5}$ standards and the federal annual $PM_{2.5}$ standard primarily due to the background concentrations which already exceed both standards. These exceedances of the PM_{10} and $PM_{2.5}$ standards are primarily due to the background concentrations which already exceed each standard. Since the results are below the significance thresholds established by SCAQMD, these are not considered to be significant impacts. The construction emissions are based on conservative assumptions to represent the maximum level of construction activity that may occur on the Project site. Furthermore, the construction modeling results is based on the combination of maximum emissions that may occur with the worst-case meteorological conditions. Thus, while it is possible that these estimates of ambient air quality concentrations may occur, these are conservatively high estimates and thus they may never occur.

For operational emissions, the mass daily criteria pollutant emissions for the Project are less than the significance thresholds for SO_2, and greater than the significance thresholds for VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$. The primary source of the operational emissions is the traffic mobile sources. The emissions from traffic mobile sources are expected to decline in the future as cars become more fuel efficient due to existing regulations (i.e., Pavley Standard and the ACC program). The Project has also incorporated TDM programs to help reduce trip generation. The mixed-use design of the Project will also help reduce total VMT by shortening potential trips. The VOC emissions are also due to the consumer products that are expected to be used by residents in the Project. The Project would not exceed the CO hotspots significance thresholds for any intersection.

The evaluation of the Project construction activities on human health shows that the Project construction would not exceed the cancer and chronic non-cancer significance thresholds.

Tables

Table 1. Project Land Uses and Square Footages
Entrada South
Los Angeles County, California

Project Entitlement[1]		Land Use Category	CalEEMod® Analysis		
			Land Use Subtype[2]	Land Use Unit Amount	Size Metric
Elementary School	9.4 acres	Educational	Elementary School	750	students
Public Neighborhood Park	5.6 acres	Recreational	City Park	5.6	acres
Single Family Residential	339 DU	Residential	Single Family Housing	339	DU
2-Story and 2&3 Story Condos	700 DU	Residential	Condo / Townhouse	700	DU
3-Story and 4-Story Condos	535 DU	Residential	Condo / Townhouse High Rise	535	DU
Commercial[3]	280 TSF	Retail	Regional Shopping Center	280	1000 sqft
Commercial[3]	15 TSF	Retail	Strip Mall	15	1000 sqft
Office	435 TSF	Commercial	General Office Building	435	1000 sqft
Parking Structure	16.52 acres	Parking	Unenclosed Parking with Elevator	1,836	spaces
Parking	12.14 acres	Parking	Parking Lot	12.14	acres
Recreational Center[4]	2.9 acres	Recreational	Health Club	2.5	1000 sqft
Recreational Center Swimming Pool[4]	6.727 TSF	Not modeled in CalEEMod® for operational AQ analysis.			
External Map Improvements[5]	119.1 acres	Not modeled in CalEEMod® for operational AQ analysis.			
Open Space[5]	92.2 acres	Not modeled in CalEEMod® for operational AQ analysis.			
Spineflower Preserve[5]	27.2 acres	Not modeled in CalEEMod® for operational AQ analysis.			

Notes:
[1] Project entitlement is based on Chapter 3 of the Draft EIR - Project Description.
[2] Land uses are defined in CalEEMod®.
[3] Commercial areas were classified as Regional Shopping Center and Strip Mall, respectively, based on type of stores expected, area served by stores, acreage, and anticipated trip generation.
[4] One of the recreation centers includes a swimming pool of 6,727 sqft. Swimming pool dimensions is based on a junior size Olympic pool. CAP emissions associated with natural gas heating were calculated outside of CalEEMod® for the Project without PDFs Scenario. For the Project Scenario, there are no CAP emissions since the pool will feature solar heating. There are no CAP emissions associated with the electricity usage from the pools.
[5] CalEEMod® does not associate any operational emissions with these land uses.

Abbreviations:
AQ - Air Quality
CalEEMod® - CALifornia Emissions Estimator MODel
CAP - criteria air pollutants
DU - dwelling units
EIR - Environmental Impact Report
PDF - project design feature
sqft - square feet
TSF - thousand square feet
SCAQMD - South Coast Air Quality Management District

References:
SCAQMD. 2013. CalEEMod© User's Guide. Available at: http://caleemod.com/. Accessed May 2014.

Table 2. Air Quality Data for Nearest SCAQMD Monitoring Stations[1,2]
Entrada South
Los Angeles County, California

Pollutant	2008	2009	2010	2011	2012
Ozone (O_3)[3] - Santa Clarita Valley					
Maximum Concentration 1-hr period, ppm	**0.160**	**0.140**	**0.126**	**0.144**	**0.134**
Maximum Concentration 8-hr period, ppm	**0.131**	**0.122**	**0.105**	**0.122**	**0.112**
Annual 4th Highest 8-hr maximum over 3 years	**0.108**	**0.103**	**0.087**	**0.101**	**0.102**
Days of Exceedances, California Standard Concentration 1-hr period	54	57	18	31	45
Days of Exceedances, California Standard Concentration 8-hr period	81	77	44	52	81
Days of Exceedances, National Standard Concentration 8-hr period	60	64	23	30	57
Carbon Monoxide (CO) - Santa Clarita Valley					
Maximum Concentration 1-hr period, ppm	2	2	2	NM	NM
Maximum Concentration 8-hr period, ppm	1.1	1.4	1.1	0.8	1.1
Number of Exceedances, California Standard Concentration 1-hr period	0	0	0	N/A	N/A
Number of Exceedances, California Standard Concentration 8-hr period	0	0	0	0	0
Number of Exceedances, National Standard Concentration 1-hr period	0	0	0	N/A	N/A
Number of Exceedances, National Standard Concentration 8-hr period	0	0	0	0	0
Nitrogen Dioxide (NO_2) - Santa Clarita Valley					
Maximum Concentration 1-hr period, ppm	0.070	0.060	0.059	0.060	0.066
98th Percentile Daily Maximum Concentration 1-hr period, ppm	NM	0.050	0.054	0.047	0.051
Annual Arithmetic Mean (AAM), ppm	0.017	0.015	0.014	0.013	0.014
Number of Exceedances, California Standard Concentration 1-hr period	0	0	0	0	0
Exceed California Standard Annual Arithmetic Mean (AAM)?	No	No	No	No	No
Number of Exceedances, National Standard Concentration 1-hr period	N/A	0	0	0	0
Exceed National Standard Annual Arithmetic Mean (AAM)?	No	No	No	No	No
Sulfur Dioxide (SO_2)[4] - East San Fernando Valley					
Maximum Concentration 1-hr period, ppm	0.01	0.01	0.015	0.009	0.007
99th Percentile Daily Maximum Concentration 1-hr period, ppm	NM	NM	NM	0.005	0.003
Maximum Concentration 24-hr period, ppm	0.003	0.003	0.004	NM	NM
Annual Arithmetic Mean (AAM), ppm	0.0008	NM	NM	NM	NM
Number of Exceedances, California Standard Concentration 1-hr period	0	0	0	0	0
Number of Exceedances, California Standard Concentration 24-hr period	0	0	0	N/A	N/A
Number of Exceedances, National Standard Concentration 1-hr period	N/a	N/A	N/A	0	0
Number of Exceedances, National Standard Concentration 24-hr period	0	0	0	N/A	N/A
Exceed National Standard Annual Arithmetic Mean (AAM)?	No	N/A	N/A	N/A	N/A
Respirable Particulate Matter (PM_{10}) - Santa Clarita Valley					
Maximum Concentration 24-hr period, µg/m^3	**91**	**56**	40	45	37
Annual Arithmetic Mean (AAM), µg/m^3	**25.8**	**23.4**	**21.0**	**20.8**	19.6
Number of Exceedances, California Standard 24-hr period	2	1	0	0	0
Exceed California Standard Annual Arithmetic Mean (AAM)?	**Yes**	**Yes**	**Yes**	**Yes**	No
Number of Exceedances, National Standard Concentration 24-hr period	0	0	0	0	0
Fine Particulate Matter ($PM_{2.5}$)[5] - East San Fernando Valley					
Maximum Concentration 24-hr period, µg/m^3	57.5	67.5	43.7	47.8	54.2
98th Percentile Concentration 24-hr period, µg/m^3	34.6	34.4	31.8	33.5	28.2
Annual Arithmetic Mean (AAM), µg/m^3	**14.1**	**14.4**	**12.5**	**13.2**	**12.17**
Number of Exceedances, National Standard Concentration 24-hr period	0	0	0	0	0
Exceed National Standard Annual Arithmetic Mean (AAM)?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Exceed California Standard Annual Arithmetic Mean (AAM)?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Notes:

[1] NM indicates pollutants that were Not Monitored. N/A indicates that information was not available.

[2] Bold values are Monitoring data that exceed the standards.

[3] The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the

[4] USEPA adopted new SO_2 standards of 75 ppb for 99th percentile of 1-hr daily maximum concentrations over 3 years in 2010.

[5] USEPA adopted new $PM_{2.5}$ annual average standard of 12.0 µg/m^3 in 2012

Abbreviations:

µg/m^3 - micrograms per cubic meter
CARB - California Air Resources Board
hr - hour
ppb - parts per billion
ppm - parts per million
SCAQMD - South Coast Air Quality Management District
USEPA -United States Environmental Protection Agency

References:

SCAQMD. 2015. Historical Data by Year. Available at: http://www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year. Accessed: June, 2014.
CARB. 2014. Ambient Air Quality Standards. Available at: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed: April, 2014.

Table 3. Summary of NAAQS and CAAQS
Entrada South
Los Angeles County, California

Pollutant	Averaging Period	California Standard[1]	Federal Standard[2]
Ozone (O_3)	1 hour	0.09 ppm (180 µg/m^3)	---
	8 hour	0.070 ppm (137 µg/m^3)	0.075 ppm (147 µg/m^3)
Respirable Particulate Matter (PM_{10})	24 hour	50 µg/m^3	150 µg/m^3
	Annual Arithmetic Mean	20 µg/m^3	---
Fine Particulate Matter ($PM_{2.5}$)	24 hour	---	35 µg/m^3
	Annual	12 µg/m^3	12.0 µg/m^3
Carbon Monoxide (CO)	1 hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)
	8 hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)
Nitrogen Dioxide (NO_2)	1 hour[3]	0.18 ppm (339 µg/m^3)	0.100 ppm (188 µg/m^3)
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)
Lead (Pb)	30 day average	1.5 µg/m^3	---
	Rolling 3-month average	---	0.15 µg/m^3
Sulfur Dioxide (SO_2)	1 hour[4]	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)
	3 hour[5]	---	0.5 ppm (1300 µg/m^3)
	24 hour	0.04 ppm (105 µg/m^3)	---
Hydrogen Sulfide (H_2S)	1 hour	0.03 ppm (42 µg/m^3)	---
Vinyl Chloride	24 hour	0.01 ppm (26 µg/m^3)	---
Sulfates	24 hour	25 µg/m^3	---
Visibility-Reducing Particles	8 hour	Extinction coefficient of 0.23 per kilometer (visibility of ten miles or more due to particles when relative humidity is less than 70 percent)	---

Notes:

[1] California standards from CARB website (www.arb.ca.gov/research/aaqs/aaqs2.pdf), updated June 4, 2013.

[2] Federal standards from EPA website (http://www.epa.gov/oar/criteria.html), updated December 14, 2012.

[3] To attain the federal 1-hour NO_2 standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average must not exceed the threshold.

[4] To attain the federal 1-hour SO_2 standard, the 3-year average of the 99th percentile of the daily maximum 1-hour average must not exceed the threshold.

[5] This is a secondary standard.

Abbreviations:

µg/m^3 - micrograms per cubic meter
CAAQS - California Ambient Air Quality Standard
CARB - California Air Resources Board
mg/m^3 - milligrams per cubic meter
NAAQS - National Ambient Air Quality Standards
ppm - parts per million

Table 4. NAAQS and CAAQS Attainment Status
Entrada South
Los Angeles County, California

Pollutant	Averaging Period	Los Angeles County Attainment Status	
		California Standard[1]	Federal Standard[2]
Ozone (O_3)	1 hour	Extreme Non-Attainment	---
	8 hour	Extreme Non-Attainment	Extreme Non-Attainment
Respirable Particulate Matter (PM_{10})	24 hour	Non-Attainment	Attainment
	Annual	Non-Attainment	---
Fine Particulate Matter ($PM_{2.5}$)	24 hour	---	Non-Attainment
	Annual	Non-Attainment	Non-Attainment
Carbon Monoxide (CO)	1 hour	Attainment	Attainment (Maintenance)
	8 hour	Attainment	Attainment (Maintenance)
Nitrogen Dioxide (NO_2)[3]	1 hour	Non-Attainment	Unclassified/Attainment
	Annual	Non-Attainment	Unclassified/Attainment
Lead (Pb)[3,4]	30 day average	Non-Attainment	---
	Rolling 3-month average	---	Non-Attainment
Sulfur Dioxide (SO_2)	1 hour	Attainment	Attainment
	3 hour	---	Attainment
Hydrogen Sulfide (H_2S)	1 hour	Unclassified	---
Vinyl Chloride	24 hour	No information Available	---
Sulfates	24 hour	Attainment	---
Visibility-Reducing Particles	8 hour	Unclassified	---

Notes:

[1] California standard attainment status based on CARB website (www.arb.ca.gov/desig/adm/adm.htm).

[2] Federal standard attainment status based on USEPA Green book and Regional 9 Air Quality Maps.

[3] Attainment status for the California standard is for the year 2012.

[4] Non-attainment applies to the southern portion of Los Angeles County only.

Abbreviations:

CAAQS - California Ambient Air Quality Standards
CARB - California Air Resources Board
NAAQS - National Ambient Air Quality Standards
USEPA - United States Environmental Protection Agency

References:

CARB. 2013. Area Designations Maps / State and National. Available at: www.arb.ca.gov/desig/adm/adm.htm. Accessed on: April, 2014.

USEPA. 2013. The Green book of Nonattaiment Areas for Criteria Pollutants. Available at: www.epa.gov/air/oaqps/greenbk/index.html. Accessed on: April, 2014.

USEPA. 2014. EPA Region 9 Air Quality Maps. Available at: http://www.epa.gov/region09/air/maps/. Accessed on: April, 2014.

Table 5. SCAQMD Air Quality Significance Thresholds[1]
Entrada South
Los Angeles County, California

Mass Daily Thresholds (lbs/day)		
Pollutant	**Construction**	**Operation**
NO_X	100	55
VOC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550
Lead	3	3
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants		
NO_2 1-hour average Annual Arithmetic Mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM_{10} 24-hour Average Annual Average	10.4 µg/m^3 (construction); 2.5 µg/m^3 (operation) 1.0 µg/m^3	
$PM_{2.5}$ 24-hour Average	10.4 µg/m^3 (construction); 2.5 µg/m^3 (operation)	
SO_2 1-hour Average 24-hour Average	0.25 ppm (state); 0.075 ppm (federal – 99th percentile) 0.04 ppm (state)	
CO 1-hour Average 8-hour Average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	

Abbreviations:

µg/m^3 - micrograms per cubic meter
CO - carbon monoxide
GHG - greenhouse gases
lbs - pounds
NO_2 - nitrogen oxide
NOx - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
ppm - parts per million
SCAQMD - South Coast Air Quality Management District
SO_2 - sulfur dioxide
SO_x - sulfur oxides
TACs - toxic air contaminants
VOC - volatile organic compounds

Reference:

[1] SCAQMD Significance Thresholds Revision March 2011. Available at: http://sfprod.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed: June, 2014.

Table 6. Construction Schedule Assumptions
Entrada South
Los Angeles County, California

Construction Phase[1]	Number of Work Days[2]	Start Date[3]	End Date[3]
Site Preparation	30	12/1/2015	1/11/2016
Grading	250	1/12/2016	12/26/2016
Utility Installation	180	9/19/2016	5/26/2017
Paving 1[4]	15	2/20/2017	3/10/2017
Paving 2[4]	15	8/14/2017	9/1/2017
Building Construction[5]	1,979	6/1/2017	12/31/2024
Architectural Coating[5,6]	440	10/1/2017	12/31/2024

Notes:
[1] Construction phases and duration were based on Project specific estimates.
[2] The construction work week was assumed to be 5 days per week.
[3] Start and end dates were estimated based on duration per phase.
[4] Paving occurs for 30 days during the 140-day period from 2/20/2017 to 9/1/2017. In order to calculate the most conservative peak day emissions, the paving phase was split into two 15-day phases in order to create overlap with adjacent phases.
[5] Building construction and architectural coating are expected to occur over multiple phases. The estimated total activity is represented in this schedule.
[6] The architectual coating phase was estimated to occur intermittently over the presented time period, for a total of 440 days.

Table 7. Construction Equipment Mix Assumptions
Entrada South
Los Angeles County, California

Construction Phase[1]	Equipment Type[1]	# of Unit [1,2]	Usage Hours (per day)[1]	Horsepower[1]
Site Preparation	Crawler Tractor	2	8	82
	On-Highway Truck[3]	2	2	N/A
	Loader/Backhoe	1	6	75
Grading	Scrapers	8	8	356
	Crawler Tractor	4	8	82
	Rubber Tired Dozer	1	20	358
	Other Material Handling Equip (H_20 Truck)	6	8	196
	Grader	1	8	162
	Loader/Backhoe	1	4	75
	Off-Highway Truck	1	4	381
	On-Highway Pick-Up[3]	6	2	N/A
	Excavator	1	1.6	157
Utility Installation	Excavator	2	8	157
	Loader/Backhoe	2	8	75
	On-Highway Truck[3]	2	2	N/A
	On-Highway Pick-Up[3]	2	2	N/A
	Other Material Handling Equip (H_20 Truck)	1	6	196
Paving 1	Grader	1	8	162
	Pavers	1	8	89
	Paving Equipment	1	8	82
	On-Highway Pick-Up[3]	1	2	N/A
	Rollers	1	8	84
Paving 2	Grader	1	8	162
	Pavers	1	8	89
	Paving Equipment	1	8	82
	On-Highway Pick-Up[3]	1	2	N/A
	Rollers	1	8	84
Building Construction	Cranes	1	7	226
	Forklifts	3	8	89
	Generator Sets	1	8	84
	Tractors/Loaders/Backhoes	3	7	97
	Welders	1	8	46
Architectural Coating	Air Compressors	1	6	78

Notes:
[1] The construction equipment mix and usage was based on Project specific estimates except for building construction and architectural coating phases for which CalEEMod® defaults were used.
[2] The equipment activity was estimated based on total hours of operation. To conserve the total hours, some equipment show partial unit numbers.
[3] Emissions from these On-Highway Pick-Ups and Trucks were modeled as on-road worker trips operating on 100% unpaved roads, since CalEEMod® does not have an off-road equipment type that represents these on-highway vehicles.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
H_20 - water
N/A - not available

Table 8a. Construction Worker, Vendor and Hauling Trips
Entrada South
Los Angeles County, California

Category	Units	Buildout Year										
		2015	2016[4]	2017[5]	2018	2019	2020	2021	2022	2023	2024	Total
Land Use Data												
Residential [1]												
2-Story and 2&3 Story Condos	DU				174	228	180	114	4			**700**
3-Story and 4-Story Condos	DU				50	60	60	120	85	60	100	**535**
Single Family Housing	DU				90	144	97	8				**339**
Non Residential [1]												
Public Neighborhood Park[1]	acres					5.6						**5.6**
Elementary School[1]	acres						9.4					**9.4**
Recreational Center	acres							2.9				**2.9**
Office	1000 sqft					97	338					**435**
Commercial (Modeled as Regional Shopping Center)	1000 sqft					280						**280**
Commercial (Modeled as Strip Mall)	1000 sqft					15						**15**
Parking Structure[1]	acres						16.52					**16.52**
Parking[1]	acres					12.14						**12.14**
Construction Schedule												
Construction Duration												
Site Preparation	Total Days	30										
Grading			250									
Utility Installation			180									
Paving				30								
Building Construction[2]				152	261	261	262	261	260	260	262	1,979
Architectural Coating [3]				23	92	125	125	33	17	8	17	440
Average Daily One-Way Trips												
Site Preparation	One-way Trips	8	8									
Grading			58									
Utility Installation			13	13								
Paving				10								
Building Construction												
Worker Trips				**194**	**194**	**385**	**651**	**172**	**64**	**43**	**72**	
Residential				*194*	*194*	*259*	*208*	*171*	*64*	*43*	*72*	
Non Residential				*0*	*0*	*125*	*443*	*1*	*0*	*0*	*0*	
Vendor Trips				**34**	**34**	**110**	**222**	**26**	**10**	**6**	**11**	
Residential				*34*	*34*	*46*	*36*	*26*	*10*	*6*	*11*	
Non Residential				*0*	*0*	*64*	*186*	*0*	*0*	*0*	*0*	
Architectural Coating												
Worker Trips				**39**	**39**	**77**	**130**	**34**	**13**	**9**	**14**	
Residential				*39*	*39*	*52*	*42*	*34*	*13*	*9*	*14*	
Non Residential				*0*	*0*	*25*	*89*	*0*	*0*	*0*	*0*	
Vendor Trips				**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
Residential				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Non Residential				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Total Average Daily One-Way Trips		**8**	**78**	**288**	**266**	**572**	**1,003**	**233**	**86**	**58**	**97**	

Notes:

[1] The Elementary School was modeled in CalEEMod® using 750 students and an estimated building area of 62,704 sqft. The Parking Structure was modeled using 1,836 spaces and an estimated building area of 734,400 sqft. Public Neighborhood Park and Parking (lot) were modeled assuming 0 building sqft.

[2] Annual construction days for Building Construction phase are a Project estimate of 1,979 days.

[3] Annual construction days for Architectural Coating phase are a Project estimate of 440 days.

[4] Based on the construction schedule, in 2016 site preparation will not overlap with grading or utility installation. Therefore the presented average daily one-way trips for 2016 are a conservative estimate.

[5] Based on the construction schedule, in 2017 utility installation will not overlap with building construction. Therefore the presented average daily one-way trips for 2017 are a conservative estimate.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
DU - Dwelling Unit
sqft - square feet

Table 8b. Construction Worker, Vendor and Hauling Trips - Summary
Entrada South
Los Angeles County, California

Construction Phase	Year	Worker Trips Per Day[1]	Onsite Trips modeled as worker trips[2]	Vendor Trips Per Day[1]	Hauling Trips Per Day[1,3]	Worker One-Way Trip Length (miles)[4]	Vendor One-Way Trip Length (miles)[4]	Hauling One-Way Trip Length (miles)[4]
Site Preparation	2015-2016	8	2	0	64	19.8	7.9	20
Grading	2016	58	6	0	0	19.8	7.9	20
Utility Installation	2016-2017	13	4	0	0	19.8	7.9	20
Paving 1	2017	10	1	0	0	19.8	7.9	20
Paving 2	2017	10	1	0	0	19.8	7.9	20
Building Construction	2017	194	0	34	0	19.8	7.9	20
	2018	194	0	34	0	19.8	7.9	20
	2019	385	0	110	0	19.8	7.9	20
	2020	651	0	222	0	19.8	7.9	20
	2021	172	0	26	0	19.8	7.9	20
	2022	64	0	10	0	19.8	7.9	20
	2023	43	0	6	0	19.8	7.9	20
	2024	72	0	11	0	19.8	7.9	20
Architectural Coating	2017	39	0	0	0	19.8	7.9	20
	2018	39	0	0	0	19.8	7.9	20
	2019	77	0	0	0	19.8	7.9	20
	2020	130	0	0	0	19.8	7.9	20
	2021	34	0	0	0	19.8	7.9	20
	2022	13	0	0	0	19.8	7.9	20
	2023	9	0	0	0	19.8	7.9	20
	2024	14	0	0	0	19.8	7.9	20

Notes:
[1] Worker, vendor and hauling trips are presented as one-way trips per day. One roundtrip consists of two one-way trips, i.e. for a worker/vendor to come to the Site and leave the Site.
[2] Emissions from the operation of on-highway pickups and trucks during the Site Preparation, Grading, Utility Installation and Paving phases were modeled as worker trips assuming total hours of operation as estimated for the Project, an average speed of 10 mph, and a default CalEEMod® trip length of 19.8 miles per one-way trip.
[3] The one-way hauling trips are for vegetation waste.
[4] Trip Length is presented as one-way trip length.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
mph - miles per hour

Table 9. Criteria Air Pollutant Construction Emissions from Off-Road Equipment
Entrada South
Los Angeles County, California

Emission Type	Construction Phase[1]	Year	VOC	NOx	CO	SO_2	Exhaust PM_{10}	Fugitive PM_{10}	Exhaust $PM_{2.5}$	Fugitive $PM_{2.5}$
			Maximum (lbs/day)[1]							
			Project[2]							
Offroad Equipment	Site Preparation	2015	1.3	11	6.6	0.008	0.94	0.41	0.86	0.04
		2016	1.3	11	6.6	0.01	0.92	0.41	0.84	0.04
	Grading	2016	22	266	156	0.22	12	10	11	3.7
	Paving 1	2017	1.9	18	11	0.01	1.2	0	1.1	0
	Paving 2	2017	1.9	18	11	0.01	1.2	0	1.1	0
	Utility Installation	2016	1.7	19	12	0.02	1.0	0	0.93	0
		2017	1.6	17	12	0.02	0.91	0	0.83	0
	Building Construction	2017	3.1	26	18	0.03	1.8	0	1.7	0
		2018	2.7	23	18	0.03	1.5	0	1.4	0
		2019	2.4	21	17	0.03	1.3	0	1.2	0
		2020	2.1	19	17	0.03	1.1	0	1.0	0
		2021	1.9	17	17	0.03	0.95	0	0.90	0
		2022	1.7	16	16	0.03	0.81	0	0.76	0
		2023	1.6	14	16	0.03	0.70	0	0.66	0
		2024	1.5	13	16	0.03	0.61	0	0.57	0
	Architectural Coating	2017	0.3	2.2	1.9	0.003	0.17	0	0.17	0
		2018	0.3	2.0	1.9	0.003	0.15	0	0.15	0
		2019	0.3	1.8	1.8	0.003	0.13	0	0.13	0
		2020	0.2	1.7	1.8	0.003	0.11	0	0.11	0
		2021	0.2	1.5	1.8	0.003	0.09	0	0.09	0
		2022	0.2	1.4	1.8	0.003	0.08	0	0.08	0
		2023	0.2	1.3	1.8	0.003	0.07	0	0.07	0
		2024	0.2	1.2	1.8	0.003	0.06	0	0.06	0
Onsite Trucks[3]	Site Preparation	2015	0.01	0.02	0.20	0.0004	0.0003	11.36	0.0003	1.13
		2016	0.01	0.02	0.18	0.0004	0.0003	11.36	0.0003	1.13
	Grading	2016	0.03	0.05	0.55	0.0012	0.0008	34.09	0.0008	3.40
	Paving 1	2017	0.005	0.01	0.08	0.0002	0.0001	5.68	0.0001	0.57
	Paving 2	2017	0.005	0.01	0.08	0.0002	0.0001	5.68	0.0001	0.57
	Utility Installation	2016	0.02	0.03	0.37	0.0008	0.0006	22.73	0.0005	2.26
		2017	0.02	0.03	0.33	0.0008	0.0005	22.73	0.0005	2.26
	Building Construction	2017	0	0	0	0	0	0	0	0
		2018	0	0	0	0	0	0	0	0
		2019	0	0	0	0	0	0	0	0
		2020	0	0	0	0	0	0	0	0
		2021	0	0	0	0	0	0	0	0
		2022	0	0	0	0	0	0	0	0
		2023	0	0	0	0	0	0	0	0
		2024	0	0	0	0	0	0	0	0
	Architectural Coating	2017	0	0	0	0	0	0	0	0
		2018	0	0	0	0	0	0	0	0
		2019	0	0	0	0	0	0	0	0
		2020	0	0	0	0	0	0	0	0
		2021	0	0	0	0	0	0	0	0
		2022	0	0	0	0	0	0	0	0
		2023	0	0	0	0	0	0	0	0
		2024	0	0	0	0	0	0	0	0

Notes:
[1] Emissions were estimated using CalEEMod® version 2013.2.2.
[2] Fugitive PM_{10} / $PM_{2.5}$ emissions from onsite trucks controlled by watering the construction site three times per day (estimated to reduce emissions by 61%), and by limiting onsite trucks speed to 15 mph.
[3] These emissions are related to the operation of on-highway pickups and trucks during the Site Preparation, Grading, Utility Installation and Paving phases. These emissions were modeled as worker trips. It was assumed these onsite trips will operate on 100% unpaved roads.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CO - carbon monoxide
lbs - pounds
mph - mile per hour
NOx - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
SO_2 - sulfur dioxide
VOC - volatile organic compound

Table 10. Criteria Air Pollutant Construction Emissions from On-Road Vehicles
Entrada South
Los Angeles County, California

Emission Type	Construction Phase	Year	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
			Maximum (lbs/day)[1]					
			Project[2]					
Worker	Site Preparation	2015	0.05	0.07	0.81	0.002	0.12	0.03
		2016	0.04	0.07	0.73	0.002	0.12	0.03
	Grading	2016	0.30	0.47	5.30	0.01	0.88	0.24
	Paving 1	2017	0.05	0.07	0.83	0.002	0.15	0.04
	Paving 2	2017	0.05	0.07	0.83	0.002	0.15	0.04
	Utility Installation	2016	0.07	0.11	1.19	0.003	0.20	0.05
		2017	0.06	0.10	1.08	0.003	0.20	0.05
	Building Construction	2017	0.90	1.44	16.06	0.038	2.95	0.80
		2018	0.80	1.30	14.59	0.038	2.95	0.80
		2019	1.45	2.37	26.59	0.07	5.84	1.58
		2020	2.30	3.72	41.92	0.13	9.88	2.67
		2021	0.57	0.92	10.41	0.03	2.61	0.71
		2022	0.20	0.32	3.64	0.01	0.97	0.26
		2023	0.13	0.20	2.30	0.01	0.65	0.18
		2024	0.20	0.32	3.66	0.01	1.09	0.30
	Architectural Coating	2017	0.18	0.29	3.23	0.01	0.59	0.16
		2018	0.16	0.26	2.93	0.01	0.59	0.16
		2019	0.29	0.47	5.32	0.01	1.17	0.32
		2020	0.46	0.74	8.37	0.03	1.97	0.53
		2021	0.11	0.18	2.06	0.01	0.52	0.14
		2022	0.04	0.07	0.74	0.00	0.20	0.05
		2023	0.03	0.04	0.48	0.00	0.14	0.04
		2024	0.04	0.06	0.71	0.00	0.21	0.06
Vendor	Site Preparation	2015	0	0	0	0	0	0
		2016	0	0	0	0	0	0
	Grading	2016	0	0	0	0	0	0
	Paving 1	2017	0	0	0	0	0	0
	Paving 2	2017	0	0	0	0	0	0
	Utility Installation	2016	0	0	0	0	0	0
		2017	0	0	0	0	0	0
	Building Construction	2017	0.3	3	4	0.01	0.3	0.1
		2018	0.3	3	4	0.01	0.3	0.1
		2019	0.9	8	12	0.03	0.9	0.4
		2020	1.7	15	24	0.05	1.8	0.7
		2021	0.2	1	3	0.01	0.2	0.08
		2022	0.1	1	1	0.002	0.1	0.03
		2023	0.0	0	1	0.001	0.0	0.02
		2024	0.1	0	1	0.003	0.1	0.03
	Architectural Coating	2017	0	0	0	0	0	0
		2018	0	0	0	0	0	0
		2019	0	0	0	0	0	0
		2020	0	0	0	0	0	0
		2021	0	0	0	0	0	0
		2022	0	0	0	0	0	0
		2023	0	0	0	0	0	0
		2024	0	0	0	0	0	0
Hauling[3]	Site Preparation	2015	1.36	21.0	15.9	0.048	1.71	0.68
		2016	1.19	18.6	14.8	0.048	4.16	1.23

Notes:
[1] Emissions were estimated using CalEEMod® version 2013.2.2.
[2] Fugitive PM_{10} / $PM_{2.5}$ emissions for the onsite on-highway trucks and pickups are controlled by watering the construction site three times per day (estimated to reduce emissions by 61%). This reduction was applied to the unmitigated emissions from CalEEMod® but outside of the software. A coding error in CalEEMod® results in the mitigated emissions of these onroad vehicles to be bigger than the unmitigated emissions. The incorrect mitigated emissions were not used anywhere in this analysis.
[3] Hauling trips, to remove vegetation, only occur during the site preparation phase.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CO - carbon monoxide
lbs - pounds
NOx - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
SO_2 - sulfur dioxide
VOC - volatile organic compound

Table 11. Criteria Air Pollutant Construction Emissions from Architectural Coating and Paving
Entrada South
Los Angeles County, California

Construction Phase	Year	VOC Maximum (lbs/day)[1] Project
Paving 1	2017	2.1
Paving 2	2017	2.1
Architectural Coating	2017	114.2
	2018	114.2
	2019	114.2
	2020	114.2
	2021	114.2
	2022	114.2
	2023	114.2
	2024	114.2

Notes:
[1] Emissions were estimated using CalEEMod® version 2013.2.2.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
lbs - pounds
VOC - volatile organic compound

Table 12. Summary of Criteria Air Pollutant Construction Emissions
Entrada South
Los Angeles County, California

Year	VOC[2]	NOx	CO	SO_2[3]	PM_{10} Total[4]	$PM_{2.5}$ Total[4]
	Maximum (lbs/day)[1]					
2015	3	32	23	0.06	15	3
2016	24	286	176	0.25	81	21
2017	119	50	50	0.09	32	6
2018	118	30	40	0.08	5	3
2019	119	34	61	0.15	9	4
2020	121	40	90	0.24	15	5
2021	117	21	33	0.08	4	2
2022	116	18	23	0.05	2	1
2023	116	16	21	0.04	2	1
2024	116	15	23	0.05	2	1
Maximum Daily Emissions	121	286	176	0.25	81	21
SCAQMD Threshold[5]	75	100	550	150	150	55
Above Threshold?	**Yes**	**Yes**	No	No	No	No

Notes:
[1] Emissions were estimated using CalEEMod® version 2013.2.2.
[2] ROG as defined by CalEEMod® is assumed to be equal to VOC as defined by SCAQMD.
[3] SO_2 as defined by CalEEMod® is assumed to represent SOx emissions.
[4] Fugitive PM_{10} / $PM_{2.5}$ emissions from onsite trucks controlled by watering the construction site three times per day (estimated to reduce emissions by 61%), and by limiting onsite trucks speed to 15 mph.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CO - carbon monoxide
lbs - pounds
mph - miles per hour
NOx - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
ROG - reactive organic gases
SCAQMD - South Coast Air Quality Management District
SO_2 - sulfur dioxide
SO_x - sulfur oxides
VOC - volatile organic compound

Table 13a. Criteria Air Pollutant Emissions Associated with Area Sources (Project)
Entrada South
Los Angeles County, California

Area Sources[1,2]	VOC[3]	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
	(lbs/day)					
Architectural Coating	13.8	0.0	0.0	0.0	0.0	0.0
Consumer Products	77.3	0.0	0.0	0.0	0.0	0.0
Hearth[4]	2.4	20.9	8.9	0.1	1.7	1.7
Landscaping	3.9	1.5	130.1	0.007	0.7	0.7
Total	**97**	**22**	**139**	**0.14**	**2.4**	**2.4**

Notes:
1 Emission sources that CalEEMod® classifies as "Area Sources."
[2] Assumed no wood burning devices as per SCAQMD Rule 445. Based on the Project Description, it was assumed 80% of residential units will have a fireplace.
[3] ROG as defined by CalEEMod® is assumed to be equal to VOC as defined by SCAQMD.
[4] Note that NO_x, CO, SO_2 emissions for hearths were estimated separately using equations from USEPA AP-42 Chapter 1, Section 1.4 natural combustion due to a known error within CalEEMod®. The AP-42 emission factor in lb/10^6 scf was converted to lb/MMBtu by dividing the emission factor by 1,020. To calculate the emissions in lbs/day, the fireplaces were assumed to operate three hours a day, and are having an average heating rate of 60,000 Btu/hr.

Emission Factor (lb/MMBtu)	NO_x	CO	SO_2	**Source**: USEPA. 1998. AP-42 Emission Factors. Chapter 1.4 Natural Gas Combustion.		
Natural Gas	0.092	0.039	0.00059			
Emissions (lb/day)	**Dwelling units (DU)**	**% of Gas Fireplaces**	**No. of Gas Fireplaces**	**NOx Emissions**	**CO Emissions**	**SO_2 Emissions**
Project	1,574	80%	1,259	20.9	8.9	0.13

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CO - carbon monoxide
hr - hour
lbs - pounds
MMBtu - million British thermal unit
NO_x - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
ROG - reactive organic gases
SCAQMD - South Coast Air Quality Management District
scf - standard cubic feet
SO_2 - sulfur dioxide
USEPA - US Environmental Protection Agency
VOC - volatile organic compounds

Reference:
SCAQMD, Rule 445, March 2008. Adopted March 7, 2008. Available at: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-445.pdf?sfvrsn=4, Accessed: June, 2014.

Table 13b. Criteria Air Pollutant Emissions Associated with Area Sources (Project without PDFs)
Entrada South
Los Angeles County, California

Area Sources[1,2]	VOC[3]	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
	(lbs/day)					
Architectural Coating	13.8	0.0	0.0	0.0	0.0	0.0
Consumer Products	77.3	0.0	0.0	0.0	0.0	0.0
Hearth[4]	2.7	23.5	10.0	0.1	1.9	1.9
Landscaping	3.9	1.5	130.1	0.01	0.7	0.7
Total	**98**	**25**	**140**	**0.16**	**2.6**	**2.6**

Notes:
[1] Emission sources that CalEEMod® classifies as "Area Sources."
[2] Assumed no wood burning devices as per SCAQMD Rule 445. For the Project without PDFs scenario, it was assumed 90% of residential units will have a fireplace (i.e, the CalEEMod® default assumption).
[3] ROG as defined by CalEEMod® is assumed to be equal to VOC as defined by SCAQMD.
[4] Note that NO_x, CO, SO_2 emissions for hearths were estimated separately using equations from USEPA AP-42 Chapter 1, Section 1.4 natural combustion due to a known error within CalEEMod®. The AP-42 emission factor in lb/10^6 scf was converted to lb/MMBtu by dividing the emission factor by 1,020. To calculate the emissions in lbs/day, the fireplaces were assumed to operate three hours a day, and are having an average heating rate of 60,000 Btu/hr.

Emission Factor (lb/MMBtu)	NO_x	CO	SO_2	**Source**: USEPA. 1998. AP-42 Emission Factors. Chapter 1.4 Natural Gas Combustion.		
Natural Gas	0.092	0.039	0.00059			
Emissions (lb/day)	**Dwelling units (DU)**	**% of Gas Fireplaces**	**No. of Gas Fireplaces**	**NOx Emissions**	**CO Emissions**	**SO_2 Emissions**
Project without PDFs	1,574	90%	1,417	23.5	10.0	0.15

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CO - carbon monoxide
hr - hour
lbs - pounds
MMBtu - million British thermal unit
NO_x - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
ROG - reactive organic gases
SCAQMD - South Coast Air Quality Management District
scf - standard cubic feet
SO_2 - sulfur dioxide
USEPA - US Environmental Protection Agency
VOC - volatile organic compounds

Reference:
SCAQMD, Rule 445, March 2008. Adopted March 7, 2008. Available at: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-445.pdf?sfvrsn=4, Accessed: June, 2014.

Table 14a. Criteria Air Pollutant Emissions Associated with Natural Gas Use (Project)[1]
Entrada South
Los Angeles County, California

CalEEMod® Land Use	Project Entitlement	Natural Gas Use	VOC[2]	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
		(kBtu/day)	(lbs/day)					
Elementary School	Elementary School	1,871	0.02	0.18	0.15	0.001	0.01	0.01
City Park	Public Neighborhood Park	0	0	0	0	0	0	0
Single Family Housing	Single Family Residential	22,119	0.24	2.04	0.87	0.013	0.16	0.16
Condo / Townhouse	2-Story and 2&3 Story Condos	22,136	0.24	2.04	0.87	0.013	0.16	0.16
Condo / Townhouse High Rise	3-Story and 4-Story Condos	16,918	0.18	1.56	0.66	0.010	0.13	0.13
Regional Shopping Center	Commercial	1,028	0.01	0.10	0.08	0.0006	0.01	0.01
Strip Mall	Commercial	55	0.001	0.01	0.005	0.00003	0.0004	0.0004
General Office Building	Office	9,260	0.10	0.91	0.76	0.005	0.07	0.07
Unenclosed Parking with Elevator	Parking Structure	0	0	0	0	0	0	0
Parking Lot	Parking	0	0	0	0	0	0	0
Health Club	Recreational Center[3]	99	0.001	0.01	0.01	0.0001	0.0007	0.0007
	Total	**73,486**	**0.79**	**6.8**	**3.4**	**0.043**	**0.55**	**0.55**

Notes:
[1] Energy usage for each land use was assumed to be consistent with CalEEMod® defaults, which were obtained from CEUS or RASS studies on energy use and adjusted to account for 2013 Title 24 building standards. The CEC estimates that 2013 Title 24 is 25% more efficient for residential and 30% more efficient for commercial construction as compared to the 2008 Title 24 building standards. See Appendix A of the CalEEMod® user's guide for details.
[2] ROG as defined by CalEEMod® is assumed to be equal to VOC as defined by SCAQMD.
[3] The Project analysis assumed that pools use solar heating as a project design feature.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CEC - California Energy Commission
CEUS - California Commercial End-Use Survey
CO - carbon monoxide
kBTU - 1,000 British thermal units
lbs - pounds
NOx - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
RASS - California Statewide Residential Appliance Saturation Study
ROG - reactive organic gases
SCAQMD - South Coast Air Quality Management District
SO_2 - sulfur dioxide
VOC - volatile organic compounds

Reference:
California Energy Commission. News Release. 2013. Available online at: http://www.energy.ca.gov/releases/2012_releases/2012-05-

Table 14b. Criteria Air Pollutant Emissions Associated with Natural Gas Use (Project without PDFs)[1]
Entrada South
Los Angeles County, California

CalEEMod® Land Use	Project Entitlement	Natural Gas Use	VOC[2]	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
		(kBtu/day)	(lbs/day)[3]					
Elementary School	Elementary School	1,871	0.02	0.18	0.15	0.001	0.01	0.01
City Park	Public Neighborhood Park	0	0	0	0	0	0	0
Single Family Housing	Single Family Residential	22,119	0.24	2.04	0.87	0.01	0.16	0.16
Condo / Townhouse	2-Story and 2&3 Story Condos	22,136	0.24	2.04	0.87	0.01	0.16	0.16
Condo / Townhouse High Rise	3-Story and 4-Story Condos	16,918	0.18	1.56	0.66	0.01	0.13	0.13
Regional Shopping Center	Commercial	1,028	0.01	0.10	0.08	0.0006	0.01	0.01
Strip Mall	Commercial	55	0.00	0.01	0.00	0.00	0.00	0.00
General Office Building	Office	9,260	0.10	0.91	0.76	0.01	0.07	0.07
Unenclosed Parking with Elevator	Parking Structure	0	0	0	0	0	0	0
Parking Lot	Parking	0	0	0	0	0	0	0
Health Club	Recreational Center[3]	15,560	0.17	1.53	1.28	0.01	0.12	0.12
	Total	**88,946**	**0.96**	**8.4**	**4.7**	**0.05**	**0.66**	**0.66**

Notes:

[1] Energy usage for each land use was assumed to be consistent with CalEEMod® defaults, which were obtained from CEUS or RASS studies on energy use and adjusted to account for 2013 Title 24 building standards. The CEC estimates that 2013 Title 24 is 25% more efficient for residential and 30% more efficient for commercial construction as compared to the 2008 Title 24 building standards. See Appendix A of the CalEEMod® user's guide for details.

[2] ROG as defined by CalEEMod® is assumed to be equal to VOC as defined by SCAQMD.

[3] The Project without PDF analysis assumed that pools use natural gas heating. The natural gas usage of the pools is included for the recreational center land use.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CEC - California Energy Commission
CEUS - California Commercial End-Use Survey
CO - carbon monoxide
kBTU - 1,000 British thermal units
lbs - pounds
NOx - nitrogen oxides
PDF - project design feature
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
RASS - California Statewide Residential Appliance Saturation Study
ROG - reactive organic gases
SCAQMD - South Coast Air Quality Management District
SO_2 - sulfur dioxide
VOC - volatile organic compounds

Reference:

California Energy Commission. News Release. 2013. Available online at: http://www.energy.ca.gov/releases/2012_releases/2012-05-31_energy_commission_approves_more_efficient_buildings_nr.html. Accessed: June, 2014.

Table 15. Calculation of Overall Trip Length
Entrada South
Los Angeles County, California

Land Use Category[1]	External Trip Length (miles)[2]	External ADT[3]	Internal Trip Length (miles)[2]	Internal ADT[4]	Overall Trip Length (miles)[5]
Residential	11.6	10,527	1	1,290	10.44
NonResidential	11.6	16,941	1	2,750	10.12

Notes:

[1] The residential land use category includes Condo/Townhouse, Condo/Townhouse High Rises and Single Family Housing. The NonResidential land use category includes City Park, Elementary School, Recreational Center, General Office building, Regional Shopping Center, and Strip Mall.

[2] External trip length based on the Project Traffic Impact Analysis. The trip length average used by the Project Traffic Impact Analysis is provided in the Santa Clarita Valley Area Plan (also called OVOV Plan). Internal trip length assumed to be 1 mile based on the average distance between residential and commercial locations within the Project site.

[3] Based on average daily trips for the "External - Residential" and "External - Non Residential" categories available on the Internal/External Trip Summary Table in the Project Traffic Impact Analysis.

[4] Since CalEEMod® generally relies upon trips (not tripends) as the basis for inputs to estimate traffic related emissions, the number of tripends by land use provided in the Project Traffic Impact Analysis were converted to trips in order to estimate traffic related emissions in CalEEMod®. See Project report for details.

[5] Overall trip length was input into CalEEMod® 2013.2.2 to estimate emissions from mobile sources.

Abbreviations:

ADT - Average Daily Trips
CalEEMod® - CALifornia Emissions Estimator MODel
OVOV - One Valley One Vision
VTTM - Vesting Tentative Tract Map

References:

Los Angeles County Department of Regional Planning. 2012. Santa Clarita Valley Area Plan. Available at: http://planning.lacounty.gov/ovov
Stantec. 2014. Entrada South (VTTM 053295) Traffic Impact Analysis. June.

Table 16a. Trip Calculations (Project)
Entrada South
Los Angeles County, California

	Total
Traffic Study	
Daily Trip Generation	35,547
Internal Trips (Non-Residential to Residential)[1]	-1,290
Internal Trips (Non-Residential to Non-Residential)[1]	-2,750
Net Daily Trip Generation	**31,507**
Trip Reduction Strategy[2]	
Expand Transit Network [TST-3]	
Percentage Trip Reduction	1.7%
Reduction in Trips	536
Net Site Trips	30,971
Pedestrian Network Improvements [SDT-1]	
Percentage Trip Reduction	2.0%
Reduction in Trips	630
Net Site Trips	30,341
Telecommuting and Alternative Work Schedule [TRT-6]	
Percentage Trip Reduction	0.2%
Reduction in Trips	63
Net Site Trips	30,278
Improve Traffic Flow [RPT-2]	
Percentage Trip Reduction	1.4%
Reduction in Trips	441
Net Site Trips	29,837
Voluntary Commute Trip Reduction [TRT-1]	
Percentage Trip Reduction	1.0%
Reduction in Trips	315
Net Site Trips	29,522
Traffic Calming Measures [SDT-2]	
Percentage Trip Reduction	0.75%
Reduction in Trips	236
Net Site Trips	29,286
Ride-Sharing Programs [TRT-3]	
Percentage Trip Reduction	1.8%
Reduction in Trips	567
Net Site Trips	28,719
Total Trip Reduction Percentage	8.85%
Total Trip Reduction	2,788
Final Net Daily Trip Generation (Project)	**28,719**

Notes:

[1] "Internal trips" from non-residential to residential, and from non-residential to non-residential are subtracted to avoid double counting of trips.

[2] Trip reductions were estimated based on various Project TDMs. The reduction for specific TDMs were estimated in Appendix D of the report: CAPCOA GHG Reduction Strategies for Transportation – Entrada South (VTTM 53295).

Abbreviations:

CAPCOA - California Air Pollution Control Officer's Association
GHG - greenhouse gas
TDM - Transportation Demand Management
VTTM - Vesting Tentative Tract Map

References:

Stantec. 2014. CAPCOA GHG Reduction Strategies for Transportation – Entrada South (VTTM 53295). July.
Stantec. 2014. Entrada South (VTTM 053295) Traffic Impact Analysis. June.

Table 16b. Trip Calculations (Project without PDFs)
Entrada South
Los Angeles County, California

	Total
Traffic Study	
Daily Trip Generation	35,547
Internal Trips (Non-Residential to Residential)[1]	-1,290
Internal Trips (Non-Residential to Non-Residential)[1]	-2,750
Final Net Daily Trip Generation (Project without PDFs)[2]	**31,507**

Notes:
[1] "Internal trips" from non-residential to residential, and from non-residential to non-residential are subtracted to avoid double counting of trips.
[2] The Project without PDFs Scenario does not have any trip reduction strategies.

Abbreviations:
PDF - project design feature
VTTM - Vesting Tentative Tract Map

References:
Stantec. 2014. Entrada South (VTTM 053295) Traffic Impact Analysis. June.

Table 17. CalEEMod® Model Inputs Associated with Traffic
Entrada South
Los Angeles County, California

CalEEMod® Land Use	Project Entitlement	Unit	Trip Rates[1] (trips/day/unit)			Trip type[2] %		
			Weekday	Saturday	Sunday	Primary	Diverted	Pass-By
Project[3]								
Elementary School	Elementary School	students	1.03	0.00	0.00	100	0	0
City Park	Public Neighborhood Park	acres	1.79	1.79	1.79	100	0	0
Single Family Housing	Single Family Residential	DU	6.84	7.21	6.27	100	0	0
Condo / Townhouse	2-Story and 2&3 Story Condos	DU	6.84	7.44	6.30	100	0	0
Condo / Townhouse High Rise	3-Story and 4-Story Condos	DU	6.84	7.44	6.30	100	0	0
Regional Shopping Center	Commercial	1000 sqft	43.27	50.35	25.43	100	0	0
Strip Mall	Commercial	1000 sqft	68.04	64.54	31.36	100	0	0
General Office Building	Office	1000 sqft	9.25	1.99	0.82	100	0	0
Unenclosed Parking with Elevator	Parking Structure	spaces	0.00	0.00	0.00	100	0	0
Parking Lot	Parking	acres	0.00	0.00	0.00	100	0	0
Health Club	Recreational Center	1000 sqft	2.07	1.31	1.68	100	0	0
Project without PDFs[3]								
Elementary School	Elementary School	students	1.13	0.00	0.00	100	0	0
City Park	Public Neighborhood Park	acres	1.96	1.96	1.96	100	0	0
Single Family Housing	Single Family Residential	DU	7.51	7.91	6.88	100	0	0
Condo / Townhouse	2-Story and 2&3 Story Condos	DU	7.51	8.16	6.92	100	0	0
Condo / Townhouse High Rise	3-Story and 4-Story Condos	DU	7.51	8.16	6.92	100	0	0
Regional Shopping Center	Commercial	1000 sqft	47.47	55.24	27.90	100	0	0
Strip Mall	Commercial	1000 sqft	74.64	70.80	34.41	100	0	0
General Office Building	Office	1000 sqft	10.14	2.18	0.90	100	0	0
Unenclosed Parking with Elevator	Parking Structure	spaces	0.00	0.00	0.00	100	0	0
Parking Lot	Parking	acres	0.00	0.00	0.00	100	0	0
Health Club	Recreational Center	1000 sqft	2.28	1.44	1.85	100	0	0

Notes:

[1] Trip Rates based on the average daily trips provided by land use in the Project Traffic Impact Analysis. Weekend trip rates were estimated based on Project trip rates and in proportion to CalEEMod® weekeday/weekend trip rates. The traffic model used in the Project Traffic Impact Analysis assumed different trip rate for single family homes and condos, but generated a weighted trip rate for all residential units. Using this weighted trip rate for the emissions estimate is mathematically equivalent to using the individual trip rates for the different residential land uses.

[2] The Project Traffic Impact Analysis accounts for primary, diverted and pass-by trips. Hence trip type % was assumed to be 100% primary trip.

[3] Trip rates for the Project Scenario incorporate a reduction of 8.85% based on TDMs outlined in Appendix D of the report: CAPCOA GHG Reduction Strategies for Transportation – Entrada South (VTTM 53295). TDM reductions are not included in the trip rate calculation for the Project without PDFs Scenario.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CAPCOA - California Air Pollution Control Officer's Association
DU - dwelling unit
GHG - greenhouse gases
PDF - project design feature
sqft - square feet
TDM - transportation demand management
VTTM - Vesting Tentative Tract Map

References:

Stantec. 2014. CAPCOA GHG Reduction Strategies for Transportation – Entrada South (VTTM 53295). July.
Stantec. 2014. Entrada South (VTTM 053295) Traffic Impact Analysis. June.

Table 18a. Criteria Air Pollutant Emissions Associated with Traffic (Project)[1,2]
Entrada South
Los Angeles County, California

CalEEMod® Land Use	Project Entitlement	Vehicles Miles Travelled	VOC[3]	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
		(VMT / year)	(lbs/day)					
Elementary School	Elementary School	2,032,602	1.7	4.5	20	0.08	5.1	1.4
City Park	Public Neighborhood Park	36,925	0.03	0.08	0.36	0.001	0.09	0.03
Single Family Housing	Single Family Residential	8,774,852	7.6	19	86	0.34	22	6.2
Condo / Townhouse	2-Story and 2&3 Story Condos	18,217,967	16	40	178	0.70	46	13
Condo / Townhouse High Rise	3-Story and 4-Story Condos	13,923,732	12	31	136	0.53	35	10
Regional Shopping Center	Commercial	43,044,538	37	95	421	1.7	109	31
Strip Mall	Commercial	3,442,399	3.0	7.6	34	0.13	8.7	2.4
General Office Building	Office	11,230,540	9.7	25	110	0.43	28	8.0
Unenclosed Parking with Elevator	Parking Structure[4]	0	0	0	0	0	0	0
Parking Lot	Parking[4]	0	0	0	0	0	0	0
Health Club	Recreational Center	17,550	0.02	0.04	0.17	0.001	0.04	0.01
	Total	**100,721,105**	**87**	**222**	**984**	**3.9**	**255**	**72**

Notes:
[1] Emissions were estimated using CalEEMod®. Emissions associated with transportation include exhaust emissions during running, idling, and startup, and particulate matter fugitive emissions. See report for Project design features and assumptions.
[2] Emissions for the Project Scenario incorporated the TDMs outlined in Appendix D of the report: CAPCOA GHG Reduction Strategies for Transportation – Entrada South (VTTM 53295).
[3] ROG as defined by CalEEMod® is assumed to be equal to VOC as defined by SCAQMD.
[4] Parking related emissions are represented as part of the other land uses.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CAPCOA - California Air Pollution Control Officer's Association
CO - carbon monoxide
GHG - greenhouse gas
lbs - pounds
NOx - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
ROG - reactive organic gases
SCAQMD - South Coast Air Quality District Management
SO_2 - sulfur dioxide
TDM - transportation demand management
VMT - vehicle miles traveled
VOC - volatile organic compounds
VTTM - Vesting Tentative Tract Map

References:
Stantec. 2014. CAPCOA GHG Reduction Strategies for Transportation – Entrada South (VTTM 53295). July.
Stantec. 2014. Entrada South (VTTM 053295) Traffic Impact Analysis. June

Table 18b. Criteria Air Pollutant Emissions Associated with Traffic (Project without PDFs)[1,2]
Entrada South
Los Angeles County, California

CalEEMod® Land Use	Project Entitlement	Vehicles Miles Travelled	VOC[3]	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
		(VMT / year)	(lbs/day)					
Elementary School	Elementary School	2,229,942	1.9	4.9	22	0.09	5.6	1.6
City Park	Public Neighborhood Park	40,432	0.03	0.09	0.40	0.002	0.10	0.03
Single Family Housing	Single Family Residential	9,632,461	8.3	21	94	0.37	24	6.8
Condo / Townhouse	2-Story and 2&3 Story Condos	20,000,242	17	44	195	0.77	51	14
Condo / Townhouse High Rise	3-Story and 4-Story Condos	15,285,899	13	34	149	0.59	39	11
Regional Shopping Center	Commercial	47,223,304	41	104	461	1.8	120	34
Strip Mall	Commercial	3,776,377	3.2	8.3	37	0.14	9.6	2.7
General Office Building	Office	12,311,016	10.6	27	120	0.47	31	8.7
Unenclosed Parking with Elevator	Parking Structure[4]	0	0	0	0	0	0	0
Parking Lot	Parking[4]	0	0	0	0	0	0	0
Health Club	Recreational Center	19,326	0.02	0.04	0.19	0.001	0.05	0.01
	Total	**110,519,000**	**95**	**244**	**1,080**	**4.2**	**280**	**79**

Notes:
[1] Emissions were estimated using CalEEMod®. Emissions associated with transportation include exhaust emissions during running, idling, and startup, and particulate matter fugitive emissions.
[2] TDM reductions are not reflected in the traffic emissions for the Project without PDFs Scenario.
[3] ROG as defined by CalEEMod® is assumed to be equal to VOC as defined by SCAQMD.
[4] Parking related emissions are represented as part of the other land uses.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CO - carbon monoxide
lbs - pounds
NOx - nitrogen oxides
PDF - Project Design Feature
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
ROG - reactive organic gases
TDM - transportation demand management
SCAQMD - South Coast Air Quality District Management
SO_2 - sulfur dioxide
VMT - vehicle miles traveled
VOC - volatile organic compounds
VTTM - Vesting Tentative Tract Map

References:
Stantec. 2014. Entrada South (VTTM 053295) Traffic Impact Analysis. June.

Table 19a. Summary of Operational Criteria Air Pollutant Emissions (Project)
Entrada South
Los Angeles County, California

Source[1]	VOC[2]	NO_x	CO	SO_2[3]	PM_{10}	$PM_{2.5}$
	(lbs/day)					
Area	97	22.4	139	0.14	2.4	2.4
Energy (Natural gas use)	0.8	6.8	3.4	0.04	0.55	0.55
Traffic	87	222	984	3.9	255	72
Total	185	252	1,127	4.1	258	75
SCAQMD Threshold[4]	55	55	550	150	150	55
Above Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**

Notes:
[1] Emissions were estimated using CalEEMod® except for area sources where an estimate was made for hearths due to an error within CalEEMod®.
[2] ROG as defined by CalEEMod® is assumed to be equal to VOC as defined by SCAQMD.
[3] SO_2 emissions reprted by CalEEMod® are assumed to represent SO_X emissions.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CEQA - California Environmental Quality Act
CO - carbon monoxide
lbs - pounds
NO_x - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
ROG - reactive organic gases
SCAQMD - South Coast Air Quality District Management
SO_2 - sulfur dioxide
SO_x - sulfur oxides
VOC - volatile organic compounds

Reference:
[4] SCAQMD Air Quality CEQA Significance Thresholds. Available at: http://sfprod.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed: June, 2014.

Table 19b. Summary of Operational Criteria Air Pollutant Emissions (Project without PDFs)
Entrada South
Los Angeles County, California

Source[1]	VOC[2]	NO_x	CO	SO_2[3]	PM_{10}	$PM_{2.5}$
	(lbs/day)					
Area	98	25.0	140	0.16	2.6	2.6
Energy (Natural gas use)	1.0	8.4	4.7	0.05	0.66	0.66
Traffic	95	244	1,080	4.2	280	79
Total	194	277	1,225	4.5	283	82
SCAQMD Threshold[4]	55	55	550	150	150	55
Above Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**

Notes:
[1] Emissions were estimated using CalEEMod® except for area sources where an estimate was made for hearths due to an error within CalEEMod®.
[2] ROG as defined by CalEEMod® is assumed to be equal to VOC as defined by SCAQMD.
[3] SO_2 emissions reprted by CalEEMod® are assumed to represent SO_X emissions.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CEQA - California Environmental Quality Act
CO - carbon monoxide
lbs - pounds
NO_x - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
PDF - project design feature
ROG - reactive organic gases
SCAQMD - South Coast Air Quality District Management
SO_2 - sulfur dioxide
SO_x - sulfur oxides
VOC - volatile organic compounds

Reference:
[4] SCAQMD Air Quality CEQA Significance Thresholds. Available at: http://sfprod.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed: June, 2014.

Table 20. Summary of Annual Construction Emissions for Air Dispersion Modeling
Entrada South
Los Angeles County, California

Emission Type	Construction Phase[1]	Year	Exhaust PM_{10}	Fugitive PM_{10}	Exhaust $PM_{2.5}$	Fugitive $PM_{2.5}$	NOx
			Annual Average (tons/yr)[1]				
			Project[2]				
Offroad Equipment & Onsite Trucks	Site Preparation	2015	0.01	0.13	0.01	0.01	0.13
		2016	0.00	0.04	0.00	0.00	0.04
	Grading	2016	1.48	5.15	1.36	0.85	33.24
	Utility Installation	2016	0.04	0.78	0.03	0.08	0.71
		2017	0.05	1.09	0.04	0.11	0.91
	Paving 1	2017	0.01	0.04	0.01	0.00	0.14
	Paving 2	2017	0.01	0.04	0.01	0.00	0.14
	Building Construction	2017	0.14	0.00	0.13	0.00	2.01
		2018	0.20	0.00	0.18	0.00	3.04
		2019	0.17	0.00	0.16	0.00	2.74
		2020	0.15	0.00	0.14	0.00	2.50
		2021	0.12	0.00	0.12	0.00	2.26
		2022	0.10	0.00	0.10	0.00	2.02
		2023	0.09	0.00	0.09	0.00	1.86
		2024	0.08	0.00	0.08	0.00	1.75
	Architectural Coating	2017	0.00	0.00	0.00	0.00	0.03
		2018	0.01	0.00	0.01	0.00	0.09
		2019	0.01	0.00	0.01	0.00	0.11
		2020	0.01	0.00	0.01	0.00	0.11
		2021	0.00	0.00	0.00	0.00	0.03
		2022	0.00	0.00	0.00	0.00	0.01
		2023	0.00	0.00	0.00	0.00	0.01
		2024	0.00	0.00	0.00	0.00	0.01
Total Emissions[3]			**2.67**	**--**	**--**	**--**	**--**
Maximum Annual Emissions[4]			**1.52**	**5.97**	**1.40**	**0.93**	**34**

Notes:
[1] Emissions estimated using CalEEMod®. The maximum daily emissions were evaluated using conservative assumptions.
[2] Fugitive PM_{10}/$PM_{2.5}$ emissions from onsite trucks controlled by watering the construction site three times per day (estimated to reduce emissions by 61%), and by limiting onsite trucks speed to 15 mph.
[3] Cancer risk from construction acitivities as shown in Table 25 was based on the total PM_{10} exhaust emissions, averaged over the entire construction duration.
[4] Annual PM_{10}, $PM_{2.5}$, and NO_2 concentration from construction activities as shown in Table 21 and Table 22 were based on the maximum annual average emission rates. The maximum annual average PM_{10} exhaust emission rate was also used to evaluate chronic health impact as shown in Table 25. Maximum annual average emissions occur in 2016 when site preparation, grading, and utility installation occur.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
mph - mile per hour
NOx - nitrogen oxides
NO_2 - nitrogen dioxide
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
tons - short tons
yr - year

Table 21. Construction Air Dispersion Modeling Results (Project)
Entrada South
Los Angeles County, California

Pollutant	Averaging Time	Maximum Impact from Project Emissions ($\mu g/m^3$)[3]	Background Pollutant Concentration ($\mu g/m^3$)	Maximum Project + Background Concentration ($\mu g/m^3$)	SCAQMD CEQA Threshold ($\mu g/m^3$)[3]	Maximum Project > Threshold?
Off-Site Receptors (Residential/Sensitive)						
NO_2 [1]	1-hour	49	164	213	339	No
	Annual	1.7	37	39	57	No
CO [2]	1-hour	32	2,292	2,324	23,000	No
	8-hour	15	1,261	1,276	10,000	No
PM_{10}	24-hour	2.53	N/A	N/A	10.4	No
	Annual	0.51	N/A	N/A	1.0	No
$PM_{2.5}$	24-hour	0.53	N/A	N/A	10.4	No

Notes:
[1] Background NO_2 concentrations based on monitoring results from Santa Clarita Valley station for the years 2005-2009.
[2] Background CO concentrations based on monitoring results from Santa Clarita Valley station for the years 2008-2010 for 1-hour and 2010-2012 for 8-hour.
[3] The maximum daily emissions used for the air dispersion modeling were extracted from Table 9 and converted to grams per second emission rate. The annual emissions used for the air dispersion modeling were extracted from Table 20 and converted to grams per second emision rate. The air concentrations for CO, PM_{10}, and $PM_{2.5}$ were calculated by multiplying the dispersion factors from the air dispersion modeling by the emission rates in grams per second for the respective averaging period. The air concentration for NO_2 was calculated by the Plume Volume Molar Ratio Method using actual emission rate in the model. This analysis conservatively reports the impact at the highest offsite receptor for 24-hour and annual concentrations. The concentrations are likely lower at residential or sensitive receptor locations.

Abbreviations:
$\mu g/m^3$ - micrograms per cubic meter
CEQA - California Environmental Quality Act
CO - carbon monoxide
N/A- Not applicable
NO_2 - nitrogen oxide
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
SCAQMD - South Coast Air Quality Management District

Reference:
[3] SCAQMD Air Quality CEQA Significance Thresholds. Available at: http://sfprod.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed: June, 2014.

Table 22. Construction Air Dispersion Modeling Results – Compared to AAQS
Entrada South
Los Angeles County, California

Pollutant	Averaging Time	Maximum Impact from Project Emissions ($\mu g/m^3$) [2]	Background Pollutant Concentration ($\mu g/m^3$)[3]	Maximum Project + Background Concentration ($\mu g/m^3$)	CAAQS Threshold ($\mu g/m^3$)[4]	Maximum Project > CAAQS?	NAAQS Threshold ($\mu g/m^3$)[5]	Maximum Project > NAAQS?
NO_2[1]	1-hour (98th percentile, averaged over 3 years)	23	121	144	N/A	N/A	188	No
	1-hour	49	164	213	339	No	N/A	N/A
	Annual	1.7	37	39	57	No	100	No
SO_2	1-hour	0.045	39	39	655	No	196	No
	24-hour	0.005	14	14	105	No	N/A	N/A
PM_{10}	24-hour	2.5	45.0	48	50	No	150	No
	Annual	0.51	**20.5**	21	20	**Yes**	N/A	N/A
$PM_{2.5}$	24-hour	0.53	31.2	32	N/A	N/A	35	No
	Annual	0.14	**12.6**	13	12	**Yes**	12	**Yes**

Notes:
[1] The NO_2 air concentration was calculated by the Plume Volume Molar Ratio Method using actual emission rates in the model.

[2] The maximum daily emissions used for the air dispersion modeling were extracted from Table 9 and converted to grams per second emission rate. The annual emissions used for the air dispersion modeling were extracted from Table 20 and converted to grams per second emision rate. The air concentrations for SO_2, PM_{10}, and $PM_{2.5}$ were calculated by multiplying the dispersion factors from the air dispersion modeling by the emission rates in grams per second for the respective averaging period. The air concentration for NO_2 was calculated by the Plume Volume Molar Ratio Method using actual emission rate. This analysis conservatively reports the impact at the highest offsite receptor for 24-hour and annual concentrations. The concentrations are likely lower at residential or sensitive receptor locations.

[3] Existing background concentrations for SO_2, PM_{10} and $PM_{2.5}$ are based upon the concentration measured at the nearest air monitoring stations between 2010 and 2012. The 1-hr and 24-hr concentrations are the maximum values measured during that period, except for $PM_{2.5}$. The PM_{10} and $PM_{2.5}$ annual background concentrations are the average values measured over the three years. Existing background concentrations for NO_2 are based upon the concentration measured at the same station, but for years 2005-2009, to be consistent with the ozone data used in the air dispersion modeling. For the 1-hour NO_2 NAAQS, the background is conservatively estimated as the yearly average of the 98th percentile 1-hour concentrations available from 2005-2009. For the 24-hr $PM_{2.5}$ NAAQS, the background is defined as the 98th percentile 24-hour concentration, averaged over 2010-2012. Bold values indicate that the background pollutant concentration exceeds the relevant CAAQS and/or NAAQS threshold.

Abbreviations:
$\mu g/m^3$ - micrograms per cubic meter
AAQS - Ambient Air Quality Standard
CAAQS - California Ambient Air Quality Standards
hr - hour
N/A- Not applicable
NAAQS - National Ambient Air Quality Standards
NO_2 - nitrogen oxide
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
SO_2 - sulfur dioxide

References:
[4] CAAQs. Available at: http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm. Accessed: August, 2014.
[5] NAAQs. Available at: http://www.epa.gov/air/criteria.html. Accessed: August, 2014.

Table 23. TACs from Construction Activities
Entrada South
Los Angeles County, California

Source	Chemical	CAS Number	Cancer Potency Factor[1] $(mg/kg\text{-}day)^{-1}$	Cancer Risk Resident Multi-Pathway Adjustment[1]	Cancer Risk Worker Multi-Pathway Adjustment[1]	Chronic Hazard Index Reference Exposure Level[1]	Chronic Hazard Index Resident Multi-Pathway Adjustment[1]	Chronic Hazard Index Worker Multi-Pathway Adjustment[1]	Acute Hazard Index Reference Exposure Level[1]
Diesel Construction Equipment Exhaust	DPM[2]	9901	1.1	1.0	1.0	5	1	1	n/a

Notes:
[1] These values were obtained from OEHHA and SCAQMD risk assessment documents. For instances where the data from the two sources did not match, the more conservative value was used in the analysis.
[2] DPM was used as a surrogate to calculate cancer risk and chronic non-cancer hazard index from diesel construction equipment.

Abbreviations:
CAS - Chemical Abstracts Service
DPM - diesel particulate matter
kg - kilogram
mg - milligram
N/A - not applicable
OEEHA - Office of Environmental Health Hazard Assessment
SCAQMD - South Coast Air Quality Management District
TAC - Toxic Air Contaminants

Sources:
SCAQMD Risk Assessment Procedures for Rules 1401 and 212, Available at: http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf?sfvrsn=4. Accessed: June, 2014.
OEEHA. Air Toxicology and Epidemiology, Available at http://www.oehha.ca.gov/air/allrels.html. Accessed: November, 2013.

Table 24. Exposure Assumptions for Construction Activities[1]
Entrada South
Los Angeles County, California

Project Phase	Population	Intake Factor, Inhalation (m^3/kg-day)	Breathing Rate (L/kg-day)	Exposure Value Factor (unitless)	Annual Concentration Adjustment Factor (unitless)	Exposure Time[2] (hr/day)	Exposure Frequency (days/yr)	Exposure Duration (yr)	Averaging Time (day)
Construction	Residential	0.04	302	0.12	1.00	24	350	9.1	25,550
	Sensitive	0.04	302	0.12	1.00	24	350	9.1	25,550

Notes:
[1] Calculation was based on SCAQMD Risk Assessment Procedures for Rules 1401 and 212.
[2] Construction was assumed to occur for 8 hours of a day. But because air dispersion modeling averages the concentration to 24 hours, exposure time was set to 24 hours.

Abbreviations:
hr - hour
kg - kilogram
L - liters
m^3 - cubic meter
SCAQMD - South Coast Air Quality Management District
yr - year

Sources:
SCAQMD Risk Assessment Procedures for Rules 1401 and 212, Available at: http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf?sfvrsn=4. Accessed: June, 2014.

Table 25. Summary of Construction Health Risk Assessment
Entrada South
Los Angeles County, California

Risk Category	Maximum Impact from Project Emissions[2]	SCAQMD CEQA Threshold[3]	Maximum Project > Threshold?
Off-Site Receptors (Residential/Sensitive)			
Cancer Risk (# in one million)	0.62	10	No
Chronic HI (unitless)	0.02	1.0	No
Acute HI[1] (unitless)	Not Calculated	1.0	No

Notes:

[1] Acute HI associated with Project construction was not quantified since no inhalation Reference Exposure Level (REL) has been determined by OEHHA for DPM.

[2] The annual average DPM (PM_{10}) emissions used for the air dispersion modeling were extracted from Table 20 and converted to grams per second emission rate for cancer risk calculation. The maximum annual DPM (PM_{10}) emissions were also extracted from Table 20 and converted to grams per second emission rate for chronic HI calculation. Because the annual average emissions over the entire construction duration occur on two different source configurations (the VTTM plus the External Map area for site preparation, grading, utility installation, and paving, and the VTTM area for building construction and architectural coating), appropriate emissions were assigned to these two source configurations and related risks were calculated separately and summed. This analysis conservatively reports the impact at the highest offsite receptor. The health risk estimates are likely lower at residential or sensitive receptor locations.

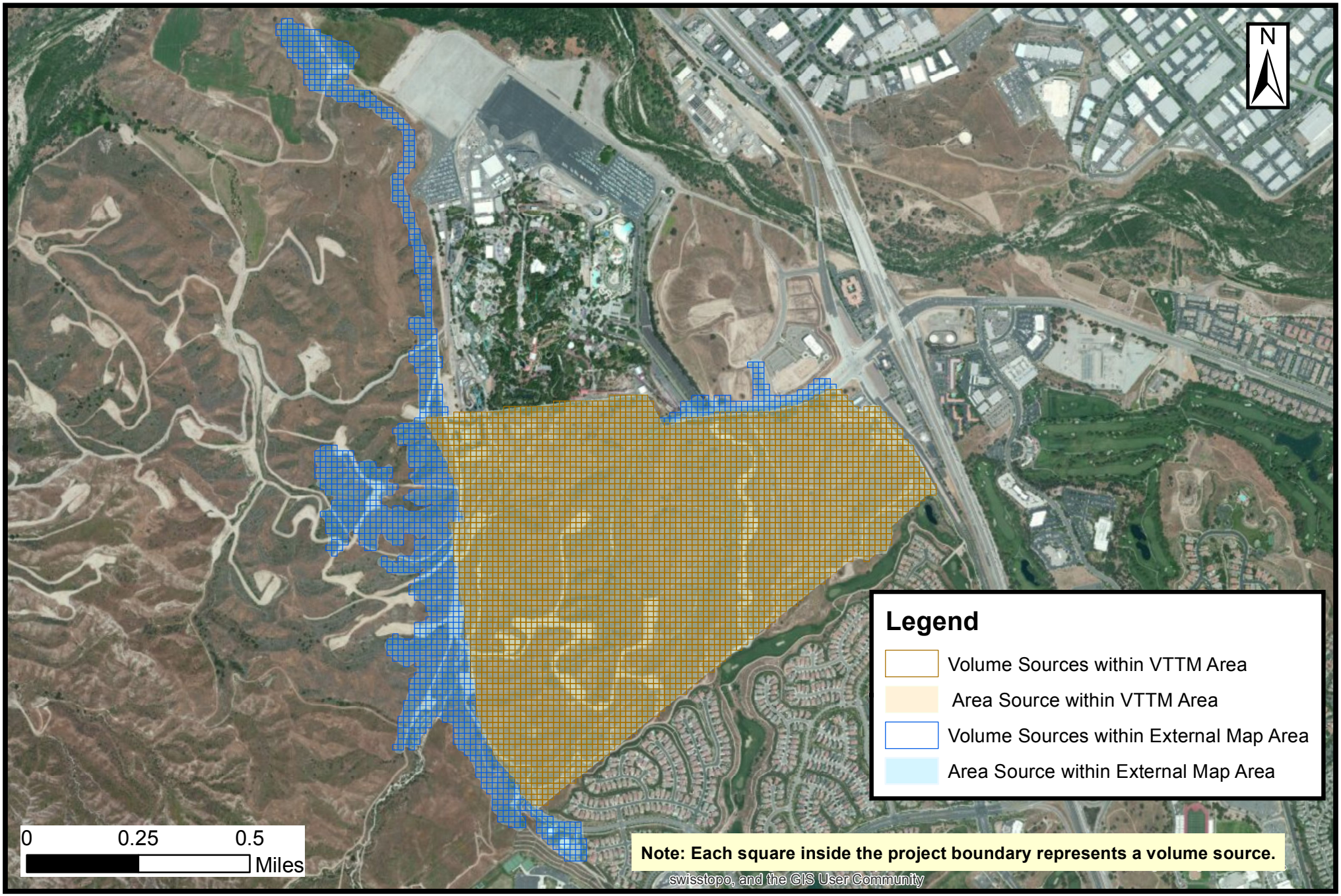
Abbreviations:

$\mu g/m^3$ - micrograms per cubic meter
CEQA - California Environmental Quality Act
DPM - diesel particulate matter
HI - Hazard Index
OEHHA - Office of Environmental Health Hazard Assessment
PM_{10} - coarse particulate matter
REL - reference exposure level
SCAQMD - South Coast Air Quality Management District
VTTM - Vesting Tentative Tract Map

Reference:

[3] SCAQMD Air Quality CEQA Significance Thresholds. Available at: http://sfprod.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed: June, 2014.

Figures

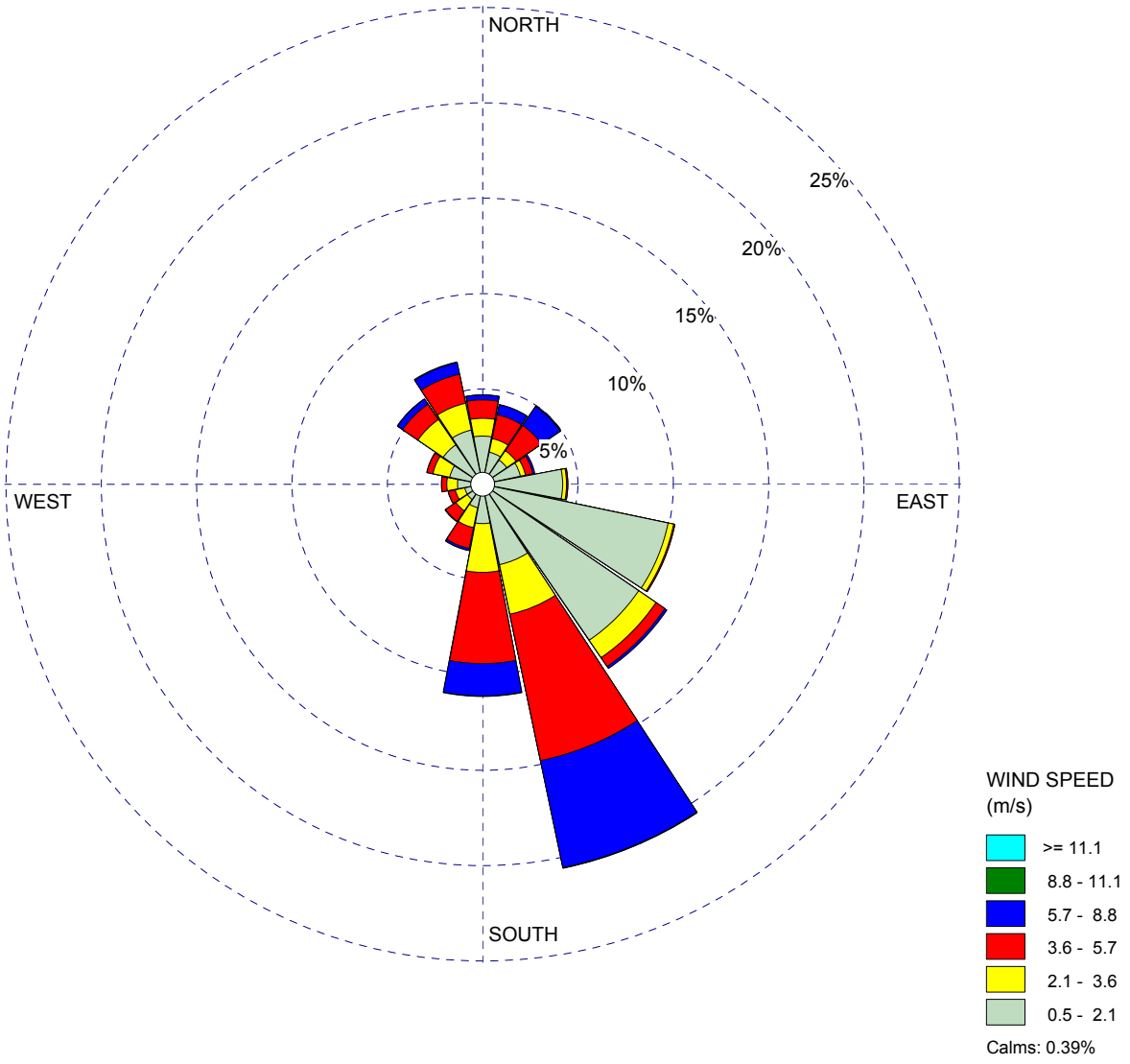


ENVIRON

Construction Modeling Sources
Entrada South
Los Angeles, CA

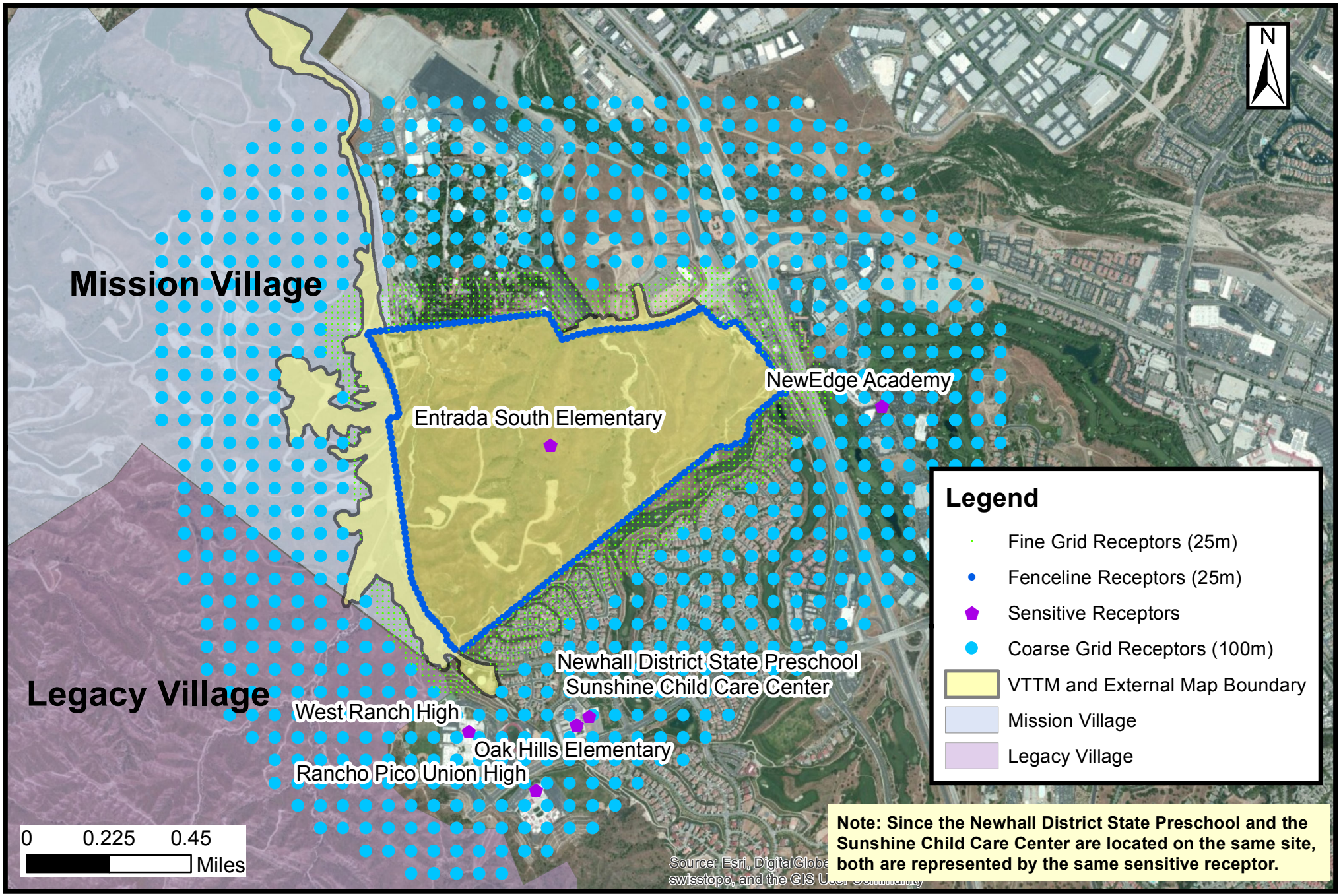
FIGURE
1

Figure 2. Wind Rose for SCAQMD Santa Clarita Meteorological Station (2005-2009)



COMMENTS:	DATA PERIOD:	COMPANY NAME:	
	Start Date: 1/1/2005 - 00:00 **End Date: 12/31/2009 - 23:00**	MODELER:	
	CALM WINDS: **0.39%**	TOTAL COUNT: **43289 hrs.**	
	AVG. WIND SPEED: **2.78 m/s**	DATE: **7/19/2013**	PROJECT NO.:

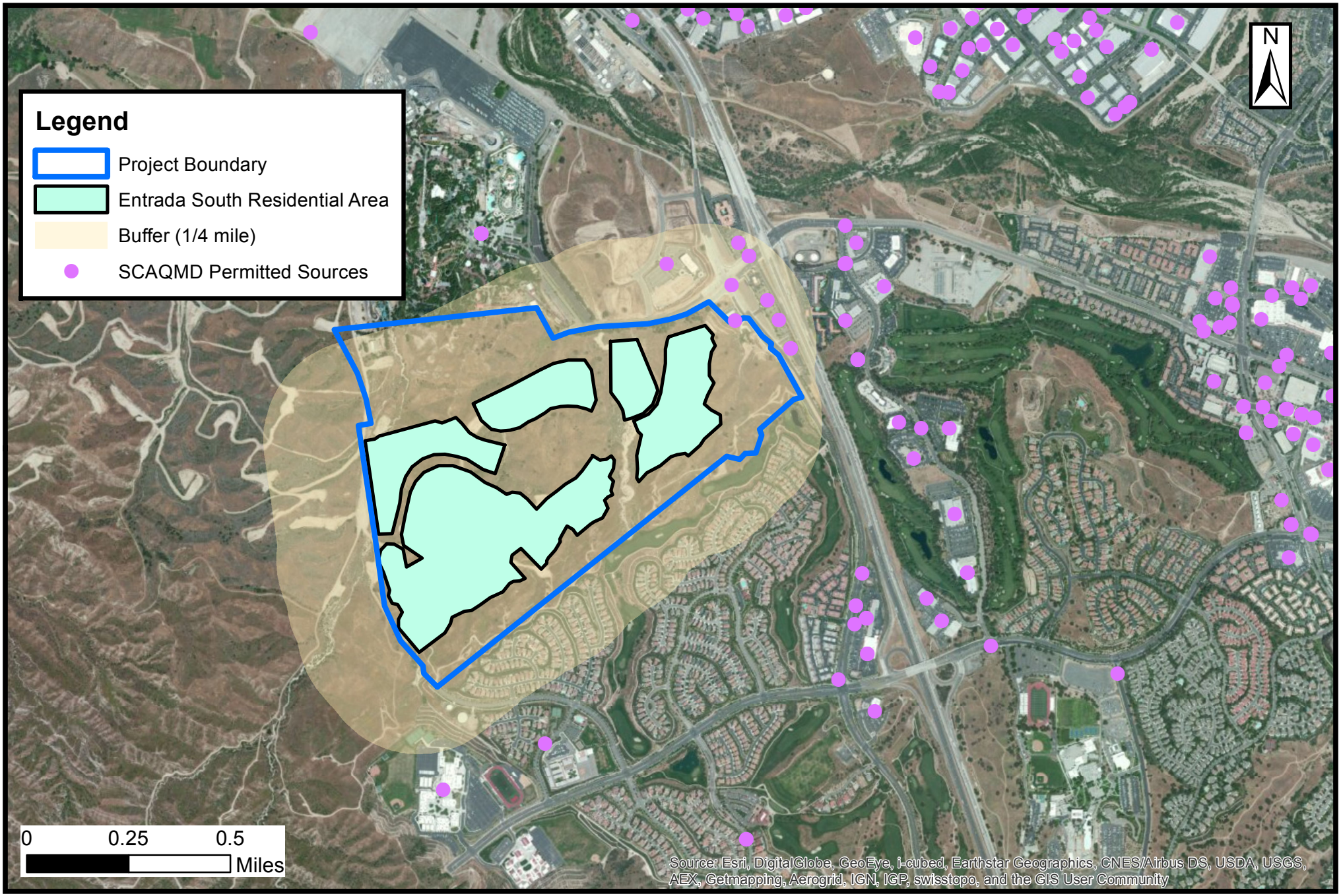
WRPLOT View - Lakes Environmental Software



ENVIRON

Locations of Receptors
Entrada South
Los Angeles, CA

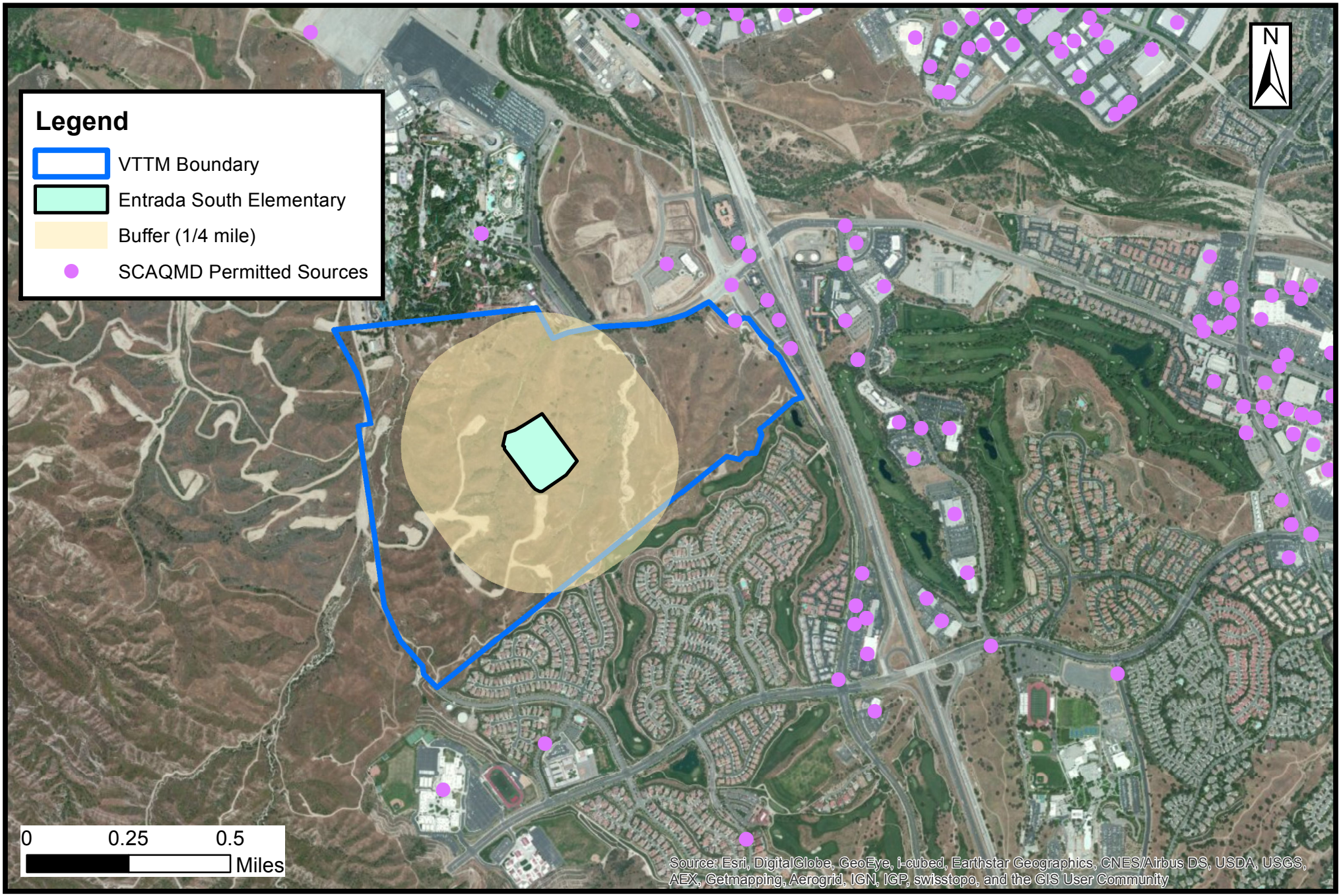
FIGURE
3



ENVIRON

SCAQMD Permitted Sources Within 1/4 Mile of the Future Residential Areas
Entrada South
Los Angeles, CA

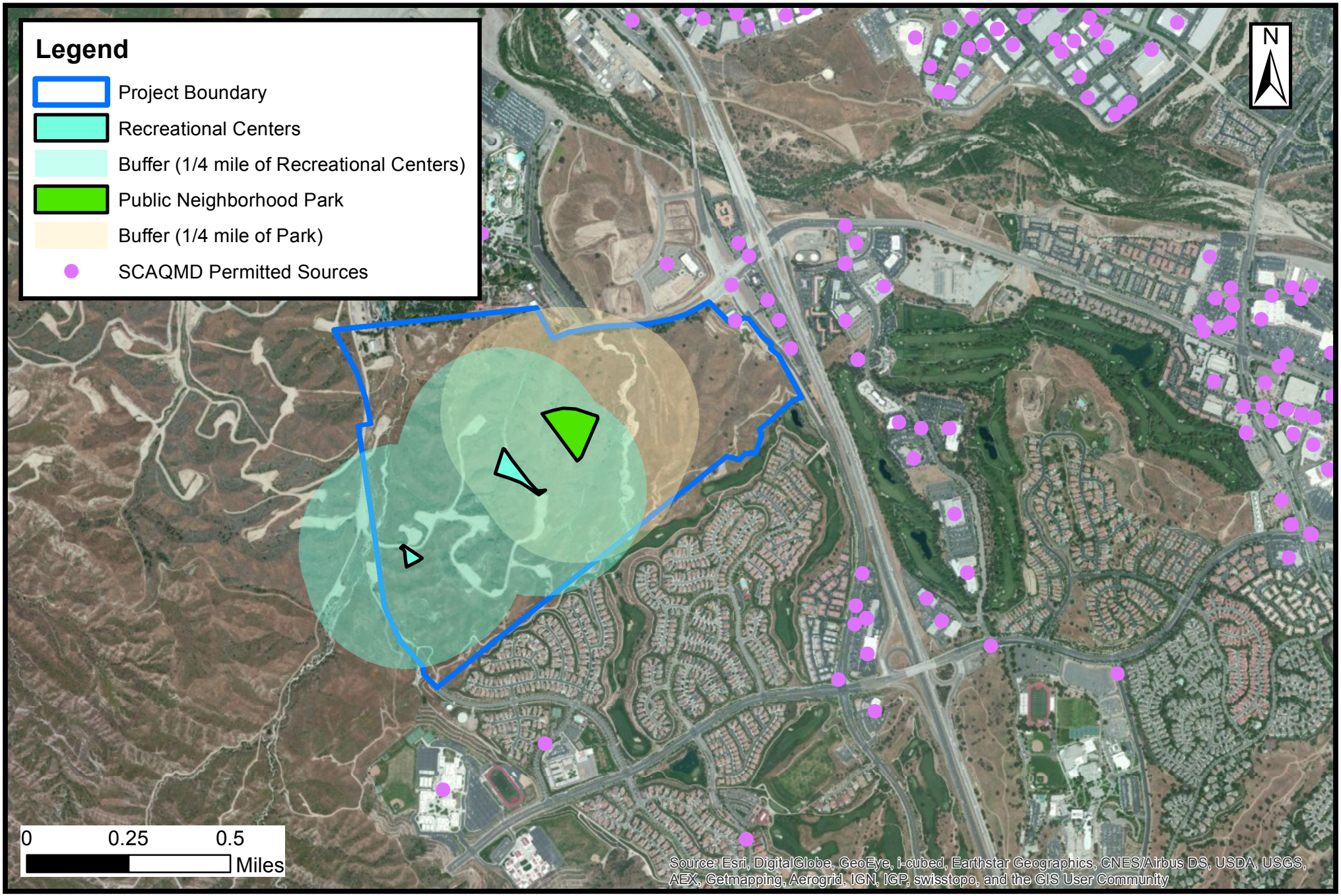
FIGURE
4



ENVIRON

SCAQMD Permitted Sources Within 1/4 Mile of the Future Elementary School
Entrada South
Los Angeles, CA

FIGURE
5



ENVIRON

SCAQMD Permitted Sources Within 1/4 Mile of the Future Recreational Areas
Entrada South
Los Angeles, CA

FIGURE
6

Appendix A

Calculation Methodology on Criteria Pollutant Emissions under Existing Conditions

Summary of Existing Conditions

This Appendix summarizes ENVIRON International Corporation's (ENVIRON) estimates for existing criteria pollutant emissions associated with the Project site.

The Project site is generally comprised of vacant land, some agricultural uses, a small plant nursery used by the adjacent Six Flags Magic Mountain, and abandoned oil wells and associated access roads. The agricultural area, approximately 7.45 acres in size and used as pasture, would be permanently eliminated during Project buildout. The Project site is periodically leased to the movie industry for set locations. In light of the existing conditions, ENVIRON evaluated the diesel equipment use associated with farmland/agriculture operations that currently exist on the project site. All other existing uses are assumed to produce negligible criteria pollutant emissions.

Please note that emissions associated with the periodic lease of the Entrada South Village area to the movie industry were not accounted for in this emissions estimate as such activities are intermittent, limited and unpredictable. Additionally, the emissions estimate does not account for the minor existing structures within the Entrada South Village area since these are not expected to emit criteria pollutants. Furthermore, the emissions estimate does not account for the limited vehicular trips from/to the site associated with the farmland/agricultural operations or any other miscellaneous purposes as such activities are very limited.

ENVIRON estimated the emissions associated with the existing site conditions, and particularly farmland, to be approximately 2.5 lbs/yr for VOC, 31 lbs/yr for NOx, 6.7 lbs/yr for CO, 2.0 lbs/yr for SO_2, 2.2 lbs/yr for PM_{10}, and 2.2 lbs/yr for $PM_{2.5}$. If we assume 30 days of operation per year, the daily emissions would be approximately 0.08 lbs/day for VOC, 1.0 lbs/day for NOx, 0.22 lbs/day for CO, 0.07 lbs/day for SO_2, 0.07 lbs/day for PM_{10}, and 0.07 lbs/day for $PM_{2.5}$.

Farming/Agricultural Operations

Table A-1 outlines ENVIRON's approach to calculating criteria pollutant emissions from equipment usage associated with farming operations that would be eliminated due to the Project. While a variety of diesel engines may be used on the site, ENVIRON relied upon general diesel engine emission factors, due to limited data availability. ENVIRON does not expect these assumptions to systematically over- or underestimate actual emissions. Table A-2 summarizes the emissions from farming operations.

Table A-1. Existing Conditions - Farming
Entrada South
Los Angeles County, California

Description	Activity Data	Units	Source(s)
Area of disturbed farmland	7.45	acre	Entrada South Greenhouse Gas Emissions Technical Report, Table 9.
Tractor diesel fuel usage rate	6.85	gallon/acre	USDA. 2001. The 2001 Net Energy Balance of Corn-Ethanol. Table 1. Available from: https://www.ethanol.org/pdf/contentmgmt/USDA_energy_balance_04.pdf. Accessed January 22, 2014.
Diesel fuel usage for acreage	51.0325	gallon	Calculations: Area of disturbed farmland * Tractor diesel fuel usage rate
Heat Input of Fuel Used	7.0	MMBtu	Calculations: 54.8 gallon * 0.13738 MMBtu/gallon. Higher heating value of diesel of 0.13738 MMBtu/gallon from US Department of Energy was conservatively used. Available from: http://www.afdc.energy.gov/fuels/fuel_comparison_chart.pdf. Accessed June 25, 2014.
Emission Factor - TOC	0.36	lb/MMBtu	USEPA. AP-42. Chapter 3.3 Table 3.3-1. Available at: http://www.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf. Accessed June 25, 2014.
Emission Factor - VOC	0.35	lb/MMBtu	Calculations: Emission Factor - TOG * 1.053 / 1.07. The conversion factor is from USEPA document "Conversion Factors for Hydrocarbon Emission Components". Available at: http://www.epa.gov/otaq/models/nonrdmdl/nonrdmdl2010/420r10015.pdf. Accessed June 25, 2014. It was assumed that TOG equals TOC.
Emission Factor - NOx	4.41	lb/MMBtu	USEPA. AP-42. Chapter 3.3 Table 3.3-1. Available at: http://www.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf. Accessed June 25, 2014.
Emission Factor - CO	0.95	lb/MMBtu	USEPA. AP-42. Chapter 3.3 Table 3.3-1. Available at: http://www.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf. Accessed June 25, 2014.
Emission Factor - SO_2	0.29	lb/MMBtu	USEPA. AP-42. Chapter 3.3 Table 3.3-1. Available at: http://www.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf. Accessed June 25, 2014. Assumed equivalent to SOx.
Emission Factor - PM_{10}	0.31	lb/MMBtu	USEPA. AP-42. Chapter 3.3 Table 3.3-1. Available at: http://www.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf. Accessed June 25, 2014.
Emission Factor - $PM_{2.5}$	0.31	lb/MMBtu	USEPA. AP-42. Chapter 3.3 Table 3.3-1. Available at: http://www.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf. Accessed June 25, 2014. Assumed to be equivalent to the PM_{10} value due to footnote b.
Emissions - VOC	2.5	lb	Calculations: emissions factor * fuel usage
Emissions - NOx	31	lb	Calculations: emissions factor * fuel usage
Emissions - CO	6.7	lb	Calculations: emissions factor * fuel usage
Emissions - SO_2	2.0	lb	Calculations: emissions factor * fuel usage
Emissions - PM_{10}	2.2	lb	Calculations: emissions factor * fuel usage
Emissions - $PM_{2.5}$	2.2	lb	Calculations: emissions factor * fuel usage

Abbreviations:

CO - carbon monoxide
lb - pound
MMBtu - million British Thermal Unit
NOx - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
SO_2 - sulfur dioxide
SO_x - sulfur oxides
TOC - total organic compounds
TOG - total organic gases
US - United States
USDA - United States Department of Agriculture
USEPA - United States Environmental Protection Agency
VOC - volatile organic compound

Table A-2. Existing Conditions - Total Emissions
Entrada South
Los Angeles County, California

Scenario	Unit	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing Conditions	lbs/year	2.5	31	6.7	2.0	2.2	2.2
	lbs/day	0.08	1.0	0.22	0.07	0.07	0.07

Notes:
Maximum daily emissions were calculated from annual emissions by assuming 30 days of operation per year.

Abbreviations:
CO - carbon monoxide
lbs - pounds
NOx - nitrogen oxides
PM_{10} - coarse particulate matter
$PM_{2.5}$ - fine particulate matter
SO_2 - sulfur dioxide
VOC - volatile organic compound

Appendix B

CalEEMod® Output Files

Table B-1. CalEEMod® Model Outputs Descriptions
Entrada South
Los Angeles County, California

Construction CalEEMod® Runs		
Output	**Phases**	**Source Categories**
Output 1 - Annual/Summer/Winter	Site Preparation, Grading and Paving 1/2	Offroad Equipment, and Offsite Onroad Vehicles
Output 2 - Annual/Summer/Winter	Utility Installation and Building Construction	Offroad Equipment, and Offsite Onroad Vehicles Except for Worker and Vendor Vehicles for Building Construction
Output 2a - Annual/Summer/Winter	Building Construction	Worker and Vendor Vehicles for Building Construction
Output 3 - Annual/Summer/Winter	Architectural Coating	Offroad Equipment, Offsite Onroad Vehicles, and VOC from Coating and Paving
Output 4 - Annual/Summer/Winter	Site Preparation, Grading and Paving 1/2	Onsite Onroad Vehicles
Output 5 - Annual/Summer/Winter	Utility Installation and Building Construction	Onsite Onroad Vehicles

Operational CalEEMod® Runs		
Output	**Scenario**	**Purpose**
Scenario 6 - Summer/Winter	2024 Project	CAP emissions
Scenario 6a - Summer/Winter	2024 Project without PDFs	CAP emissions

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
CARB - California Air Resources Board
GHG - greenhouse gases
NAT - no action Taken
PDF - project design feature

Entrada South - Construction Emissions - Site Preparation, Grading & Paving

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land Use Type, Unit Amount, and Population based on Newhall provided information.

Construction Phase - Client provided - days of construction phase

Off-road Equipment - Client provided equipment list

Off-road Equipment - Client provided equipment list

Off-road Equipment - Client provided

Off-road Equipment - Client Provided

Off-road Equipment - Client Provided

Trips and VMT - Restoring CalEEMod Defaults since some equipment was entered with different unit amount and hours to account for unit fractions.

On-road Fugitive Dust - Offroad equipment modeled as vendor trips, operate on 100% unpaved area

Grading -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstructionPhase	NumDays	465.00	250.00
tblConstructionPhase	NumDays	330.00	15.00
tblConstructionPhase	NumDays	330.00	15.00
tblConstructionPhase	NumDays	180.00	30.00
tblConstructionPhase	PhaseEndDate	1/16/2017	3/10/2017
tblConstructionPhase	PhaseEndDate	3/31/2017	9/1/2017
tblConstructionPhase	PhaseStartDate	12/27/2016	2/20/2017
tblConstructionPhase	PhaseStartDate	3/11/2017	8/14/2017
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40

tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	HorsePower	162.00	157.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	125.00	89.00
tblOffRoadEquipment	HorsePower	125.00	89.00
tblOffRoadEquipment	HorsePower	130.00	82.00
tblOffRoadEquipment	HorsePower	130.00	82.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	255.00	358.00
tblOffRoadEquipment	HorsePower	361.00	356.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	208.00	82.00
tblOffRoadEquipment	HorsePower	208.00	82.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	400.00	381.00
tblOffRoadEquipment	HorsePower	167.00	196.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.60
tblOffRoadEquipment	UsageHours	8.00	20.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	1,920.00

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					
2015	0.0309	0.3770	0.2624	6.6000e-004	0.0328	0.0147	0.0474	6.2400e-003	0.0135	0.0197	0.0000	60.8186	60.8186	3.0900e-003	0.0000	60.8834
2016	2.8352	33.3950	20.2543	0.0285	3.4105	1.4857	4.8962	1.2184	1.3669	2.5852	0.0000	2,662.5877	2,662.5877	0.7731	0.0000	2,678.8217
2017	0.0613	0.2785	0.1771	2.4000e-004	2.2100e-003	0.0183	0.0205	5.9000e-004	0.0168	0.0174	0.0000	21.9708	21.9708	6.2100e-003	0.0000	22.1012
Total	**2.9274**	**34.0505**	**20.6938**	**0.0294**	**3.4454**	**1.5187**	**4.9641**	**1.2252**	**1.3972**	**2.6224**	**0.0000**	**2,745.3770**	**2,745.3770**	**0.7824**	**0.0000**	**2,761.8063**

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					
2015	0.0309	0.3770	0.2624	6.6000e-004	0.0231	0.0147	0.0377	5.2000e-003	0.0135	0.0187	0.0000	60.8185	60.8185	3.0900e-003	0.0000	60.8834
2016	2.8352	33.3950	20.2543	0.0285	1.4037	1.4857	2.8895	0.4946	1.3669	1.8615	0.0000	2,662.5846	2,662.5846	0.7731	0.0000	2,678.8187
2017	0.0613	0.2785	0.1771	2.4000e-004	2.2100e-003	0.0183	0.0205	5.9000e-004	0.0168	0.0174	0.0000	21.9708	21.9708	6.2100e-003	0.0000	22.1012
Total	**2.9274**	**34.0504**	**20.6938**	**0.0294**	**1.4290**	**1.5187**	**2.9477**	**0.5004**	**1.3972**	**1.8976**	**0.0000**	**2,745.3739**	**2,745.3739**	**0.7824**	**0.0000**	**2,761.8032**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**58.52**	**0.00**	**40.62**	**59.16**	**0.00**	**27.64**	**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	tons/yr										MT/yr					
Area	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Energy	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	7,880.7783	7,880.7783	0.3138	0.0909	7,915.5473
Mobile	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Waste						0.0000	0.0000		0.0000	0.0000	385.8858	0.0000	385.8858	22.8052	0.0000	864.7950
Water						0.0000	0.0000		0.0000	0.0000	64.6196	1,194.1152	1,258.7348	6.6919	0.1681	1,451.3676
Total	**33.9677**	**37.9133**	**183.9819**	**0.6187**	**38.8288**	**2.5262**	**41.3550**	**10.4037**	**2.4636**	**12.8673**	**617.6942**	**49,466.7340**	**50,084.4281**	**31.6438**	**0.2703**	**50,832.7470**

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	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Energy	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	7,880.7783	7,880.7783	0.3138	0.0909	7,915.5473
Mobile	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Waste						0.0000	0.0000		0.0000	0.0000	385.8858	0.0000	385.8858	22.8052	0.0000	864.7950
Water						0.0000	0.0000		0.0000	0.0000	64.6196	1,194.1152	1,258.7348	6.6907	0.1678	1,451.2645
Total	**33.9677**	**37.9133**	**183.9819**	**0.6187**	**38.8288**	**2.5262**	**41.3550**	**10.4037**	**2.4636**	**12.8673**	**617.6942**	**49,466.7340**	**50,084.4281**	**31.6426**	**0.2701**	**50,832.6439**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**	**0.09**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2015	1/11/2016	5	30	
2	Grading	Grading	1/12/2016	12/26/2016	5	250	
3	Paving1	Paving	2/20/2017	3/10/2017	5	15	
4	Paving2	Paving	8/14/2017	9/1/2017	5	15	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 2625

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	2	8.00	82	0.43
Site Preparation	Tractors/Loaders/Backhoes	1	6.00	75	0.37
Grading	Crawler Tractors	4	8.00	82	0.43
Grading	Excavators	1	1.60	157	0.38
Grading	Graders	1	8.00	162	0.41
Grading	Off-Highway Trucks	1	4.00	381	0.38
Grading	Other Material Handling Equipment	6	8.00	196	0.40
Grading	Rubber Tired Dozers	1	20.00	358	0.40
Grading	Scrapers	8	8.00	356	0.48
Grading	Tractors/Loaders/Backhoes	1	4.00	75	0.37
Paving1	Graders	1	8.00	162	0.41
Paving1	Pavers	1	8.00	89	0.42
Paving1	Paving Equipment	1	8.00	82	0.36
Paving1	Rollers	1	8.00	84	0.38
Paving2	Graders	1	8.00	162	0.41
Paving2	Pavers	1	8.00	89	0.42
Paving2	Paving Equipment	1	8.00	82	0.36
Paving2	Rollers	1	8.00	84	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	1,920.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	23	58.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving1	4	10.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

Paving2	4	10.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT	

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0159	0.0000	0.0159	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0151	0.1301	0.0761	9.0000e-005		0.0108	0.0108		9.9400e-003	9.9400e-003	0.0000	8.6876	8.6876	2.5900e-003	0.0000	8.7421
Total	**0.0151**	**0.1301**	**0.0761**	**9.0000e-005**	**0.0159**	**0.0108**	**0.0267**	**1.7200e-003**	**9.9400e-003**	**0.0117**	**0.0000**	**8.6876**	**8.6876**	**2.5900e-003**	**0.0000**	**8.7421**

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	0.0154	0.2461	0.1775	5.5000e-004	0.0155	3.8600e-003	0.0193	4.1600e-003	3.5500e-003	7.7100e-003	0.0000	50.7672	50.7672	4.2000e-004	0.0000	50.7759
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	5.1000e-004	8.6000e-004	8.8500e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.3637	1.3637	8.0000e-005	0.0000	1.3654
Total	**0.0159**	**0.2469**	**0.1864**	**5.7000e-004**	**0.0169**	**3.8700e-003**	**0.0207**	**4.5200e-003**	**3.5600e-003**	**8.0800e-003**	**0.0000**	**52.1309**	**52.1309**	**5.0000e-004**	**0.0000**	**52.1413**

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					6.2000e-003	0.0000	6.2000e-003	6.7000e-004	0.0000	6.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0151	0.1301	0.0761	9.0000e-005		0.0108	0.0108		9.9400e-003	9.9400e-003	0.0000	8.6876	8.6876	2.5900e-003	0.0000	8.7421
Total	**0.0151**	**0.1301**	**0.0761**	**9.0000e-005**	**6.2000e-003**	**0.0108**	**0.0170**	**6.7000e-004**	**9.9400e-003**	**0.0106**	**0.0000**	**8.6876**	**8.6876**	**2.5900e-003**	**0.0000**	**8.7421**

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	0.0154	0.2461	0.1775	5.5000e-004	0.0155	3.8600e-003	0.0193	4.1600e-003	3.5500e-003	7.7100e-003	0.0000	50.7672	50.7672	4.2000e-004	0.0000	50.7759
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	5.1000e-004	8.6000e-004	8.8500e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.3637	1.3637	8.0000e-005	0.0000	1.3654
Total	**0.0159**	**0.2469**	**0.1864**	**5.7000e-004**	**0.0169**	**3.8700e-003**	**0.0207**	**4.5200e-003**	**3.5600e-003**	**8.0800e-003**	**0.0000**	**52.1309**	**52.1309**	**5.0000e-004**	**0.0000**	**52.1413**

3.2 Site Preparation - 2016

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					0.0159	0.0000	0.0159	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.4800e-003	0.0386	0.0231	3.0000e-005		3.2000e-003	3.2000e-003		2.9500e-003	2.9500e-003	0.0000	2.6150	2.6150	7.9000e-004	0.0000	2.6316
Total	**4.4800e-003**	**0.0386**	**0.0231**	**3.0000e-005**	**0.0159**	**3.2000e-003**	**0.0191**	**1.7200e-003**	**2.9500e-003**	**4.6700e-003**	**0.0000**	**2.6150**	**2.6150**	**7.9000e-004**	**0.0000**	**2.6316**

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	4.1000e-003	0.0662	0.0501	1.7000e-004	0.0133	9.3000e-004	0.0143	3.3900e-003	8.6000e-004	4.2400e-003	0.0000	15.2802	15.2802	1.1000e-004	0.0000	15.2826
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	1.4000e-004	2.4000e-004	2.4400e-003	1.0000e-005	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.4012	0.4012	2.0000e-005	0.0000	0.4017
Total	**4.2400e-003**	**0.0664**	**0.0526**	**1.8000e-004**	**0.0138**	**9.3000e-004**	**0.0147**	**3.5000e-003**	**8.6000e-004**	**4.3500e-003**	**0.0000**	**15.6814**	**15.6814**	**1.3000e-004**	**0.0000**	**15.6842**

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					6.2000e-003	0.0000	6.2000e-003	6.7000e-004	0.0000	6.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.4800e-003	0.0386	0.0231	3.0000e-005		3.2000e-003	3.2000e-003		2.9500e-003	2.9500e-003	0.0000	2.6150	2.6150	7.9000e-004	0.0000	2.6316
Total	**4.4800e-003**	**0.0386**	**0.0231**	**3.0000e-005**	**6.2000e-003**	**3.2000e-003**	**9.4000e-003**	**6.7000e-004**	**2.9500e-003**	**3.6200e-003**	**0.0000**	**2.6150**	**2.6150**	**7.9000e-004**	**0.0000**	**2.6316**

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	4.1000e-003	0.0662	0.0501	1.7000e-004	0.0133	9.3000e-004	0.0143	3.3900e-003	8.6000e-004	4.2400e-003	0.0000	15.2802	15.2802	1.1000e-004	0.0000	15.2826
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	1.4000e-004	2.4000e-004	2.4400e-003	1.0000e-005	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.4012	0.4012	2.0000e-005	0.0000	0.4017
Total	**4.2400e-003**	**0.0664**	**0.0526**	**1.8000e-004**	**0.0138**	**9.3000e-004**	**0.0147**	**3.5000e-003**	**8.6000e-004**	**4.3500e-003**	**0.0000**	**15.6814**	**15.6814**	**1.3000e-004**	**0.0000**	**15.6842**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2738	0.0000	3.2738	1.1847	0.0000	1.1847	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7906	33.2291	19.5479	0.0269		1.4806	1.4806		1.3621	1.3621	0.0000	2,540.4145	2,540.4145	0.7663	0.0000	2,556.5064
Total	**2.7906**	**33.2291**	**19.5479**	**0.0269**	**3.2738**	**1.4806**	**4.7544**	**1.1847**	**1.3621**	**2.5469**	**0.0000**	**2,540.4145**	**2,540.4145**	**0.7663**	**0.0000**	**2,556.5064**

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	0.0360	0.0610	0.6308	1.3500e-003	0.1070	1.0100e-003	0.1080	0.0284	9.3000e-004	0.0293	0.0000	103.8767	103.8767	5.8500e-003	0.0000	103.9995
Total	**0.0360**	**0.0610**	**0.6308**	**1.3500e-003**	**0.1070**	**1.0100e-003**	**0.1080**	**0.0284**	**9.3000e-004**	**0.0293**	**0.0000**	**103.8767**	**103.8767**	**5.8500e-003**	**0.0000**	**103.9995**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2768	0.0000	1.2768	0.4621	0.0000	0.4621	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7906	33.2290	19.5478	0.0269		1.4806	1.4806		1.3621	1.3621	0.0000	2,540.4115	2,540.4115	0.7663	0.0000	2,556.5034
Total	**2.7906**	**33.2290**	**19.5478**	**0.0269**	**1.2768**	**1.4806**	**2.7574**	**0.4621**	**1.3621**	**1.8242**	**0.0000**	**2,540.4115**	**2,540.4115**	**0.7663**	**0.0000**	**2,556.5034**

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	0.0360	0.0610	0.6308	1.3500e-003	0.1070	1.0100e-003	0.1080	0.0284	9.3000e-004	0.0293	0.0000	103.8767	103.8767	5.8500e-003	0.0000	103.9995
Total	**0.0360**	**0.0610**	**0.6308**	**1.3500e-003**	**0.1070**	**1.0100e-003**	**0.1080**	**0.0284**	**9.3000e-004**	**0.0293**	**0.0000**	**103.8767**	**103.8767**	**5.8500e-003**	**0.0000**	**103.9995**

3.4 Paving1 - 2017

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	0.0144	0.1387	0.0827	1.1000e-004		9.1200e-003	9.1200e-003		8.3900e-003	8.3900e-003	0.0000	9.9511	9.9511	3.0500e-003	0.0000	10.0151
Paving	0.0159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0303**	**0.1387**	**0.0827**	**1.1000e-004**		**9.1200e-003**	**9.1200e-003**		**8.3900e-003**	**8.3900e-003**	**0.0000**	**9.9511**	**9.9511**	**3.0500e-003**	**0.0000**	**10.0151**

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	3.3000e-004	5.7000e-004	5.8900e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0343	1.0343	6.0000e-005	0.0000	1.0355

Total	**3.3000e-004**	**5.7000e-004**	**5.8900e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1200e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0343**	**1.0343**	**6.0000e-005**	**0.0000**	**1.0355**

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	0.0144	0.1387	0.0827	1.1000e-004		9.1200e-003	9.1200e-003		8.3900e-003	8.3900e-003	0.0000	9.9511	9.9511	3.0500e-003	0.0000	10.0151
Paving	0.0159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0303**	**0.1387**	**0.0827**	**1.1000e-004**		**9.1200e-003**	**9.1200e-003**		**8.3900e-003**	**8.3900e-003**	**0.0000**	**9.9511**	**9.9511**	**3.0500e-003**	**0.0000**	**10.0151**

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	3.3000e-004	5.7000e-004	5.8900e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0343	1.0343	6.0000e-005	0.0000	1.0355
Total	**3.3000e-004**	**5.7000e-004**	**5.8900e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1200e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0343**	**1.0343**	**6.0000e-005**	**0.0000**	**1.0355**

3.5 Paving2 - 2017

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	0.0144	0.1387	0.0827	1.1000e-004		9.1200e-003	9.1200e-003		8.3900e-003	8.3900e-003	0.0000	9.9511	9.9511	3.0500e-003	0.0000	10.0151
Paving	0.0159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0303**	**0.1387**	**0.0827**	**1.1000e-004**		**9.1200e-003**	**9.1200e-003**		**8.3900e-003**	**8.3900e-003**	**0.0000**	**9.9511**	**9.9511**	**3.0500e-003**	**0.0000**	**10.0151**

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	3.3000e-004	5.7000e-004	5.8900e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0343	1.0343	6.0000e-005	0.0000	1.0355
Total	**3.3000e-004**	**5.7000e-004**	**5.8900e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1200e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0343**	**1.0343**	**6.0000e-005**	**0.0000**	**1.0355**

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	0.0144	0.1387	0.0827	1.1000e-004		9.1200e-003	9.1200e-003		8.3900e-003	8.3900e-003	0.0000	9.9511	9.9511	3.0500e-003	0.0000	10.0151
Paving	0.0159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0303**	**0.1387**	**0.0827**	**1.1000e-004**		**9.1200e-003**	**9.1200e-003**		**8.3900e-003**	**8.3900e-003**	**0.0000**	**9.9511**	**9.9511**	**3.0500e-003**	**0.0000**	**10.0151**

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	3.3000e-004	5.7000e-004	5.8900e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0343	1.0343	6.0000e-005	0.0000	1.0355
Total	**3.3000e-004**	**5.7000e-004**	**5.8900e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1200e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0343**	**1.0343**	**6.0000e-005**	**0.0000**	**1.0355**

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	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Unmitigated	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with Elevator	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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 Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,072.8188	6,072.8188	0.2792	0.0578	6,096.5848
NaturalGas Mitigated	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	1,807.9595	1,807.9595	0.0347	0.0332	1,818.9625
NaturalGas Unmitigated	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	1,807.9595	1,807.9595	0.0347	0.0332	1,818.9625
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,072.8188	6,072.8188	0.2792	0.0578	6,096.5848

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					
Condo/Townhouse High Rise	7.70723e+006	0.0416	0.3551	0.1511	2.2700e-003		0.0287	0.0287		0.0287	0.0287	0.0000	411.2869	411.2869	7.8800e-003	7.5400e-003	413.7900
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	4.75455e+006	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	253.7209	253.7209	4.8600e-003	4.6500e-003	255.2650
Health Club	47025	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5094	2.5094	5.0000e-005	5.0000e-005	2.5247

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
Regional Shopping Center	476000	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.4012	25.4012	4.9000e-004	4.7000e-004	25.5558
Single Family Housing	1.01025e+007	0.0545	0.4655	0.1981	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	539.1089	539.1089	0.0103	9.8800e-003	542.3898
Strip Mall	25500	1.4000e-004	1.2500e-003	1.0500e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3608	1.3608	3.0000e-005	2.0000e-005	1.3691
Unenclosed Parking with Elevator	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
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
Condo/Townhouse	1.00842e+007	0.0544	0.4647	0.1977	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1324	538.1324	0.0103	9.8700e-003	541.4074
Total		**0.1827**	**1.5788**	**0.7934**	**9.9700e-003**		**0.1262**	**0.1262**		**0.1262**	**0.1262**	**0.0000**	**1,807.9595**	**1,807.9595**	**0.0347**	**0.0332**	**1,818.9625**

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					
Condo/Townhouse High Rise	7.70723e+006	0.0416	0.3551	0.1511	2.2700e-003		0.0287	0.0287		0.0287	0.0287	0.0000	411.2869	411.2869	7.8800e-003	7.5400e-003	413.7900
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	4.75455e+006	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	253.7209	253.7209	4.8600e-003	4.6500e-003	255.2650
Health Club	47025	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5094	2.5094	5.0000e-005	5.0000e-005	2.5247
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
Regional Shopping Center	476000	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.4012	25.4012	4.9000e-004	4.7000e-004	25.5558
Single Family Housing	1.01025e+007	0.0545	0.4655	0.1981	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	539.1089	539.1089	0.0103	9.8800e-003	542.3898
Strip Mall	25500	1.4000e-004	1.2500e-003	1.0500e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3608	1.3608	3.0000e-005	2.0000e-005	1.3691
Unenclosed Parking with Elevator	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

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
Condo/Townhouse	1.00842e+007	0.0544	0.4647	0.1977	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1324	538.1324	0.0103	9.8700e-003	541.4074
Total		**0.1827**	**1.5788**	**0.7934**	**9.9700e-003**		**0.1262**	**0.1262**		**0.1262**	**0.1262**	**0.0000**	**1,807.9595**	**1,807.9595**	**0.0347**	**0.0332**	**1,818.9625**

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
Condo/Townhouse	3.07852e+006	880.9694	0.0405	8.3800e-003	884.4170
Condo/Townhouse High Rise	2.35287e+006	673.3123	0.0310	6.4000e-003	675.9473
Elementary School	420114	120.2226	5.5300e-003	1.1400e-003	120.6931
General Office Building	6.32055e+006	1,808.7321	0.0831	0.0172	1,815.8107
Health Club	30125	8.6208	4.0000e-004	8.0000e-005	8.6545
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.2476e+006	1,215.5225	0.0559	0.0116	1,220.2795
Single Family Housing	2.47292e+006	707.6679	0.0325	6.7300e-003	710.4374
Strip Mall	227550	65.1173	2.9900e-003	6.2000e-004	65.3721
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,072.8188**	**0.2792**	**0.0578**	**6,096.5848**

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
Condo/Townhouse	3.07852e+006	880.9694	0.0405	8.3800e-003	884.4170
Condo/Townhouse High Rise	2.35287e+006	673.3123	0.0310	6.4000e-003	675.9473
Elementary School	420114	120.2226	5.5300e-003	1.1400e-003	120.6931
General Office Building	6.32055e+006	1,808.7321	0.0831	0.0172	1,815.8107
Health Club	30125	8.6208	4.0000e-004	8.0000e-005	8.6545
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.2476e+006	1,215.5225	0.0559	0.0116	1,220.2795
Single Family Housing	2.47292e+006	707.6679	0.0325	6.7300e-003	710.4374
Strip Mall	227550	65.1173	2.9900e-003	6.2000e-004	65.3721
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,072.8188**	**0.2792**	**0.0578**	**6,096.5848**

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	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Unmitigated	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1556	0.1308	9.8895	0.0157		1.5029	1.5029		1.5027	1.5027	167.1888	321.2795	488.4683	0.4986	0.0114	502.4564
Landscaping	0.4918	0.1873	16.2678	8.6000e-004		0.0901	0.0901		0.0901	0.0901	0.0000	26.5977	26.5977	0.0257	0.0000	27.1365
Total	**20.5620**	**0.3181**	**26.1573**	**0.0166**		**1.5930**	**1.5930**		**1.5928**	**1.5928**	**167.1888**	**347.8772**	**515.0660**	**0.5243**	**0.0114**	**529.5929**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1556	0.1308	9.8895	0.0157		1.5029	1.5029		1.5027	1.5027	167.1888	321.2795	488.4683	0.4986	0.0114	502.4564

Landscaping	0.4918	0.1873	16.2678	8.6000e-004		0.0901	0.0901		0.0901	0.0901	0.0000	26.5977	26.5977	0.0257	0.0000	27.1365
Total	**20.5620**	**0.3181**	**26.1573**	**0.0166**		**1.5930**	**1.5930**		**1.5928**	**1.5928**	**167.1888**	**347.8772**	**515.0660**	**0.5243**	**0.0114**	**529.5929**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,258.7348	6.6907	0.1678	1,451.2645
Unmitigated	1,258.7348	6.6919	0.1681	1,451.3676

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.6723	21.2133	9.8000e-004	2.0000e-004	21.2963
Condo/Townhouse	45.6078 / 28.7528	275.8262	1.4982	0.0376	318.9359
Condo/Townhouse High Rise	34.8574 / 21.9753	210.8100	1.1450	0.0287	243.7582
Elementary School	1.81818 / 4.67532	22.2160	0.0602	1.6000e-003	23.9785
General Office Building	77.3142 / 47.3861	463.2700	2.5395	0.0637	536.3326

Health Club	0.147858 / 0.0906226	0.8860	4.8600e-003	1.2000e-004	1.0257
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	20.7403 / 12.7118	124.2768	0.6812	0.0171	143.8766
Single Family Housing	22.0872 / 13.9245	133.5787	0.7255	0.0182	154.4561
Strip Mall	1.11109 / 0.680989	6.6577	0.0365	9.1000e-004	7.7077
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,258.7348**	**6.6919**	**0.1681**	**1,451.3676**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.6723	21.2133	9.8000e-004	2.0000e-004	21.2963
Condo/Townhouse	45.6078 / 28.7528	275.8262	1.4979	0.0375	318.9128
Condo/Townhouse High Rise	34.8574 / 21.9753	210.8100	1.1448	0.0287	243.7405
Elementary School	1.81818 / 4.67532	22.2160	0.0602	1.6000e-003	23.9776
General Office Building	77.3142 / 47.3861	463.2700	2.5390	0.0636	536.2935
Health Club	0.147858 / 0.0906226	0.8860	4.8600e-003	1.2000e-004	1.0256
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	20.7403 / 12.7118	124.2768	0.6811	0.0171	143.8661
Single Family Housing	22.0872 / 13.9245	133.5787	0.7254	0.0182	154.4449
Strip Mall	1.11109 / 0.680989	6.6577	0.0365	9.1000e-004	7.7071

Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,258.7348**	**6.6907**	**0.1678**	**1,451.2645**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	385.8858	22.8052	0.0000	864.7950
Unmitigated	385.8858	22.8052	0.0000	864.7950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.48	0.0974	5.7600e-003	0.0000	0.2184
Condo/Townhouse	322	65.3631	3.8629	0.0000	146.4829
Condo/Townhouse High Rise	246.1	49.9561	2.9523	0.0000	111.9548
Elementary School	136.88	27.7854	1.6421	0.0000	62.2689

General Office Building	404.55	82.1200	4.8532	0.0000	184.0362
Health Club	14.25	2.8926	0.1710	0.0000	6.4826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	294	59.6793	3.5270	0.0000	133.7453
Single Family Housing	466.99	94.7948	5.6022	0.0000	212.4411
Strip Mall	15.75	3.1971	0.1889	0.0000	7.1649
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**385.8858**	**22.8052**	**0.0000**	**864.7950**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.48	0.0974	5.7600e-003	0.0000	0.2184
Condo/Townhouse	322	65.3631	3.8629	0.0000	146.4829
Condo/Townhouse High Rise	246.1	49.9561	2.9523	0.0000	111.9548
Elementary School	136.88	27.7854	1.6421	0.0000	62.2689
General Office Building	404.55	82.1200	4.8532	0.0000	184.0362
Health Club	14.25	2.8926	0.1710	0.0000	6.4826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	294	59.6793	3.5270	0.0000	133.7453
Single Family Housing	466.99	94.7948	5.6022	0.0000	212.4411

Strip Mall	15.75	3.1971	0.1889	0.0000	7.1649
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**385.8858**	**22.8052**	**0.0000**	**864.7950**

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Site Preparation, Grading & Paving

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land Use Type, Unit Amount, and Population based on Newhall provided information.

Construction Phase - Client provided - days of construction phase

Off-road Equipment - Client provided equipment list

Off-road Equipment - Client provided equipment list

Off-road Equipment - Client provided

Off-road Equipment - Client Provided

Off-road Equipment - Client Provided

Trips and VMT - Restoring CalEEMod Defaults since some equipment was entered with different unit amount and hours to account for unit fractions.

On-road Fugitive Dust - Offroad equipment modeled as vendor trips, operate on 100% unpaved area

Grading -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstructionPhase	NumDays	465.00	250.00
tblConstructionPhase	NumDays	330.00	15.00
tblConstructionPhase	NumDays	330.00	15.00
tblConstructionPhase	NumDays	180.00	30.00
tblConstructionPhase	PhaseEndDate	1/16/2017	3/10/2017
tblConstructionPhase	PhaseEndDate	3/31/2017	9/1/2017
tblConstructionPhase	PhaseStartDate	12/27/2016	2/20/2017
tblConstructionPhase	PhaseStartDate	3/11/2017	8/14/2017
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40

tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	HorsePower	162.00	157.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	125.00	89.00
tblOffRoadEquipment	HorsePower	125.00	89.00
tblOffRoadEquipment	HorsePower	130.00	82.00
tblOffRoadEquipment	HorsePower	130.00	82.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	255.00	358.00
tblOffRoadEquipment	HorsePower	361.00	356.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	208.00	82.00
tblOffRoadEquipment	HorsePower	208.00	82.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	400.00	381.00
tblOffRoadEquipment	HorsePower	167.00	196.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.60
tblOffRoadEquipment	UsageHours	8.00	20.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	1,920.00

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					
2015	2.6351	31.6828	21.2657	0.0573	2.5527	1.2752	3.8280	0.5147	1.1731	1.6879	0.0000	5,840.0369	5,840.0369	0.2959	0.0000	5,846.2512
2016	22.6180	266.2605	161.6808	0.2268	27.0635	11.8528	38.9163	9.7094	10.9046	20.6140	0.0000	23,357.9178	23,357.9178	6.8090	0.0000	23,500.9065
2017	4.0843	18.5537	11.8485	0.0162	0.1505	1.2180	1.3685	0.0399	1.1205	1.1604	0.0000	1,621.0991	1,621.0991	0.4563	0.0000	1,630.6824
Total	**29.3375**	**316.4971**	**194.7950**	**0.3004**	**29.7668**	**14.3460**	**44.1127**	**10.2641**	**13.1982**	**23.4623**	**0.0000**	**30,819.0538**	**30,819.0538**	**7.5612**	**0.0000**	**30,977.8400**

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					
2015	2.6351	31.6828	21.2657	0.0573	1.9058	1.2752	3.1811	0.4449	1.1731	1.6180	0.0000	5,840.0369	5,840.0369	0.2959	0.0000	5,846.2512
2016	22.6180	266.2605	161.6808	0.2268	11.0873	11.8528	22.9401	3.9279	10.9046	14.8325	0.0000	23,357.9178	23,357.9178	6.8090	0.0000	23,500.9064
2017	4.0843	18.5537	11.8485	0.0162	0.1505	1.2180	1.3685	0.0399	1.1205	1.1604	0.0000	1,621.0991	1,621.0991	0.4563	0.0000	1,630.6824
Total	**29.3375**	**316.4971**	**194.7950**	**0.3004**	**13.1437**	**14.3460**	**27.4896**	**4.4127**	**13.1982**	**17.6109**	**0.0000**	**30,819.0538**	**30,819.0538**	**7.5612**	**0.0000**	**30,977.8399**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**55.84**	**0.00**	**37.68**	**57.01**	**0.00**	**24.94**	**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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Total	**584.5193**	**233.7937**	**1,922.0956**	**5.2098**	**251.2667**	**126.7729**	**378.0396**	**67.2149**	**126.3578**	**193.5727**	**14,743.5296**	**328,756.4382**	**343,499.9678**	**53.5712**	**1.2009**	**344,997.2382**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Total	**584.5193**	**233.7937**	**1,922.0956**	**5.2098**	**251.2667**	**126.7729**	**378.0396**	**67.2149**	**126.3578**	**193.5727**	**14,743.5296**	**328,756.4382**	**343,499.9678**	**53.5712**	**1.2009**	**344,997.2382**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2015	1/11/2016	5	30	
2	Grading	Grading	1/12/2016	12/26/2016	5	250	
3	Paving1	Paving	2/20/2017	3/10/2017	5	15	
4	Paving2	Paving	8/14/2017	9/1/2017	5	15	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 2625

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

Site Preparation	Crawler Tractors	2	8.00	82	0.43
Site Preparation	Tractors/Loaders/Backhoes	1	6.00	75	0.37
Grading	Crawler Tractors	4	8.00	82	0.43
Grading	Excavators	1	1.60	157	0.38
Grading	Graders	1	8.00	162	0.41
Grading	Off-Highway Trucks	1	4.00	381	0.38
Grading	Other Material Handling Equipment	6	8.00	196	0.40
Grading	Rubber Tired Dozers	1	20.00	358	0.40
Grading	Scrapers	8	8.00	356	0.48
Grading	Tractors/Loaders/Backhoes	1	4.00	75	0.37
Paving1	Graders	1	8.00	162	0.41
Paving1	Pavers	1	8.00	89	0.42
Paving1	Paving Equipment	1	8.00	82	0.36
Paving1	Rollers	1	8.00	84	0.38
Paving2	Graders	1	8.00	162	0.41
Paving2	Pavers	1	8.00	89	0.42
Paving2	Paving Equipment	1	8.00	82	0.36
Paving2	Rollers	1	8.00	84	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	1,920.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	23	58.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving1	4	10.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving2	4	10.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	1.3091	11.3108	6.6168	7.9200e-003		0.9393	0.9393		0.8642	0.8642		832.7380	832.7380	0.2486		837.9588
Total	**1.3091**	**11.3108**	**6.6168**	**7.9200e-003**	**1.0605**	**0.9393**	**1.9998**	**0.1145**	**0.8642**	**0.9787**		**832.7380**	**832.7380**	**0.2486**		**837.9588**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2809	20.3068	13.8435	0.0479	1.3718	0.3348	1.7066	0.3683	0.3079	0.6762		4,870.9867	4,870.9867	0.0396		4,871.8184
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	0.0451	0.0653	0.8054	1.5600e-003	0.1204	1.1800e-003	0.1216	0.0319	1.0800e-003	0.0330		136.3121	136.3121	7.7100e-003		136.4740
Total	**1.3260**	**20.3721**	**14.6489**	**0.0494**	**1.4922**	**0.3359**	**1.8282**	**0.4002**	**0.3090**	**0.7092**		**5,007.2989**	**5,007.2989**	**0.0473**		**5,008.2924**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	1.3091	11.3108	6.6168	7.9200e-003		0.9393	0.9393		0.8642	0.8642	0.0000	832.7380	832.7380	0.2486		837.9588
Total	**1.3091**	**11.3108**	**6.6168**	**7.9200e-003**	**0.4136**	**0.9393**	**1.3529**	**0.0447**	**0.8642**	**0.9088**	**0.0000**	**832.7380**	**832.7380**	**0.2486**		**837.9588**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2809	20.3068	13.8435	0.0479	1.3718	0.3348	1.7066	0.3683	0.3079	0.6762		4,870.9867	4,870.9867	0.0396		4,871.8184
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	0.0451	0.0653	0.8054	1.5600e-003	0.1204	1.1800e-003	0.1216	0.0319	1.0800e-003	0.0330		136.3121	136.3121	7.7100e-003		136.4740
Total	**1.3260**	**20.3721**	**14.6489**	**0.0494**	**1.4922**	**0.3359**	**1.8282**	**0.4002**	**0.3090**	**0.7092**		**5,007.2989**	**5,007.2989**	**0.0473**		**5,008.2924**

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

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

Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	1.2786	11.0241	6.6048	7.9100e-003		0.9153	0.9153		0.8421	0.8421		823.5941	823.5941	0.2484		828.8110
Total	**1.2786**	**11.0241**	**6.6048**	**7.9100e-003**	**1.0605**	**0.9153**	**1.9758**	**0.1145**	**0.8421**	**0.9566**		**823.5941**	**823.5941**	**0.2484**		**828.8110**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1273	17.9405	12.7314	0.0478	3.8947	0.2656	4.1604	0.9876	0.2443	1.2319		4,817.1802	4,817.1802	0.0356		4,817.9282
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	0.0405	0.0591	0.7308	1.5600e-003	0.1204	1.1200e-003	0.1215	0.0319	1.0300e-003	0.0330		131.7650	131.7650	7.1100e-003		131.9144
Total	**1.1678**	**17.9996**	**13.4622**	**0.0494**	**4.0151**	**0.2668**	**4.2819**	**1.0195**	**0.2454**	**1.2649**		**4,948.9452**	**4,948.9452**	**0.0427**		**4,949.8426**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	1.2786	11.0241	6.6048	7.9100e-003		0.9153	0.9153		0.8421	0.8421	0.0000	823.5941	823.5941	0.2484		828.8110
Total	**1.2786**	**11.0241**	**6.6048**	**7.9100e-003**	**0.4136**	**0.9153**	**1.3289**	**0.0447**	**0.8421**	**0.8867**	**0.0000**	**823.5941**	**823.5941**	**0.2484**		**828.8110**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1273	17.9405	12.7314	0.0478	3.8947	0.2656	4.1604	0.9876	0.2443	1.2319		4,817.1802	4,817.1802	0.0356		4,817.9282
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	0.0405	0.0591	0.7308	1.5600e-003	0.1204	1.1200e-003	0.1215	0.0319	1.0300e-003	0.0330		131.7650	131.7650	7.1100e-003		131.9144
Total	**1.1678**	**17.9996**	**13.4622**	**0.0494**	**4.0151**	**0.2668**	**4.2819**	**1.0195**	**0.2454**	**1.2649**		**4,948.9452**	**4,948.9452**	**0.0427**		**4,949.8426**

3.3 Grading - 2016

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					26.1905	0.0000	26.1905	9.4779	0.0000	9.4779			0.0000			0.0000
Off-Road	22.3244	265.8324	156.3828	0.2155		11.8447	11.8447		10.8971	10.8971		22,402.6214	22,402.6214	6.7574		22,544.5274
Total	**22.3244**	**265.8324**	**156.3828**	**0.2155**	**26.1905**	**11.8447**	**38.0352**	**9.4779**	**10.8971**	**20.3751**		**22,402.6214**	**22,402.6214**	**6.7574**		**22,544.5274**

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	0.2936	0.4281	5.2980	0.0113	0.8730	8.0900e-003	0.8811	0.2315	7.4400e-003	0.2389		955.2964	955.2964	0.0516		956.3791
Total	**0.2936**	**0.4281**	**5.2980**	**0.0113**	**0.8730**	**8.0900e-003**	**0.8811**	**0.2315**	**7.4400e-003**	**0.2389**		**955.2964**	**955.2964**	**0.0516**		**956.3791**

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					10.2143	0.0000	10.2143	3.6964	0.0000	3.6964			0.0000			0.0000
Off-Road	22.3244	265.8324	156.3828	0.2155		11.8447	11.8447		10.8971	10.8971	0.0000	22,402.6214	22,402.6214	6.7574		22,544.5273
Total	**22.3244**	**265.8324**	**156.3828**	**0.2155**	**10.2143**	**11.8447**	**22.0590**	**3.6964**	**10.8971**	**14.5935**	**0.0000**	**22,402.6214**	**22,402.6214**	**6.7574**		**22,544.5273**

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	0.2936	0.4281	5.2980	0.0113	0.8730	8.0900e-003	0.8811	0.2315	7.4400e-003	0.2389		955.2964	955.2964	0.0516		956.3791

Total	**0.2936**	**0.4281**	**5.2980**	**0.0113**	**0.8730**	**8.0900e-003**	**0.8811**	**0.2315**	**7.4400e-003**	**0.2389**		**955.2964**	**955.2964**	**0.0516**		**956.3791**

3.4 Paving1 - 2017

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193		1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**		**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

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	0.0452	0.0668	0.8277	1.9500e-003	0.1505	1.3400e-003	0.1519	0.0399	1.2300e-003	0.0412		158.5416	158.5416	8.2200e-003		158.7142
Total	**0.0452**	**0.0668**	**0.8277**	**1.9500e-003**	**0.1505**	**1.3400e-003**	**0.1519**	**0.0399**	**1.2300e-003**	**0.0412**		**158.5416**	**158.5416**	**8.2200e-003**		**158.7142**

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193	0.0000	1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**	**0.0000**	**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

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	0.0452	0.0668	0.8277	1.9500e-003	0.1505	1.3400e-003	0.1519	0.0399	1.2300e-003	0.0412		158.5416	158.5416	8.2200e-003		158.7142
Total	**0.0452**	**0.0668**	**0.8277**	**1.9500e-003**	**0.1505**	**1.3400e-003**	**0.1519**	**0.0399**	**1.2300e-003**	**0.0412**		**158.5416**	**158.5416**	**8.2200e-003**		**158.7142**

3.5 Paving2 - 2017

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193		1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**		**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

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	0.0452	0.0668	0.8277	1.9500e-003	0.1505	1.3400e-003	0.1519	0.0399	1.2300e-003	0.0412		158.5416	158.5416	8.2200e-003		158.7142
Total	**0.0452**	**0.0668**	**0.8277**	**1.9500e-003**	**0.1505**	**1.3400e-003**	**0.1519**	**0.0399**	**1.2300e-003**	**0.0412**		**158.5416**	**158.5416**	**8.2200e-003**		**158.7142**

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193	0.0000	1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**	**0.0000**	**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

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	0.0452	0.0668	0.8277	1.9500e-003	0.1505	1.3400e-003	0.1519	0.0399	1.2300e-003	0.0412		158.5416	158.5416	8.2200e-003		158.7142
Total	**0.0452**	**0.0668**	**0.8277**	**1.9500e-003**	**0.1505**	**1.3400e-003**	**0.1519**	**0.0399**	**1.2300e-003**	**0.0412**		**158.5416**	**158.5416**	**8.2200e-003**		**158.7142**

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	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Unmitigated	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
NaturalGas Unmitigated	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461

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					
Condo/Townhouse High Rise	21115.7	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13026.2	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	128.836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1304.11	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27678.1	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	69.863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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

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
Condo/Townhouse	27628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13.0262	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	0.128836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1.30411	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27.6781	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	0.069863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Condo/Townhouse	27.628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21.1157	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Unmitigated	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Site Preparation, Grading & Paving

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land Use Type, Unit Amount, and Population based on Newhall provided information.

Construction Phase - Client provided - days of construction phase

Off-road Equipment - Client provided equipment list

Off-road Equipment - Client provided equipment list

Off-road Equipment - Client provided

Off-road Equipment - Client Provided

Off-road Equipment - Client Provided

Trips and VMT - Restoring CalEEMod Defaults since some equipment was entered with different unit amount and hours to account for unit fractions.

On-road Fugitive Dust - Offroad equipment modeled as vendor trips, operate on 100% unpaved area

Grading -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstructionPhase	NumDays	465.00	250.00
tblConstructionPhase	NumDays	330.00	15.00
tblConstructionPhase	NumDays	330.00	15.00
tblConstructionPhase	NumDays	180.00	30.00
tblConstructionPhase	PhaseEndDate	1/16/2017	3/10/2017
tblConstructionPhase	PhaseEndDate	3/31/2017	9/1/2017
tblConstructionPhase	PhaseStartDate	12/27/2016	2/20/2017
tblConstructionPhase	PhaseStartDate	3/11/2017	8/14/2017
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40

tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	HorsePower	162.00	157.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	125.00	89.00
tblOffRoadEquipment	HorsePower	125.00	89.00
tblOffRoadEquipment	HorsePower	130.00	82.00
tblOffRoadEquipment	HorsePower	130.00	82.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	255.00	358.00
tblOffRoadEquipment	HorsePower	361.00	356.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	208.00	82.00
tblOffRoadEquipment	HorsePower	208.00	82.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	400.00	381.00
tblOffRoadEquipment	HorsePower	167.00	196.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.60
tblOffRoadEquipment	UsageHours	8.00	20.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	1,920.00

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					
2015	2.7170	32.4051	23.2361	0.0572	2.5527	1.2764	3.8291	0.5147	1.1742	1.6890	0.0000	5,820.9628	5,820.9628	0.2964	0.0000	5,827.1871
2016	22.6270	266.3073	161.3151	0.2262	27.0635	11.8528	38.9163	9.7094	10.9046	20.6140	0.0000	23,304.1148	23,304.1148	6.8090	0.0000	23,447.1034
2017	4.0856	18.5610	11.7881	0.0161	0.1505	1.2180	1.3685	0.0399	1.1205	1.1604	0.0000	1,612.1586	1,612.1586	0.4563	0.0000	1,621.7419
Total	**29.4296**	**317.2733**	**196.3393**	**0.2995**	**29.7668**	**14.3472**	**44.1139**	**10.2641**	**13.1993**	**23.4634**	**0.0000**	**30,737.2363**	**30,737.2363**	**7.5617**	**0.0000**	**30,896.0324**

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					
2015	2.7170	32.4051	23.2361	0.0572	1.9058	1.2764	3.1822	0.4449	1.1742	1.6191	0.0000	5,820.9628	5,820.9628	0.2964	0.0000	5,827.1871
2016	22.6270	266.3073	161.3151	0.2262	11.0873	11.8528	22.9401	3.9279	10.9046	14.8325	0.0000	23,304.1148	23,304.1148	6.8090	0.0000	23,447.1034
2017	4.0856	18.5610	11.7881	0.0161	0.1505	1.2180	1.3685	0.0399	1.1205	1.1604	0.0000	1,612.1586	1,612.1586	0.4563	0.0000	1,621.7419
Total	**29.4296**	**317.2733**	**196.3393**	**0.2995**	**13.1437**	**14.3472**	**27.4908**	**4.4127**	**13.1993**	**17.6120**	**0.0000**	**30,737.2362**	**30,737.2362**	**7.5617**	**0.0000**	**30,896.0323**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**55.84**	**0.00**	**37.68**	**57.01**	**0.00**	**24.94**	**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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Total	**588.1308**	**245.3138**	**1,923.1355**	**5.0350**	**251.2667**	**126.7866**	**378.0532**	**67.2149**	**126.3703**	**193.5853**	**14,743.5296**	**316,668.2746**	**331,411.8041**	**53.5837**	**1.2009**	**332,909.3385**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Total	**588.1308**	**245.3138**	**1,923.1355**	**5.0350**	**251.2667**	**126.7866**	**378.0532**	**67.2149**	**126.3703**	**193.5853**	**14,743.5296**	**316,668.2746**	**331,411.8041**	**53.5837**	**1.2009**	**332,909.3385**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2015	1/11/2016	5	30	
2	Grading	Grading	1/12/2016	12/26/2016	5	250	
3	Paving1	Paving	2/20/2017	3/10/2017	5	15	
4	Paving2	Paving	8/14/2017	9/1/2017	5	15	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 2625

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

Site Preparation	Crawler Tractors	2	8.00	82	0.43
Site Preparation	Tractors/Loaders/Backhoes	1	6.00	75	0.37
Grading	Crawler Tractors	4	8.00	82	0.43
Grading	Excavators	1	1.60	157	0.38
Grading	Graders	1	8.00	162	0.41
Grading	Off-Highway Trucks	1	4.00	381	0.38
Grading	Other Material Handling Equipment	6	8.00	196	0.40
Grading	Rubber Tired Dozers	1	20.00	358	0.40
Grading	Scrapers	8	8.00	356	0.48
Grading	Tractors/Loaders/Backhoes	1	4.00	75	0.37
Paving1	Graders	1	8.00	162	0.41
Paving1	Pavers	1	8.00	89	0.42
Paving1	Paving Equipment	1	8.00	82	0.36
Paving1	Rollers	1	8.00	84	0.38
Paving2	Graders	1	8.00	162	0.41
Paving2	Pavers	1	8.00	89	0.42
Paving2	Paving Equipment	1	8.00	82	0.36
Paving2	Rollers	1	8.00	84	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	1,920.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	23	58.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving1	4	10.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving2	4	10.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	1.3091	11.3108	6.6168	7.9200e-003		0.9393	0.9393		0.8642	0.8642		832.7380	832.7380	0.2486		837.9588
Total	**1.3091**	**11.3108**	**6.6168**	**7.9200e-003**	**1.0605**	**0.9393**	**1.9998**	**0.1145**	**0.8642**	**0.9787**		**832.7380**	**832.7380**	**0.2486**		**837.9588**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3613	21.0219	15.8668	0.0478	1.3718	0.3359	1.7078	0.3683	0.3090	0.6773		4,859.5837	4,859.5837	0.0401		4,860.4254
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	0.0466	0.0724	0.7525	1.4700e-003	0.1204	1.1800e-003	0.1216	0.0319	1.0800e-003	0.0330		128.6411	128.6411	7.7100e-003		128.8029
Total	**1.4079**	**21.0943**	**16.6193**	**0.0492**	**1.4922**	**0.3371**	**1.8294**	**0.4002**	**0.3101**	**0.7103**		**4,988.2248**	**4,988.2248**	**0.0478**		**4,989.2283**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	1.3091	11.3108	6.6168	7.9200e-003		0.9393	0.9393		0.8642	0.8642	0.0000	832.7380	832.7380	0.2486		837.9588
Total	**1.3091**	**11.3108**	**6.6168**	**7.9200e-003**	**0.4136**	**0.9393**	**1.3529**	**0.0447**	**0.8642**	**0.9088**	**0.0000**	**832.7380**	**832.7380**	**0.2486**		**837.9588**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3613	21.0219	15.8668	0.0478	1.3718	0.3359	1.7078	0.3683	0.3090	0.6773		4,859.5837	4,859.5837	0.0401		4,860.4254
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	0.0466	0.0724	0.7525	1.4700e-003	0.1204	1.1800e-003	0.1216	0.0319	1.0800e-003	0.0330		128.6411	128.6411	7.7100e-003		128.8029
Total	**1.4079**	**21.0943**	**16.6193**	**0.0492**	**1.4922**	**0.3371**	**1.8294**	**0.4002**	**0.3101**	**0.7103**		**4,988.2248**	**4,988.2248**	**0.0478**		**4,989.2283**

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

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

Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	1.2786	11.0241	6.6048	7.9100e-003		0.9153	0.9153		0.8421	0.8421		823.5941	823.5941	0.2484		828.8110
Total	**1.2786**	**11.0241**	**6.6048**	**7.9100e-003**	**1.0605**	**0.9153**	**1.9758**	**0.1145**	**0.8421**	**0.9566**		**823.5941**	**823.5941**	**0.2484**		**828.8110**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1937	18.5713	14.7564	0.0477	3.8947	0.2663	4.1610	0.9876	0.2449	1.2325		4,805.8713	4,805.8713	0.0361		4,806.6288
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	0.0417	0.0655	0.6803	1.4700e-003	0.1204	1.1200e-003	0.1215	0.0319	1.0300e-003	0.0330		124.3439	124.3439	7.1100e-003		124.4933
Total	**1.2355**	**18.6368**	**15.4367**	**0.0492**	**4.0151**	**0.2674**	**4.2825**	**1.0195**	**0.2460**	**1.2655**		**4,930.2152**	**4,930.2152**	**0.0432**		**4,931.1221**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	1.2786	11.0241	6.6048	7.9100e-003		0.9153	0.9153		0.8421	0.8421	0.0000	823.5941	823.5941	0.2484		828.8110
Total	**1.2786**	**11.0241**	**6.6048**	**7.9100e-003**	**0.4136**	**0.9153**	**1.3289**	**0.0447**	**0.8421**	**0.8867**	**0.0000**	**823.5941**	**823.5941**	**0.2484**		**828.8110**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1937	18.5713	14.7564	0.0477	3.8947	0.2663	4.1610	0.9876	0.2449	1.2325		4,805.8713	4,805.8713	0.0361		4,806.6288
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	0.0417	0.0655	0.6803	1.4700e-003	0.1204	1.1200e-003	0.1215	0.0319	1.0300e-003	0.0330		124.3439	124.3439	7.1100e-003		124.4933
Total	**1.2355**	**18.6368**	**15.4367**	**0.0492**	**4.0151**	**0.2674**	**4.2825**	**1.0195**	**0.2460**	**1.2655**		**4,930.2152**	**4,930.2152**	**0.0432**		**4,931.1221**

3.3 Grading - 2016

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					26.1905	0.0000	26.1905	9.4779	0.0000	9.4779			0.0000			0.0000
Off-Road	22.3244	265.8324	156.3828	0.2155		11.8447	11.8447		10.8971	10.8971		22,402.6214	22,402.6214	6.7574		22,544.5274
Total	**22.3244**	**265.8324**	**156.3828**	**0.2155**	**26.1905**	**11.8447**	**38.0352**	**9.4779**	**10.8971**	**20.3751**		**22,402.6214**	**22,402.6214**	**6.7574**		**22,544.5274**

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	0.3027	0.4749	4.9323	0.0107	0.8730	8.0900e-003	0.8811	0.2315	7.4400e-003	0.2389		901.4934	901.4934	0.0516		902.5761
Total	**0.3027**	**0.4749**	**4.9323**	**0.0107**	**0.8730**	**8.0900e-003**	**0.8811**	**0.2315**	**7.4400e-003**	**0.2389**		**901.4934**	**901.4934**	**0.0516**		**902.5761**

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					10.2143	0.0000	10.2143	3.6964	0.0000	3.6964			0.0000			0.0000
Off-Road	22.3244	265.8324	156.3828	0.2155		11.8447	11.8447		10.8971	10.8971	0.0000	22,402.6214	22,402.6214	6.7574		22,544.5273
Total	**22.3244**	**265.8324**	**156.3828**	**0.2155**	**10.2143**	**11.8447**	**22.0590**	**3.6964**	**10.8971**	**14.5935**	**0.0000**	**22,402.6214**	**22,402.6214**	**6.7574**		**22,544.5273**

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	0.3027	0.4749	4.9323	0.0107	0.8730	8.0900e-003	0.8811	0.2315	7.4400e-003	0.2389		901.4934	901.4934	0.0516		902.5761

Total	**0.3027**	**0.4749**	**4.9323**	**0.0107**	**0.8730**	**8.0900e-003**	**0.8811**	**0.2315**	**7.4400e-003**	**0.2389**		**901.4934**	**901.4934**	**0.0516**		**902.5761**

3.4 Paving1 - 2017

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193		1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**		**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

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	0.0465	0.0741	0.7673	1.8400e-003	0.1505	1.3400e-003	0.1519	0.0399	1.2300e-003	0.0412		149.6011	149.6011	8.2200e-003		149.7737
Total	**0.0465**	**0.0741**	**0.7673**	**1.8400e-003**	**0.1505**	**1.3400e-003**	**0.1519**	**0.0399**	**1.2300e-003**	**0.0412**		**149.6011**	**149.6011**	**8.2200e-003**		**149.7737**

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193	0.0000	1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**	**0.0000**	**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

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	0.0465	0.0741	0.7673	1.8400e-003	0.1505	1.3400e-003	0.1519	0.0399	1.2300e-003	0.0412		149.6011	149.6011	8.2200e-003		149.7737
Total	**0.0465**	**0.0741**	**0.7673**	**1.8400e-003**	**0.1505**	**1.3400e-003**	**0.1519**	**0.0399**	**1.2300e-003**	**0.0412**		**149.6011**	**149.6011**	**8.2200e-003**		**149.7737**

3.5 Paving2 - 2017

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193		1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**		**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

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	0.0465	0.0741	0.7673	1.8400e-003	0.1505	1.3400e-003	0.1519	0.0399	1.2300e-003	0.0412		149.6011	149.6011	8.2200e-003		149.7737
Total	**0.0465**	**0.0741**	**0.7673**	**1.8400e-003**	**0.1505**	**1.3400e-003**	**0.1519**	**0.0399**	**1.2300e-003**	**0.0412**		**149.6011**	**149.6011**	**8.2200e-003**		**149.7737**

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193	0.0000	1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**	**0.0000**	**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

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	0.0465	0.0741	0.7673	1.8400e-003	0.1505	1.3400e-003	0.1519	0.0399	1.2300e-003	0.0412		149.6011	149.6011	8.2200e-003		149.7737
Total	**0.0465**	**0.0741**	**0.7673**	**1.8400e-003**	**0.1505**	**1.3400e-003**	**0.1519**	**0.0399**	**1.2300e-003**	**0.0412**		**149.6011**	**149.6011**	**8.2200e-003**		**149.7737**

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	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Unmitigated	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
NaturalGas Unmitigated	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461

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					
Condo/Townhouse High Rise	21115.7	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13026.2	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	128.836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1304.11	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27678.1	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	69.863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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

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
Condo/Townhouse	27628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	21.1157	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13.0262	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	0.128836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1.30411	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27.6781	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	0.069863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Condo/Townhouse	27.628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Unmitigated	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Utility Installation & Building Construction

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only construction, no need to factor in RPS

Land Use - Client

Construction Phase - Based on Client provided data

Off-road Equipment -

Off-road Equipment - Client Provided - Equipment type, unit, hrs/day and HP (when equipment fractions were give, 1 unit * number of total hrs was input)
CalEEMod Default - Load Factors, HP for 6 off-highway trucks

Off-road Equipment - Client provided, except HP for off-highway trucks (CalEEMod defaults). Other material handling equipment represent water trucks.

Trips and VMT -

On-road Fugitive Dust - Offroad equipment modeled as vendor trips is assumed to operate on 100% unpaved area

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstructionPhase	NumDays	4,650.00	1,979.00
tblConstructionPhase	PhaseEndDate	12/26/2024	12/31/2024
tblConstructionPhase	PhaseStartDate	5/27/2017	6/1/2017
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	HorsePower	162.00	157.00
tblOffRoadEquipment	HorsePower	167.00	196.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	419.00	0.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	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					
2016	0.0659	0.7170	0.4954	8.5000e-004	7.1900e-003	0.0378	0.0450	1.9100e-003	0.0348	0.0367	0.0000	78.1088	78.1088	0.0219	0.0000	78.5676
2017	0.3209	2.9240	2.0563	3.2200e-003	0.0101	0.1830	0.1931	2.6700e-003	0.1710	0.1737	0.0000	289.4041	289.4041	0.0753	0.0000	290.9860
2018	0.3483	3.0355	2.2880	3.5000e-003	0.0000	0.1950	0.1950	0.0000	0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
2019	0.3069	2.7359	2.2342	3.5000e-003	0.0000	0.1677	0.1677	0.0000	0.1577	0.1577	0.0000	305.5302	305.5302	0.0743	0.0000	307.0913
2020	0.2766	2.5000	2.2019	3.5100e-003	0.0000	0.1458	0.1458	0.0000	0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973
2021	0.2471	2.2629	2.1582	3.5000e-003	0.0000	0.1246	0.1246	0.0000	0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
2022	0.2209	2.0197	2.1226	3.4900e-003	0.0000	0.1047	0.1047	0.0000	0.0986	0.0986	0.0000	299.9946	299.9946	0.0718	0.0000	301.5017
2023	0.2036	1.8606	2.1072	3.4900e-003	0.0000	0.0906	0.0906	0.0000	0.0852	0.0852	0.0000	300.0980	300.0980	0.0713	0.0000	301.5949
2024	0.1920	1.7524	2.1135	3.5200e-003	0.0000	0.0800	0.0800	0.0000	0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643
Total	**2.1820**	**19.8082**	**17.7772**	**0.0286**	**0.0173**	**1.1292**	**1.1465**	**4.5800e-003**	**1.0601**	**1.0646**	**0.0000**	**2,487.7700**	**2,487.7700**	**0.6077**	**0.0000**	**2,500.5322**

2.1 Overall Construction

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					
2016	0.0659	0.7170	0.4954	8.5000e-004	7.1900e-003	0.0378	0.0450	1.9100e-003	0.0348	0.0367	0.0000	78.1088	78.1088	0.0219	0.0000	78.5675
2017	0.3209	2.9240	2.0563	3.2200e-003	0.0101	0.1830	0.1931	2.6700e-003	0.1710	0.1737	0.0000	289.4038	289.4038	0.0753	0.0000	290.9857
2018	0.3483	3.0355	2.2880	3.5000e-003	0.0000	0.1950	0.1950	0.0000	0.1833	0.1833	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
2019	0.3069	2.7359	2.2342	3.5000e-003	0.0000	0.1677	0.1677	0.0000	0.1577	0.1577	0.0000	305.5299	305.5299	0.0743	0.0000	307.0909
2020	0.2766	2.5000	2.2019	3.5100e-003	0.0000	0.1458	0.1458	0.0000	0.1371	0.1371	0.0000	302.1510	302.1510	0.0736	0.0000	303.6969
2021	0.2471	2.2629	2.1582	3.5000e-003	0.0000	0.1246	0.1246	0.0000	0.1172	0.1172	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
2022	0.2209	2.0197	2.1226	3.4900e-003	0.0000	0.1047	0.1047	0.0000	0.0986	0.0986	0.0000	299.9943	299.9943	0.0718	0.0000	301.5013
2023	0.2036	1.8606	2.1072	3.4900e-003	0.0000	0.0906	0.0906	0.0000	0.0852	0.0852	0.0000	300.0976	300.0976	0.0713	0.0000	301.5946
2024	0.1920	1.7524	2.1135	3.5200e-003	0.0000	0.0800	0.0800	0.0000	0.0752	0.0752	0.0000	302.4642	302.4642	0.0714	0.0000	303.9639
Total	**2.1820**	**19.8082**	**17.7772**	**0.0286**	**0.0173**	**1.1292**	**1.1465**	**4.5800e-003**	**1.0601**	**1.0646**	**0.0000**	**2,487.7671**	**2,487.7671**	**0.6077**	**0.0000**	**2,500.5293**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Energy	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	7,880.7783	7,880.7783	0.3138	0.0909	7,915.5473
Mobile	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Waste						0.0000	0.0000		0.0000	0.0000	385.8858	0.0000	385.8858	22.8052	0.0000	864.7950
Water						0.0000	0.0000		0.0000	0.0000	64.6196	1,194.1152	1,258.7348	6.6919	0.1681	1,451.3676
Total	**33.9677**	**37.9133**	**183.9819**	**0.6187**	**38.8288**	**2.5262**	**41.3550**	**10.4037**	**2.4636**	**12.8673**	**617.6942**	**49,466.7340**	**50,084.4281**	**31.6438**	**0.2703**	**50,832.7470**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Energy	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	7,880.7783	7,880.7783	0.3138	0.0909	7,915.5473
Mobile	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Waste						0.0000	0.0000		0.0000	0.0000	385.8858	0.0000	385.8858	22.8052	0.0000	864.7950
Water						0.0000	0.0000		0.0000	0.0000	64.6196	1,194.1152	1,258.7348	6.6907	0.1678	1,451.2645
Total	**33.9677**	**37.9133**	**183.9819**	**0.6187**	**38.8288**	**2.5262**	**41.3550**	**10.4037**	**2.4636**	**12.8673**	**617.6942**	**49,466.7340**	**50,084.4281**	**31.6426**	**0.2701**	**50,832.6439**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**	**0.09**	**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	Utility Installation	Trenching	9/19/2016	5/26/2017	5	180	
2	Building Construction	Building Construction	6/1/2017	12/31/2024	5	1979	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Utility Installation	Excavators	2	8.00	157	0.38
Utility Installation	Other Material Handling Equipment	1	6.00	196	0.40
Utility Installation	Tractors/Loaders/Backhoes	2	8.00	75	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Utility Installation	5	13.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Utility Installation - 2016

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	0.0635	0.7129	0.4530	7.5000e-004		0.0377	0.0377		0.0347	0.0347	0.0000	71.1240	71.1240	0.0215	0.0000	71.5745
Total	**0.0635**	**0.7129**	**0.4530**	**7.5000e-004**		**0.0377**	**0.0377**		**0.0347**	**0.0347**	**0.0000**	**71.1240**	**71.1240**	**0.0215**	**0.0000**	**71.5745**

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	2.4200e-003	4.1000e-003	0.0424	9.0000e-005	7.1900e-003	7.0000e-005	7.2600e-003	1.9100e-003	6.0000e-005	1.9700e-003	0.0000	6.9848	6.9848	3.9000e-004	0.0000	6.9931
Total	**2.4200e-003**	**4.1000e-003**	**0.0424**	**9.0000e-005**	**7.1900e-003**	**7.0000e-005**	**7.2600e-003**	**1.9100e-003**	**6.0000e-005**	**1.9700e-003**	**0.0000**	**6.9848**	**6.9848**	**3.9000e-004**	**0.0000**	**6.9931**

3.2 Utility Installation - 2016

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	0.0635	0.7129	0.4530	7.5000e-004		0.0377	0.0377		0.0347	0.0347	0.0000	71.1239	71.1239	0.0215	0.0000	71.5745
Total	**0.0635**	**0.7129**	**0.4530**	**7.5000e-004**		**0.0377**	**0.0377**		**0.0347**	**0.0347**	**0.0000**	**71.1239**	**71.1239**	**0.0215**	**0.0000**	**71.5745**

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	2.4200e-003	4.1000e-003	0.0424	9.0000e-005	7.1900e-003	7.0000e-005	7.2600e-003	1.9100e-003	6.0000e-005	1.9700e-003	0.0000	6.9848	6.9848	3.9000e-004	0.0000	6.9931
Total	**2.4200e-003**	**4.1000e-003**	**0.0424**	**9.0000e-005**	**7.1900e-003**	**7.0000e-005**	**7.2600e-003**	**1.9100e-003**	**6.0000e-005**	**1.9700e-003**	**0.0000**	**6.9848**	**6.9848**	**3.9000e-004**	**0.0000**	**6.9931**

3.2 Utility Installation - 2017

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	0.0822	0.9120	0.6248	1.0600e-003		0.0476	0.0476		0.0438	0.0438	0.0000	97.9878	97.9878	0.0300	0.0000	98.6183
Total	**0.0822**	**0.9120**	**0.6248**	**1.0600e-003**		**0.0476**	**0.0476**		**0.0438**	**0.0438**	**0.0000**	**97.9878**	**97.9878**	**0.0300**	**0.0000**	**98.6183**

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	3.0100e-003	5.1900e-003	0.0536	1.3000e-004	0.0101	9.0000e-005	0.0102	2.6700e-003	8.0000e-005	2.7600e-003	0.0000	9.4122	9.4122	5.1000e-004	0.0000	9.4229
Total	**3.0100e-003**	**5.1900e-003**	**0.0536**	**1.3000e-004**	**0.0101**	**9.0000e-005**	**0.0102**	**2.6700e-003**	**8.0000e-005**	**2.7600e-003**	**0.0000**	**9.4122**	**9.4122**	**5.1000e-004**	**0.0000**	**9.4229**

3.2 Utility Installation - 2017

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	0.0821	0.9120	0.6248	1.0600e-003		0.0476	0.0476		0.0438	0.0438	0.0000	97.9877	97.9877	0.0300	0.0000	98.6182
Total	**0.0821**	**0.9120**	**0.6248**	**1.0600e-003**		**0.0476**	**0.0476**		**0.0438**	**0.0438**	**0.0000**	**97.9877**	**97.9877**	**0.0300**	**0.0000**	**98.6182**

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	3.0100e-003	5.1900e-003	0.0536	1.3000e-004	0.0101	9.0000e-005	0.0102	2.6700e-003	8.0000e-005	2.7600e-003	0.0000	9.4122	9.4122	5.1000e-004	0.0000	9.4229
Total	**3.0100e-003**	**5.1900e-003**	**0.0536**	**1.3000e-004**	**0.0101**	**9.0000e-005**	**0.0102**	**2.6700e-003**	**8.0000e-005**	**2.7600e-003**	**0.0000**	**9.4122**	**9.4122**	**5.1000e-004**	**0.0000**	**9.4229**

3.3 Building Construction - 2017

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	0.2358	2.0068	1.3778	2.0400e-003		0.1354	0.1354		0.1272	0.1272	0.0000	182.0041	182.0041	0.0448	0.0000	182.9448
Total	**0.2358**	**2.0068**	**1.3778**	**2.0400e-003**		**0.1354**	**0.1354**		**0.1272**	**0.1272**	**0.0000**	**182.0041**	**182.0041**	**0.0448**	**0.0000**	**182.9448**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2017

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	0.2358	2.0068	1.3778	2.0400e-003		0.1354	0.1354		0.1272	0.1272	0.0000	182.0039	182.0039	0.0448	0.0000	182.9446
Total	**0.2358**	**2.0068**	**1.3778**	**2.0400e-003**		**0.1354**	**0.1354**		**0.1272**	**0.1272**	**0.0000**	**182.0039**	**182.0039**	**0.0448**	**0.0000**	**182.9446**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
Total	**0.3483**	**3.0355**	**2.2880**	**3.5000e-003**		**0.1950**	**0.1950**		**0.1833**	**0.1833**	**0.0000**	**308.9844**	**308.9844**	**0.0756**	**0.0000**	**310.5723**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2018

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	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
Total	**0.3483**	**3.0355**	**2.2880**	**3.5000e-003**		**0.1950**	**0.1950**		**0.1833**	**0.1833**	**0.0000**	**308.9841**	**308.9841**	**0.0756**	**0.0000**	**310.5720**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2019

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	0.3069	2.7359	2.2342	3.5000e-003		0.1677	0.1677		0.1577	0.1577	0.0000	305.5302	305.5302	0.0743	0.0000	307.0913
Total	**0.3069**	**2.7359**	**2.2342**	**3.5000e-003**		**0.1677**	**0.1677**		**0.1577**	**0.1577**	**0.0000**	**305.5302**	**305.5302**	**0.0743**	**0.0000**	**307.0913**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2019

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	0.3069	2.7359	2.2342	3.5000e-003		0.1677	0.1677		0.1577	0.1577	0.0000	305.5299	305.5299	0.0743	0.0000	307.0909
Total	**0.3069**	**2.7359**	**2.2342**	**3.5000e-003**		**0.1677**	**0.1677**		**0.1577**	**0.1577**	**0.0000**	**305.5299**	**305.5299**	**0.0743**	**0.0000**	**307.0909**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 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	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973
Total	**0.2766**	**2.5000**	**2.2019**	**3.5100e-003**		**0.1458**	**0.1458**		**0.1371**	**0.1371**	**0.0000**	**302.1514**	**302.1514**	**0.0736**	**0.0000**	**303.6973**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1510	302.1510	0.0736	0.0000	303.6969
Total	**0.2766**	**2.5000**	**2.2019**	**3.5100e-003**		**0.1458**	**0.1458**		**0.1371**	**0.1371**	**0.0000**	**302.1510**	**302.1510**	**0.0736**	**0.0000**	**303.6969**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2021

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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0335**	**301.0335**	**0.0725**	**0.0000**	**302.5565**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9946	299.9946	0.0718	0.0000	301.5017
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9946**	**299.9946**	**0.0718**	**0.0000**	**301.5017**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9943	299.9943	0.0718	0.0000	301.5013
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9943**	**299.9943**	**0.0718**	**0.0000**	**301.5013**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0980	300.0980	0.0713	0.0000	301.5949
Total	**0.2036**	**1.8606**	**2.1072**	**3.4900e-003**		**0.0906**	**0.0906**		**0.0852**	**0.0852**	**0.0000**	**300.0980**	**300.0980**	**0.0713**	**0.0000**	**301.5949**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0976	300.0976	0.0713	0.0000	301.5946
Total	**0.2036**	**1.8606**	**2.1072**	**3.4900e-003**		**0.0906**	**0.0906**		**0.0852**	**0.0852**	**0.0000**	**300.0976**	**300.0976**	**0.0713**	**0.0000**	**301.5946**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2024

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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643
Total	**0.1920**	**1.7524**	**2.1135**	**3.5200e-003**		**0.0800**	**0.0800**		**0.0752**	**0.0752**	**0.0000**	**302.4646**	**302.4646**	**0.0714**	**0.0000**	**303.9643**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2024

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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4642	302.4642	0.0714	0.0000	303.9639
Total	**0.1920**	**1.7524**	**2.1135**	**3.5200e-003**		**0.0800**	**0.0800**		**0.0752**	**0.0752**	**0.0000**	**302.4642**	**302.4642**	**0.0714**	**0.0000**	**303.9639**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Unmitigated	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	6,072.8188	6,072.8188	0.2792	0.0578	6,096.5848
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,072.8188	6,072.8188	0.2792	0.0578	6,096.5848
NaturalGas Mitigated	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	1,807.9595	1,807.9595	0.0347	0.0332	1,818.9625
NaturalGas Unmitigated	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	1,807.9595	1,807.9595	0.0347	0.0332	1,818.9625

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
Condo/Townhouse	1.00842e+007	0.0544	0.4647	0.1977	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1324	538.1324	0.0103	9.8700e-003	541.4074
Condo/Townhouse High Rise	7.70723e+006	0.0416	0.3551	0.1511	2.2700e-003		0.0287	0.0287		0.0287	0.0287	0.0000	411.2869	411.2869	7.8800e-003	7.5400e-003	413.7900
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	4.75455e+006	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	253.7209	253.7209	4.8600e-003	4.6500e-003	255.2650
Health Club	47025	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5094	2.5094	5.0000e-005	5.0000e-005	2.5247
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
Regional Shopping Center	476000	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.4012	25.4012	4.9000e-004	4.7000e-004	25.5558
Single Family Housing	1.01025e+007	0.0545	0.4655	0.1981	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	539.1089	539.1089	0.0103	9.8800e-003	542.3898
Strip Mall	25500	1.4000e-004	1.2500e-003	1.0500e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3608	1.3608	3.0000e-005	2.0000e-005	1.3691
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1827**	**1.5788**	**0.7934**	**9.9700e-003**		**0.1262**	**0.1262**		**0.1262**	**0.1262**	**0.0000**	**1,807.9595**	**1,807.9595**	**0.0347**	**0.0332**	**1,818.9625**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	1.00842e+007	0.0544	0.4647	0.1977	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1324	538.1324	0.0103	9.8700e-003	541.4074
Condo/Townhouse High Rise	7.70723e+006	0.0416	0.3551	0.1511	2.2700e-003		0.0287	0.0287		0.0287	0.0287	0.0000	411.2869	411.2869	7.8800e-003	7.5400e-003	413.7900
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	4.75455e+006	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	253.7209	253.7209	4.8600e-003	4.6500e-003	255.2650
Health Club	47025	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5094	2.5094	5.0000e-005	5.0000e-005	2.5247
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
Regional Shopping Center	476000	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.4012	25.4012	4.9000e-004	4.7000e-004	25.5558
Single Family Housing	1.01025e+007	0.0545	0.4655	0.1981	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	539.1089	539.1089	0.0103	9.8800e-003	542.3898
Strip Mall	25500	1.4000e-004	1.2500e-003	1.0500e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3608	1.3608	3.0000e-005	2.0000e-005	1.3691
Unenclosed Parking with Elevator	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
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
Total		**0.1827**	**1.5788**	**0.7934**	**9.9700e-003**		**0.1262**	**0.1262**		**0.1262**	**0.1262**	**0.0000**	**1,807.9595**	**1,807.9595**	**0.0347**	**0.0332**	**1,818.9625**

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
Condo/Townhouse	3.07852e+006	880.9694	0.0405	8.3800e-003	884.4170
Condo/Townhouse High Rise	2.35287e+006	673.3123	0.0310	6.4000e-003	675.9473
Elementary School	420114	120.2226	5.5300e-003	1.1400e-003	120.6931
General Office Building	6.32055e+006	1,808.7321	0.0831	0.0172	1,815.8107
Health Club	30125	8.6208	4.0000e-004	8.0000e-005	8.6545
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.2476e+006	1,215.5225	0.0559	0.0116	1,220.2795
Single Family Housing	2.47292e+006	707.6679	0.0325	6.7300e-003	710.4374
Strip Mall	227550	65.1173	2.9900e-003	6.2000e-004	65.3721
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,072.8188**	**0.2792**	**0.0578**	**6,096.5848**

5.3 Energy by Land Use - Electricity

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
Condo/Townhouse	3.07852e+006	880.9694	0.0405	8.3800e-003	884.4170
Condo/Townhouse High Rise	2.35287e+006	673.3123	0.0310	6.4000e-003	675.9473
Elementary School	420114	120.2226	5.5300e-003	1.1400e-003	120.6931
General Office Building	6.32055e+006	1,808.7321	0.0831	0.0172	1,815.8107
Health Club	30125	8.6208	4.0000e-004	8.0000e-005	8.6545
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.2476e+006	1,215.5225	0.0559	0.0116	1,220.2795
Single Family Housing	2.47292e+006	707.6679	0.0325	6.7300e-003	710.4374
Strip Mall	227550	65.1173	2.9900e-003	6.2000e-004	65.3721
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,072.8188**	**0.2792**	**0.0578**	**6,096.5848**

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	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Unmitigated	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1556	0.1308	9.8895	0.0157		1.5029	1.5029		1.5027	1.5027	167.1888	321.2795	488.4683	0.4986	0.0114	502.4564
Landscaping	0.4918	0.1873	16.2678	8.6000e-004		0.0901	0.0901		0.0901	0.0901	0.0000	26.5977	26.5977	0.0257	0.0000	27.1365
Total	**20.5620**	**0.3181**	**26.1573**	**0.0166**		**1.5930**	**1.5930**		**1.5928**	**1.5928**	**167.1888**	**347.8772**	**515.0660**	**0.5243**	**0.0114**	**529.5929**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1556	0.1308	9.8895	0.0157		1.5029	1.5029		1.5027	1.5027	167.1888	321.2795	488.4683	0.4986	0.0114	502.4564
Landscaping	0.4918	0.1873	16.2678	8.6000e-004		0.0901	0.0901		0.0901	0.0901	0.0000	26.5977	26.5977	0.0257	0.0000	27.1365
Total	**20.5620**	**0.3181**	**26.1573**	**0.0166**		**1.5930**	**1.5930**		**1.5928**	**1.5928**	**167.1888**	**347.8772**	**515.0660**	**0.5243**	**0.0114**	**529.5929**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,258.7348	6.6907	0.1678	1,451.2645
Unmitigated	1,258.7348	6.6919	0.1681	1,451.3676

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.6723	21.2133	9.8000e-004	2.0000e-004	21.2963
Condo/Townhouse	45.6078 / 28.7528	275.8262	1.4982	0.0376	318.9359
Condo/Townhouse High Rise	34.8574 / 21.9753	210.8100	1.1450	0.0287	243.7582
Elementary School	1.81818 / 4.67532	22.2160	0.0602	1.6000e-003	23.9785
General Office Building	77.3142 / 47.3861	463.2700	2.5395	0.0637	536.3326
Health Club	0.147858 / 0.0906226	0.8860	4.8600e-003	1.2000e-004	1.0257
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	20.7403 / 12.7118	124.2768	0.6812	0.0171	143.8766
Single Family Housing	22.0872 / 13.9245	133.5787	0.7255	0.0182	154.4561
Strip Mall	1.11109 / 0.680989	6.6577	0.0365	9.1000e-004	7.7077
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,258.7348**	**6.6919**	**0.1681**	**1,451.3676**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.6723	21.2133	9.8000e-004	2.0000e-004	21.2963
Condo/Townhouse	45.6078 / 28.7528	275.8262	1.4979	0.0375	318.9128
Condo/Townhouse High Rise	34.8574 / 21.9753	210.8100	1.1448	0.0287	243.7405
Elementary School	1.81818 / 4.67532	22.2160	0.0602	1.6000e-003	23.9776
General Office Building	77.3142 / 47.3861	463.2700	2.5390	0.0636	536.2935
Health Club	0.147858 / 0.0906226	0.8860	4.8600e-003	1.2000e-004	1.0256
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	20.7403 / 12.7118	124.2768	0.6811	0.0171	143.8661
Single Family Housing	22.0872 / 13.9245	133.5787	0.7254	0.0182	154.4449
Strip Mall	1.11109 / 0.680989	6.6577	0.0365	9.1000e-004	7.7071
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,258.7348**	**6.6907**	**0.1678**	**1,451.2645**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	385.8858	22.8052	0.0000	864.7950
Unmitigated	385.8858	22.8052	0.0000	864.7950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.48	0.0974	5.7600e-003	0.0000	0.2184
Condo/Townhouse	322	65.3631	3.8629	0.0000	146.4829
Condo/Townhouse High Rise	246.1	49.9561	2.9523	0.0000	111.9548
Elementary School	136.88	27.7854	1.6421	0.0000	62.2689
General Office Building	404.55	82.1200	4.8532	0.0000	184.0362
Health Club	14.25	2.8926	0.1710	0.0000	6.4826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	294	59.6793	3.5270	0.0000	133.7453
Single Family Housing	466.99	94.7948	5.6022	0.0000	212.4411
Strip Mall	15.75	3.1971	0.1889	0.0000	7.1649
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**385.8858**	**22.8052**	**0.0000**	**864.7950**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.48	0.0974	5.7600e-003	0.0000	0.2184
Condo/Townhouse	322	65.3631	3.8629	0.0000	146.4829
Condo/Townhouse High Rise	246.1	49.9561	2.9523	0.0000	111.9548
Elementary School	136.88	27.7854	1.6421	0.0000	62.2689
General Office Building	404.55	82.1200	4.8532	0.0000	184.0362
Health Club	14.25	2.8926	0.1710	0.0000	6.4826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	294	59.6793	3.5270	0.0000	133.7453
Single Family Housing	466.99	94.7948	5.6022	0.0000	212.4411
Strip Mall	15.75	3.1971	0.1889	0.0000	7.1649
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**385.8858**	**22.8052**	**0.0000**	**864.7950**

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Utility Installation & Building Construction

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only construction, no need to factor in RPS

Land Use - Client

Construction Phase - Based on Client provided data

Off-road Equipment -

Off-road Equipment - Client Provided - Equipment type, unit, hrs/day and HP (when equipment fractions were give, 1 unit * number of total hrs was input)
CalEEMod Default - Load Factors, HP for 6 off-highway trucks

Off-road Equipment - Client provided, except HP for off-highway trucks (CalEEMod defaults). Other material handling equipment represent water trucks.

Trips and VMT -

On-road Fugitive Dust - Offroad equipment modeled as vendor trips is assumed to operate on 100% unpaved area

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstructionPhase	NumDays	4,650.00	1,979.00
tblConstructionPhase	PhaseEndDate	12/26/2024	12/31/2024
tblConstructionPhase	PhaseStartDate	5/27/2017	6/1/2017
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	HorsePower	162.00	157.00
tblOffRoadEquipment	HorsePower	167.00	196.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	419.00	0.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	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					
2016	1.7581	19.1065	13.2672	0.0227	0.1957	1.0079	1.2036	0.0519	0.9272	0.9791	0.0000	2,304.8064	2,304.8064	0.6422	0.0000	2,318.2922
2017	3.1024	26.4057	18.1291	0.0268	0.1957	1.7812	1.7812	0.0519	1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497	0.0000	2,653.4490
2018	2.6687	23.2608	17.5327	0.0268	0.0000	1.4943	1.4943	0.0000	1.4048	1.4048	0.0000	2,609.9390	2,609.9390	0.6387	0.0000	2,623.3517
2019	2.3516	20.9650	17.1204	0.0268	0.0000	1.2850	1.2850	0.0000	1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279	0.0000	2,593.9479
2020	2.1113	19.0839	16.8084	0.0268	0.0000	1.1128	1.1128	0.0000	1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194	0.0000	2,555.4880
2021	1.8931	17.3403	16.5376	0.0268	0.0000	0.9549	0.9549	0.0000	0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126	0.0000	2,555.6462
2022	1.6992	15.5364	16.3276	0.0268	0.0000	0.8057	0.8057	0.0000	0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085	0.0000	2,556.5286
2023	1.5661	14.3126	16.2093	0.0268	0.0000	0.6967	0.6967	0.0000	0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044	0.0000	2,557.3191
2024	1.4653	13.3774	16.1332	0.0268	0.0000	0.6106	0.6106	0.0000	0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009	0.0000	2,557.7349
Total	**18.6157**	**169.3887**	**148.0655**	**0.2372**	**0.3914**	**9.7491**	**9.9448**	**0.1038**	**9.1457**	**9.1976**	**0.0000**	**22,854.0654**	**22,854.0654**	**5.6044**	**0.0000**	**22,971.7577**

2.1 Overall Construction (Maximum Daily Emission)

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					
2016	1.7581	19.1065	13.2672	0.0227	0.1957	1.0079	1.2036	0.0519	0.9272	0.9791	0.0000	2,304.8064	2,304.8064	0.6422	0.0000	2,318.2922
2017	3.1024	26.4057	18.1291	0.0268	0.1957	1.7812	1.7812	0.0519	1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497	0.0000	2,653.4490
2018	2.6687	23.2608	17.5327	0.0268	0.0000	1.4943	1.4943	0.0000	1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387	0.0000	2,623.3517
2019	2.3516	20.9650	17.1204	0.0268	0.0000	1.2850	1.2850	0.0000	1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279	0.0000	2,593.9479
2020	2.1113	19.0839	16.8084	0.0268	0.0000	1.1128	1.1128	0.0000	1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194	0.0000	2,555.4880
2021	1.8931	17.3403	16.5376	0.0268	0.0000	0.9549	0.9549	0.0000	0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126	0.0000	2,555.6462
2022	1.6992	15.5364	16.3276	0.0268	0.0000	0.8057	0.8057	0.0000	0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085	0.0000	2,556.5286
2023	1.5661	14.3126	16.2093	0.0268	0.0000	0.6967	0.6967	0.0000	0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044	0.0000	2,557.3191
2024	1.4653	13.3774	16.1332	0.0268	0.0000	0.6106	0.6106	0.0000	0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009	0.0000	2,557.7349
Total	**18.6157**	**169.3887**	**148.0655**	**0.2372**	**0.3914**	**9.7491**	**9.9448**	**0.1038**	**9.1457**	**9.1976**	**0.0000**	**22,854.0654**	**22,854.0654**	**5.6044**	**0.0000**	**22,971.7577**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Total	**584.5193**	**233.7937**	**1,922.0956**	**5.2098**	**251.2667**	**126.7729**	**378.0396**	**67.2149**	**126.3578**	**193.5727**	**14,743.5296**	**328,756.4382**	**343,499.9678**	**53.5712**	**1.2009**	**344,997.2382**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Total	**584.5193**	**233.7937**	**1,922.0956**	**5.2098**	**251.2667**	**126.7729**	**378.0396**	**67.2149**	**126.3578**	**193.5727**	**14,743.5296**	**328,756.4382**	**343,499.9678**	**53.5712**	**1.2009**	**344,997.2382**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Utility Installation	Trenching	9/19/2016	5/26/2017	5	180	
2	Building Construction	Building Construction	6/1/2017	12/31/2024	5	1979	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Utility Installation	Excavators	2	8.00	157	0.38
Utility Installation	Other Material Handling Equipment	1	6.00	196	0.40
Utility Installation	Tractors/Loaders/Backhoes	2	8.00	75	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Utility Installation	5	13.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Utility Installation - 2016

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	1.6923	19.0106	12.0797	0.0201		1.0061	1.0061		0.9256	0.9256		2,090.6883	2,090.6883	0.6306		2,103.9314
Total	**1.6923**	**19.0106**	**12.0797**	**0.0201**		**1.0061**	**1.0061**		**0.9256**	**0.9256**		**2,090.6883**	**2,090.6883**	**0.6306**		**2,103.9314**

3.2 Utility Installation - 2016

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	0.0658	0.0960	1.1875	2.5300e-003	0.1957	1.8100e-003	0.1975	0.0519	1.6700e-003	0.0536		214.1182	214.1182	0.0116		214.3608
Total	**0.0658**	**0.0960**	**1.1875**	**2.5300e-003**	**0.1957**	**1.8100e-003**	**0.1975**	**0.0519**	**1.6700e-003**	**0.0536**		**214.1182**	**214.1182**	**0.0116**		**214.3608**

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	1.6923	19.0106	12.0797	0.0201		1.0061	1.0061		0.9256	0.9256	0.0000	2,090.6883	2,090.6883	0.6306		2,103.9314
Total	**1.6923**	**19.0106**	**12.0797**	**0.0201**		**1.0061**	**1.0061**		**0.9256**	**0.9256**	**0.0000**	**2,090.6883**	**2,090.6883**	**0.6306**		**2,103.9314**

3.2 Utility Installation - 2016

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	0.0658	0.0960	1.1875	2.5300e-003	0.1957	1.8100e-003	0.1975	0.0519	1.6700e-003	0.0536		214.1182	214.1182	0.0116		214.3608
Total	**0.0658**	**0.0960**	**1.1875**	**2.5300e-003**	**0.1957**	**1.8100e-003**	**0.1975**	**0.0519**	**1.6700e-003**	**0.0536**		**214.1182**	**214.1182**	**0.0116**		**214.3608**

3.2 Utility Installation - 2017

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	1.5647	17.3716	11.9013	0.0201		0.9061	0.9061		0.8336	0.8336		2,057.3912	2,057.3912	0.6304		2,070.6292
Total	**1.5647**	**17.3716**	**11.9013**	**0.0201**		**0.9061**	**0.9061**		**0.8336**	**0.8336**		**2,057.3912**	**2,057.3912**	**0.6304**		**2,070.6292**

3.2 Utility Installation - 2017

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	0.0587	0.0868	1.0760	2.5300e-003	0.1957	1.7400e-003	0.1974	0.0519	1.6000e-003	0.0535		206.1041	206.1041	0.0107		206.3285
Total	**0.0587**	**0.0868**	**1.0760**	**2.5300e-003**	**0.1957**	**1.7400e-003**	**0.1974**	**0.0519**	**1.6000e-003**	**0.0535**		**206.1041**	**206.1041**	**0.0107**		**206.3285**

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	1.5647	17.3716	11.9013	0.0201		0.9061	0.9061		0.8336	0.8336	0.0000	2,057.3912	2,057.3912	0.6304		2,070.6292
Total	**1.5647**	**17.3716**	**11.9013**	**0.0201**		**0.9061**	**0.9061**		**0.8336**	**0.8336**	**0.0000**	**2,057.3912**	**2,057.3912**	**0.6304**		**2,070.6292**

3.2 Utility Installation - 2017

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	0.0587	0.0868	1.0760	2.5300e-003	0.1957	1.7400e-003	0.1974	0.0519	1.6000e-003	0.0535		206.1041	206.1041	0.0107		206.3285
Total	**0.0587**	**0.0868**	**1.0760**	**2.5300e-003**	**0.1957**	**1.7400e-003**	**0.1974**	**0.0519**	**1.6000e-003**	**0.0535**		**206.1041**	**206.1041**	**0.0107**		**206.3285**

3.3 Building Construction - 2017

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.3 Building Construction - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.3 Building Construction - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

3.3 Building Construction - 2018

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

3.3 Building Construction - 2018

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.3 Building Construction - 2019

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.3 Building Construction - 2019

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

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

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

3.3 Building Construction - 2020

Mitigated Construction Off-Site

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

3.3 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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

3.3 Building Construction - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

3.3 Building Construction - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

3.3 Building Construction - 2022

Unmitigated Construction Off-Site

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

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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

3.3 Building Construction - 2022

Mitigated Construction Off-Site

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

3.3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**		**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

3.3 Building Construction - 2023

Unmitigated Construction Off-Site

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

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	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**	**0.0000**	**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

3.3 Building Construction - 2023

Mitigated Construction Off-Site

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

3.3 Building Construction - 2024

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**		**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

3.3 Building Construction - 2024

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**	**0.0000**	**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

3.3 Building Construction - 2024

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Unmitigated	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
NaturalGas Unmitigated	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461

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					
Condo/Townhouse	27628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21115.7	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13026.2	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	128.836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1304.11	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27678.1	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	69.863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	27.628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21.1157	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13.0262	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	0.128836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1.30411	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27.6781	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	0.069863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Unmitigated	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Utility Installation & Building Construction

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only construction, no need to factor in RPS

Land Use - Client

Construction Phase - Based on Client provided data

Off-road Equipment -

Off-road Equipment - Client Provided - Equipment type, unit, hrs/day and HP (when equipment fractions were give, 1 unit * number of total hrs was input)
CalEEMod Default - Load Factors, HP for 6 off-highway trucks

Off-road Equipment - Client provided, except HP for off-highway trucks (CalEEMod defaults). Other material handling equipment represent water trucks.

Trips and VMT -

On-road Fugitive Dust - Offroad equipment modeled as vendor trips is assumed to operate on 100% unpaved area

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstructionPhase	NumDays	4,650.00	1,979.00
tblConstructionPhase	PhaseEndDate	12/26/2024	12/31/2024
tblConstructionPhase	PhaseStartDate	5/27/2017	6/1/2017
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	HorsePower	162.00	157.00
tblOffRoadEquipment	HorsePower	167.00	196.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	419.00	0.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	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					
2016	1.7601	19.1170	13.1852	0.0225	0.1957	1.0079	1.2036	0.0519	0.9272	0.9791	0.0000	2,292.7471	2,292.7471	0.6422	0.0000	2,306.2330
2017	3.1024	26.4057	18.1291	0.0268	0.1957	1.7812	1.7812	0.0519	1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497	0.0000	2,653.4490
2018	2.6687	23.2608	17.5327	0.0268	0.0000	1.4943	1.4943	0.0000	1.4048	1.4048	0.0000	2,609.9390	2,609.9390	0.6387	0.0000	2,623.3517
2019	2.3516	20.9650	17.1204	0.0268	0.0000	1.2850	1.2850	0.0000	1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279	0.0000	2,593.9479
2020	2.1113	19.0839	16.8084	0.0268	0.0000	1.1128	1.1128	0.0000	1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194	0.0000	2,555.4880
2021	1.8931	17.3403	16.5376	0.0268	0.0000	0.9549	0.9549	0.0000	0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126	0.0000	2,555.6462
2022	1.6992	15.5364	16.3276	0.0268	0.0000	0.8057	0.8057	0.0000	0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085	0.0000	2,556.5286
2023	1.5661	14.3126	16.2093	0.0268	0.0000	0.6967	0.6967	0.0000	0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044	0.0000	2,557.3191
2024	1.4653	13.3774	16.1332	0.0268	0.0000	0.6106	0.6106	0.0000	0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009	0.0000	2,557.7349
Total	**18.6177**	**169.3992**	**147.9835**	**0.2370**	**0.3914**	**9.7491**	**9.9448**	**0.1038**	**9.1457**	**9.1976**	**0.0000**	**22,842.0062**	**22,842.0062**	**5.6044**	**0.0000**	**22,959.6984**

2.1 Overall Construction (Maximum Daily Emission)

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					
2016	1.7601	19.1170	13.1852	0.0225	0.1957	1.0079	1.2036	0.0519	0.9272	0.9791	0.0000	2,292.7471	2,292.7471	0.6422	0.0000	2,306.2330
2017	3.1024	26.4057	18.1291	0.0268	0.1957	1.7812	1.7812	0.0519	1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497	0.0000	2,653.4490
2018	2.6687	23.2608	17.5327	0.0268	0.0000	1.4943	1.4943	0.0000	1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387	0.0000	2,623.3517
2019	2.3516	20.9650	17.1204	0.0268	0.0000	1.2850	1.2850	0.0000	1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279	0.0000	2,593.9479
2020	2.1113	19.0839	16.8084	0.0268	0.0000	1.1128	1.1128	0.0000	1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194	0.0000	2,555.4880
2021	1.8931	17.3403	16.5376	0.0268	0.0000	0.9549	0.9549	0.0000	0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126	0.0000	2,555.6462
2022	1.6992	15.5364	16.3276	0.0268	0.0000	0.8057	0.8057	0.0000	0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085	0.0000	2,556.5286
2023	1.5661	14.3126	16.2093	0.0268	0.0000	0.6967	0.6967	0.0000	0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044	0.0000	2,557.3191
2024	1.4653	13.3774	16.1332	0.0268	0.0000	0.6106	0.6106	0.0000	0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009	0.0000	2,557.7349
Total	**18.6177**	**169.3992**	**147.9835**	**0.2370**	**0.3914**	**9.7491**	**9.9448**	**0.1038**	**9.1457**	**9.1976**	**0.0000**	**22,842.0061**	**22,842.0061**	**5.6044**	**0.0000**	**22,959.6984**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Total	**588.1308**	**245.3138**	**1,923.1355**	**5.0350**	**251.2667**	**126.7866**	**378.0532**	**67.2149**	**126.3703**	**193.5853**	**14,743.5296**	**316,668.2746**	**331,411.8041**	**53.5837**	**1.2009**	**332,909.3385**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Total	**588.1308**	**245.3138**	**1,923.1355**	**5.0350**	**251.2667**	**126.7866**	**378.0532**	**67.2149**	**126.3703**	**193.5853**	**14,743.5296**	**316,668.2746**	**331,411.8041**	**53.5837**	**1.2009**	**332,909.3385**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Utility Installation	Trenching	9/19/2016	5/26/2017	5	180	
2	Building Construction	Building Construction	6/1/2017	12/31/2024	5	1979	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Utility Installation	Excavators	2	8.00	157	0.38
Utility Installation	Other Material Handling Equipment	1	6.00	196	0.40
Utility Installation	Tractors/Loaders/Backhoes	2	8.00	75	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Utility Installation	5	13.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Utility Installation - 2016

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	1.6923	19.0106	12.0797	0.0201		1.0061	1.0061		0.9256	0.9256		2,090.6883	2,090.6883	0.6306		2,103.9314
Total	**1.6923**	**19.0106**	**12.0797**	**0.0201**		**1.0061**	**1.0061**		**0.9256**	**0.9256**		**2,090.6883**	**2,090.6883**	**0.6306**		**2,103.9314**

3.2 Utility Installation - 2016

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	0.0678	0.1064	1.1055	2.3900e-003	0.1957	1.8100e-003	0.1975	0.0519	1.6700e-003	0.0536		202.0589	202.0589	0.0116		202.3015
Total	**0.0678**	**0.1064**	**1.1055**	**2.3900e-003**	**0.1957**	**1.8100e-003**	**0.1975**	**0.0519**	**1.6700e-003**	**0.0536**		**202.0589**	**202.0589**	**0.0116**		**202.3015**

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	1.6923	19.0106	12.0797	0.0201		1.0061	1.0061		0.9256	0.9256	0.0000	2,090.6883	2,090.6883	0.6306		2,103.9314
Total	**1.6923**	**19.0106**	**12.0797**	**0.0201**		**1.0061**	**1.0061**		**0.9256**	**0.9256**	**0.0000**	**2,090.6883**	**2,090.6883**	**0.6306**		**2,103.9314**

3.2 Utility Installation - 2016

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	0.0678	0.1064	1.1055	2.3900e-003	0.1957	1.8100e-003	0.1975	0.0519	1.6700e-003	0.0536		202.0589	202.0589	0.0116		202.3015
Total	**0.0678**	**0.1064**	**1.1055**	**2.3900e-003**	**0.1957**	**1.8100e-003**	**0.1975**	**0.0519**	**1.6700e-003**	**0.0536**		**202.0589**	**202.0589**	**0.0116**		**202.3015**

3.2 Utility Installation - 2017

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	1.5647	17.3716	11.9013	0.0201		0.9061	0.9061		0.8336	0.8336		2,057.3912	2,057.3912	0.6304		2,070.6292
Total	**1.5647**	**17.3716**	**11.9013**	**0.0201**		**0.9061**	**0.9061**		**0.8336**	**0.8336**		**2,057.3912**	**2,057.3912**	**0.6304**		**2,070.6292**

3.2 Utility Installation - 2017

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	0.0604	0.0963	0.9974	2.3900e-003	0.1957	1.7400e-003	0.1974	0.0519	1.6000e-003	0.0535		194.4815	194.4815	0.0107		194.7059
Total	**0.0604**	**0.0963**	**0.9974**	**2.3900e-003**	**0.1957**	**1.7400e-003**	**0.1974**	**0.0519**	**1.6000e-003**	**0.0535**		**194.4815**	**194.4815**	**0.0107**		**194.7059**

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	1.5647	17.3716	11.9013	0.0201		0.9061	0.9061		0.8336	0.8336	0.0000	2,057.3912	2,057.3912	0.6304		2,070.6292
Total	**1.5647**	**17.3716**	**11.9013**	**0.0201**		**0.9061**	**0.9061**		**0.8336**	**0.8336**	**0.0000**	**2,057.3912**	**2,057.3912**	**0.6304**		**2,070.6292**

3.2 Utility Installation - 2017

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	0.0604	0.0963	0.9974	2.3900e-003	0.1957	1.7400e-003	0.1974	0.0519	1.6000e-003	0.0535		194.4815	194.4815	0.0107		194.7059
Total	**0.0604**	**0.0963**	**0.9974**	**2.3900e-003**	**0.1957**	**1.7400e-003**	**0.1974**	**0.0519**	**1.6000e-003**	**0.0535**		**194.4815**	**194.4815**	**0.0107**		**194.7059**

3.3 Building Construction - 2017

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.3 Building Construction - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.3 Building Construction - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

3.3 Building Construction - 2018

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

3.3 Building Construction - 2018

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.3 Building Construction - 2019

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.3 Building Construction - 2019

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

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

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

3.3 Building Construction - 2020

Mitigated Construction Off-Site

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

3.3 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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

3.3 Building Construction - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

3.3 Building Construction - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

3.3 Building Construction - 2022

Unmitigated Construction Off-Site

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

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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

3.3 Building Construction - 2022

Mitigated Construction Off-Site

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

3.3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**		**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

3.3 Building Construction - 2023

Unmitigated Construction Off-Site

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

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	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**	**0.0000**	**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

3.3 Building Construction - 2023

Mitigated Construction Off-Site

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

3.3 Building Construction - 2024

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**		**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

3.3 Building Construction - 2024

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**	**0.0000**	**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

3.3 Building Construction - 2024

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Unmitigated	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
NaturalGas Unmitigated	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461

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					
Condo/Townhouse	27628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21115.7	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13026.2	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	128.836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1304.11	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27678.1	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	69.863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	27.628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21.1157	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13.0262	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	0.128836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1.30411	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27.6781	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	0.069863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Unmitigated	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Utility Installation & Building Construction

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only construction, no need to factor in RPS

Land Use - Client

Construction Phase - Based on Client provided data

Off-road Equipment -

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Trips and VMT - From yearly analysis

On-road Fugitive Dust - Offroad equipment modeled as vendor trips is assumed to operate on 100% unpaved area

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstructionPhase	NumDays	4,650.00	152.00
tblConstructionPhase	NumDays	4,650.00	261.00
tblConstructionPhase	NumDays	4,650.00	261.00
tblConstructionPhase	NumDays	4,650.00	262.00
tblConstructionPhase	NumDays	4,650.00	261.00
tblConstructionPhase	NumDays	4,650.00	260.00

tblConstructionPhase	NumDays	4,650.00	260.00
tblConstructionPhase	NumDays	4,650.00	262.00
tblConstructionPhase	PhaseEndDate	12/29/2017	12/31/2017
tblConstructionPhase	PhaseStartDate	12/31/2022	1/1/2023
tblConstructionPhase	PhaseStartDate	12/30/2023	1/1/2024
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	419.00	34.00
tblTripsAndVMT	VendorTripNumber	419.00	34.00
tblTripsAndVMT	VendorTripNumber	419.00	110.00
tblTripsAndVMT	VendorTripNumber	419.00	222.00
tblTripsAndVMT	VendorTripNumber	419.00	26.00
tblTripsAndVMT	VendorTripNumber	419.00	10.00
tblTripsAndVMT	VendorTripNumber	419.00	6.00
tblTripsAndVMT	VendorTripNumber	419.00	11.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	194.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	194.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	385.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	651.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	172.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	64.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	43.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	72.00

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					
2017	0.0873	0.3518	1.4575	3.3900e-003	0.2357	5.5700e-003	0.2413	0.0630	5.1300e-003	0.0681	0.0000	260.7174	260.7174	0.0114	0.0000	260.9569
2018	0.1354	0.5526	2.2940	5.8200e-003	0.4048	9.1000e-003	0.4138	0.1081	8.3800e-003	0.1165	0.0000	433.2546	433.2546	0.0183	0.0000	433.6378
2019	0.2902	1.4438	4.8159	0.0129	0.8422	0.0242	0.8665	0.2257	0.0223	0.2480	0.0000	948.3792	948.3792	0.0348	0.0000	949.1097
2020	0.4990	2.4910	8.2105	0.0230	1.4627	0.0438	1.5065	0.3925	0.0403	0.4328	0.0000	1,653.0307	1,653.0307	0.0568	0.0000	1,654.2239
2021	0.0949	0.3202	1.6236	5.0100e-003	0.3551	6.3000e-003	0.3614	0.0948	5.8200e-003	0.1006	0.0000	341.5850	341.5850	0.0137	0.0000	341.8730
2022	0.0338	0.1112	0.5736	1.8700e-003	0.1319	2.3600e-003	0.1343	0.0352	2.1800e-003	0.0374	0.0000	125.8054	125.8054	4.8900e-003	0.0000	125.9080
2023	0.0207	0.0594	0.3551	1.2300e-003	0.0880	1.4800e-003	0.0894	0.0235	1.3600e-003	0.0248	0.0000	81.4653	81.4653	3.1300e-003	0.0000	81.5310
2024	0.0343	0.1025	0.5842	2.1200e-003	0.1493	2.6300e-003	0.1519	0.0399	2.4300e-003	0.0423	0.0000	139.3077	139.3077	5.1700e-003	0.0000	139.4162
Total	**1.1956**	**5.4324**	**19.9145**	**0.0553**	**3.6697**	**0.0954**	**3.7651**	**0.9825**	**0.0880**	**1.0704**	**0.0000**	**3,983.5452**	**3,983.5452**	**0.1482**	**0.0000**	**3,986.6566**

2.1 Overall Construction

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					
2017	0.0873	0.3518	1.4575	3.3900e-003	0.2357	5.5700e-003	0.2413	0.0630	5.1300e-003	0.0681	0.0000	260.7174	260.7174	0.0114	0.0000	260.9569
2018	0.1354	0.5526	2.2940	5.8200e-003	0.4048	9.1000e-003	0.4138	0.1081	8.3800e-003	0.1165	0.0000	433.2546	433.2546	0.0183	0.0000	433.6378
2019	0.2902	1.4438	4.8159	0.0129	0.8422	0.0242	0.8665	0.2257	0.0223	0.2480	0.0000	948.3792	948.3792	0.0348	0.0000	949.1097
2020	0.4990	2.4910	8.2105	0.0230	1.4627	0.0438	1.5065	0.3925	0.0403	0.4328	0.0000	1,653.0307	1,653.0307	0.0568	0.0000	1,654.2239
2021	0.0949	0.3202	1.6236	5.0100e-003	0.3551	6.3000e-003	0.3614	0.0948	5.8200e-003	0.1006	0.0000	341.5850	341.5850	0.0137	0.0000	341.8730
2022	0.0338	0.1112	0.5736	1.8700e-003	0.1319	2.3600e-003	0.1343	0.0352	2.1800e-003	0.0374	0.0000	125.8054	125.8054	4.8900e-003	0.0000	125.9080
2023	0.0207	0.0594	0.3551	1.2300e-003	0.0880	1.4800e-003	0.0894	0.0235	1.3600e-003	0.0248	0.0000	81.4653	81.4653	3.1300e-003	0.0000	81.5310
2024	0.0343	0.1025	0.5842	2.1200e-003	0.1493	2.6300e-003	0.1519	0.0399	2.4300e-003	0.0423	0.0000	139.3077	139.3077	5.1700e-003	0.0000	139.4162
Total	**1.1956**	**5.4324**	**19.9145**	**0.0553**	**3.6697**	**0.0954**	**3.7651**	**0.9825**	**0.0880**	**1.0704**	**0.0000**	**3,983.5452**	**3,983.5452**	**0.1482**	**0.0000**	**3,986.6566**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Energy	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	7,880.7783	7,880.7783	0.3138	0.0909	7,915.5473
Mobile	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Waste						0.0000	0.0000		0.0000	0.0000	385.8858	0.0000	385.8858	22.8052	0.0000	864.7950
Water						0.0000	0.0000		0.0000	0.0000	64.6196	1,194.1152	1,258.7348	6.6919	0.1681	1,451.3676
Total	**33.9677**	**37.9133**	**183.9819**	**0.6187**	**38.8288**	**2.5262**	**41.3550**	**10.4037**	**2.4636**	**12.8673**	**617.6942**	**49,466.7340**	**50,084.4281**	**31.6438**	**0.2703**	**50,832.7470**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Energy	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	7,880.7783	7,880.7783	0.3138	0.0909	7,915.5473
Mobile	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Waste						0.0000	0.0000		0.0000	0.0000	385.8858	0.0000	385.8858	22.8052	0.0000	864.7950
Water						0.0000	0.0000		0.0000	0.0000	64.6196	1,194.1152	1,258.7348	6.6907	0.1678	1,451.2645
Total	**33.9677**	**37.9133**	**183.9819**	**0.6187**	**38.8288**	**2.5262**	**41.3550**	**10.4037**	**2.4636**	**12.8673**	**617.6942**	**49,466.7340**	**50,084.4281**	**31.6426**	**0.2701**	**50,832.6439**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**	**0.09**	**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	Building Construction 2017	Building Construction	6/1/2017	12/31/2017	5	152	
2	Building Construction 2018	Building Construction	1/1/2018	12/31/2018	5	261	
3	Building Construction 2019	Building Construction	1/1/2019	12/31/2019	5	261	
4	Building Construction 2020	Building Construction	1/1/2020	12/31/2020	5	262	
5	Building Construction 2021	Building Construction	1/1/2021	12/31/2021	5	261	
6	Builidng Construction 2022	Building Construction	1/1/2022	12/30/2022	5	260	
7	Building Construction 2023	Building Construction	1/1/2023	12/29/2023	5	260	
8	Building Construction 2024	Building Construction	1/1/2024	12/31/2024	5	262	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction 2017	Cranes	0	7.00	226	0.29
Building Construction 2018	Cranes	0	7.00	226	0.29
Building Construction 2019	Cranes	0	7.00	226	0.29
Building Construction 2020	Cranes	0	7.00	226	0.29
Building Construction 2021	Cranes	0	7.00	226	0.29
Builidng Construction 2022	Cranes	0	7.00	226	0.29
Building Construction 2023	Cranes	0	7.00	226	0.29
Building Construction 2024	Cranes	0	7.00	226	0.29

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
Building Construction 2017	0	194.00	34.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2018	0	194.00	34.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2019	0	385.00	110.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2020	0	651.00	222.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2021	0	172.00	26.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Builidng Construction 2022	0	64.00	10.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2023	0	43.00	6.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2024	0	72.00	11.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction 2017 - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Worker	0.0650	0.1122	1.1585	2.7500e-003	0.2176	1.9700e-003	0.2195	0.0578	1.8200e-003	0.0596	0.0000	203.3317	203.3317	0.0110	0.0000	203.5626
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	0.0223	0.2396	0.2990	6.4000e-004	0.0181	3.6000e-003	0.0217	5.1700e-003	3.3100e-003	8.4900e-003	0.0000	57.3856	57.3856	4.1000e-004	0.0000	57.3943
Total	**0.0873**	**0.3518**	**1.4575**	**3.3900e-003**	**0.2357**	**5.5700e-003**	**0.2413**	**0.0630**	**5.1300e-003**	**0.0681**	**0.0000**	**260.7174**	**260.7174**	**0.0114**	**0.0000**	**260.9569**

3.2 Building Construction 2017 - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	0.0223	0.2396	0.2990	6.4000e-004	0.0181	3.6000e-003	0.0217	5.1700e-003	3.3100e-003	8.4900e-003	0.0000	57.3856	57.3856	4.1000e-004	0.0000	57.3943
Worker	0.0650	0.1122	1.1585	2.7500e-003	0.2176	1.9700e-003	0.2195	0.0578	1.8200e-003	0.0596	0.0000	203.3317	203.3317	0.0110	0.0000	203.5626
Total	**0.0873**	**0.3518**	**1.4575**	**3.3900e-003**	**0.2357**	**5.5700e-003**	**0.2413**	**0.0630**	**5.1300e-003**	**0.0681**	**0.0000**	**260.7174**	**260.7174**	**0.0114**	**0.0000**	**260.9569**

3.3 Building Construction 2018 - 2018

Unmitigated Construction On-Site

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

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	0.0360	0.3777	0.4926	1.1000e-003	0.0312	5.8200e-003	0.0370	8.8900e-003	5.3600e-003	0.0142	0.0000	96.9091	96.9091	7.0000e-004	0.0000	96.9239
Worker	0.0993	0.1749	1.8015	4.7200e-003	0.3736	3.2700e-003	0.3769	0.0992	3.0300e-003	0.1022	0.0000	336.3455	336.3455	0.0175	0.0000	336.7139
Total	**0.1354**	**0.5526**	**2.2940**	**5.8200e-003**	**0.4048**	**9.0900e-003**	**0.4138**	**0.1081**	**8.3900e-003**	**0.1165**	**0.0000**	**433.2546**	**433.2546**	**0.0182**	**0.0000**	**433.6378**

3.3 Building Construction 2018 - 2018

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	0.0360	0.3777	0.4926	1.1000e-003	0.0312	5.8200e-003	0.0370	8.8900e-003	5.3600e-003	0.0142	0.0000	96.9091	96.9091	7.0000e-004	0.0000	96.9239
Worker	0.0993	0.1749	1.8015	4.7200e-003	0.3736	3.2700e-003	0.3769	0.0992	3.0300e-003	0.1022	0.0000	336.3455	336.3455	0.0175	0.0000	336.7139
Total	**0.1354**	**0.5526**	**2.2940**	**5.8200e-003**	**0.4048**	**9.0900e-003**	**0.4138**	**0.1081**	**8.3900e-003**	**0.1165**	**0.0000**	**433.2546**	**433.2546**	**0.0182**	**0.0000**	**433.6378**

3.4 Building Construction 2019 - 2019

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.1105	1.1254	1.5401	3.5400e-003	0.1008	0.0179	0.1187	0.0288	0.0165	0.0452	0.0000	307.0823	307.0823	2.2300e-003	0.0000	307.1291
Worker	0.1797	0.3184	3.2758	9.3400e-003	0.7414	6.3200e-003	0.7477	0.1969	5.8600e-003	0.2028	0.0000	641.2970	641.2970	0.0326	0.0000	641.9806
Total	**0.2903**	**1.4438**	**4.8159**	**0.0129**	**0.8422**	**0.0242**	**0.8665**	**0.2257**	**0.0223**	**0.2480**	**0.0000**	**948.3792**	**948.3792**	**0.0348**	**0.0000**	**949.1097**

3.4 Building Construction 2019 - 2019

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	0.1105	1.1254	1.5401	3.5400e-003	0.1008	0.0179	0.1187	0.0288	0.0165	0.0452	0.0000	307.0823	307.0823	2.2300e-003	0.0000	307.1291
Worker	0.1797	0.3184	3.2758	9.3400e-003	0.7414	6.3200e-003	0.7477	0.1969	5.8600e-003	0.2028	0.0000	641.2970	641.2970	0.0326	0.0000	641.9806
Total	**0.2903**	**1.4438**	**4.8159**	**0.0129**	**0.8422**	**0.0242**	**0.8665**	**0.2257**	**0.0223**	**0.2480**	**0.0000**	**948.3792**	**948.3792**	**0.0348**	**0.0000**	**949.1097**

3.5 Building Construction 2020 - 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.2140	1.9897	3.0330	7.1700e-003	0.2043	0.0332	0.2375	0.0583	0.0305	0.0888	0.0000	608.2542	608.2542	4.4200e-003	0.0000	608.3469
Worker	0.2850	0.5012	5.1775	0.0159	1.2584	0.0106	1.2691	0.3342	9.8400e-003	0.3440	0.0000	1,044.7765	1,044.7765	0.0524	0.0000	1,045.8770
Total	**0.4990**	**2.4910**	**8.2105**	**0.0230**	**1.4627**	**0.0438**	**1.5065**	**0.3925**	**0.0403**	**0.4328**	**0.0000**	**1,653.0307**	**1,653.0307**	**0.0568**	**0.0000**	**1,654.2239**

3.5 Building Construction 2020 - 2020

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	0.2140	1.9897	3.0330	7.1700e-003	0.2043	0.0332	0.2375	0.0583	0.0305	0.0888	0.0000	608.2542	608.2542	4.4200e-003	0.0000	608.3469
Worker	0.2850	0.5012	5.1775	0.0159	1.2584	0.0106	1.2691	0.3342	9.8400e-003	0.3440	0.0000	1,044.7765	1,044.7765	0.0524	0.0000	1,045.8770
Total	**0.4990**	**2.4910**	**8.2105**	**0.0230**	**1.4627**	**0.0438**	**1.5065**	**0.3925**	**0.0403**	**0.4328**	**0.0000**	**1,653.0307**	**1,653.0307**	**0.0568**	**0.0000**	**1,654.2239**

3.6 Building Construction 2021 - 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0241	0.1970	0.3445	8.4000e-004	0.0238	3.5200e-003	0.0274	6.8000e-003	3.2400e-003	0.0100	0.0000	70.9105	70.9105	5.2000e-004	0.0000	70.9213
Worker	0.0708	0.1232	1.2791	4.1800e-003	0.3312	2.7800e-003	0.3340	0.0880	2.5800e-003	0.0905	0.0000	270.6745	270.6745	0.0132	0.0000	270.9517
Total	**0.0949**	**0.3202**	**1.6236**	**5.0200e-003**	**0.3551**	**6.3000e-003**	**0.3614**	**0.0948**	**5.8200e-003**	**0.1006**	**0.0000**	**341.5850**	**341.5850**	**0.0137**	**0.0000**	**341.8730**

3.6 Building Construction 2021 - 2021

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	0.0241	0.1970	0.3445	8.4000e-004	0.0238	3.5200e-003	0.0274	6.8000e-003	3.2400e-003	0.0100	0.0000	70.9105	70.9105	5.2000e-004	0.0000	70.9213
Worker	0.0708	0.1232	1.2791	4.1800e-003	0.3312	2.7800e-003	0.3340	0.0880	2.5800e-003	0.0905	0.0000	270.6745	270.6745	0.0132	0.0000	270.9517
Total	**0.0949**	**0.3202**	**1.6236**	**5.0200e-003**	**0.3551**	**6.3000e-003**	**0.3614**	**0.0948**	**5.8200e-003**	**0.1006**	**0.0000**	**341.5850**	**341.5850**	**0.0137**	**0.0000**	**341.8730**

3.7 Builidng Construction 2022 - 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	9.0400e-003	0.0685	0.1286	3.2000e-004	9.1300e-003	1.3300e-003	0.0105	2.6000e-003	1.2300e-003	3.8300e-003	0.0000	27.1464	27.1464	2.0000e-004	0.0000	27.1506
Worker	0.0248	0.0428	0.4451	1.5500e-003	0.1228	1.0300e-003	0.1238	0.0326	9.5000e-004	0.0336	0.0000	98.6590	98.6590	4.6800e-003	0.0000	98.7574
Total	**0.0338**	**0.1112**	**0.5736**	**1.8700e-003**	**0.1319**	**2.3600e-003**	**0.1343**	**0.0352**	**2.1800e-003**	**0.0374**	**0.0000**	**125.8054**	**125.8054**	**4.8800e-003**	**0.0000**	**125.9080**

3.7 Builidng Construction 2022 - 2022

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	9.0400e-003	0.0685	0.1286	3.2000e-004	9.1300e-003	1.3300e-003	0.0105	2.6000e-003	1.2300e-003	3.8300e-003	0.0000	27.1464	27.1464	2.0000e-004	0.0000	27.1506
Worker	0.0248	0.0428	0.4451	1.5500e-003	0.1228	1.0300e-003	0.1238	0.0326	9.5000e-004	0.0336	0.0000	98.6590	98.6590	4.6800e-003	0.0000	98.7574
Total	**0.0338**	**0.1112**	**0.5736**	**1.8700e-003**	**0.1319**	**2.3600e-003**	**0.1343**	**0.0352**	**2.1800e-003**	**0.0374**	**0.0000**	**125.8054**	**125.8054**	**4.8800e-003**	**0.0000**	**125.9080**

3.8 Building Construction 2023 - 2023

Unmitigated Construction On-Site

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

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	5.0100e-003	0.0324	0.0741	1.9000e-004	5.4800e-003	7.9000e-004	6.2700e-003	1.5600e-003	7.3000e-004	2.2900e-003	0.0000	16.2102	16.2102	1.1000e-004	0.0000	16.2125
Worker	0.0157	0.0270	0.2810	1.0400e-003	0.0825	6.9000e-004	0.0832	0.0219	6.4000e-004	0.0225	0.0000	65.2550	65.2550	3.0200e-003	0.0000	65.3185
Total	**0.0207**	**0.0594**	**0.3551**	**1.2300e-003**	**0.0880**	**1.4800e-003**	**0.0894**	**0.0235**	**1.3700e-003**	**0.0248**	**0.0000**	**81.4653**	**81.4653**	**3.1300e-003**	**0.0000**	**81.5310**

3.8 Building Construction 2023 - 2023

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	5.0100e-003	0.0324	0.0741	1.9000e-004	5.4800e-003	7.9000e-004	6.2700e-003	1.5600e-003	7.3000e-004	2.2900e-003	0.0000	16.2102	16.2102	1.1000e-004	0.0000	16.2125
Worker	0.0157	0.0270	0.2810	1.0400e-003	0.0825	6.9000e-004	0.0832	0.0219	6.4000e-004	0.0225	0.0000	65.2550	65.2550	3.0200e-003	0.0000	65.3185
Total	**0.0207**	**0.0594**	**0.3551**	**1.2300e-003**	**0.0880**	**1.4800e-003**	**0.0894**	**0.0235**	**1.3700e-003**	**0.0248**	**0.0000**	**81.4653**	**81.4653**	**3.1300e-003**	**0.0000**	**81.5310**

3.9 Building Construction 2024 - 2024

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	9.1100e-003	0.0595	0.1340	3.5000e-004	0.0101	1.4600e-003	0.0116	2.8900e-003	1.3500e-003	4.2300e-003	0.0000	30.0140	30.0140	2.0000e-004	0.0000	30.0182
Worker	0.0252	0.0430	0.4503	1.7700e-003	0.1392	1.1700e-003	0.1404	0.0370	1.0800e-003	0.0380	0.0000	109.2937	109.2937	4.9700e-003	0.0000	109.3980
Total	**0.0343**	**0.1025**	**0.5842**	**2.1200e-003**	**0.1493**	**2.6300e-003**	**0.1519**	**0.0399**	**2.4300e-003**	**0.0423**	**0.0000**	**139.3077**	**139.3077**	**5.1700e-003**	**0.0000**	**139.4162**

3.9 Building Construction 2024 - 2024

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	9.1100e-003	0.0595	0.1340	3.5000e-004	0.0101	1.4600e-003	0.0116	2.8900e-003	1.3500e-003	4.2300e-003	0.0000	30.0140	30.0140	2.0000e-004	0.0000	30.0182
Worker	0.0252	0.0430	0.4503	1.7700e-003	0.1392	1.1700e-003	0.1404	0.0370	1.0800e-003	0.0380	0.0000	109.2937	109.2937	4.9700e-003	0.0000	109.3980
Total	**0.0343**	**0.1025**	**0.5842**	**2.1200e-003**	**0.1493**	**2.6300e-003**	**0.1519**	**0.0399**	**2.4300e-003**	**0.0423**	**0.0000**	**139.3077**	**139.3077**	**5.1700e-003**	**0.0000**	**139.4162**

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	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Unmitigated	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

4.4 Fleet Mix

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	6,072.8188	6,072.8188	0.2792	0.0578	6,096.5848
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,072.8188	6,072.8188	0.2792	0.0578	6,096.5848
NaturalGas Mitigated	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	1,807.9595	1,807.9595	0.0347	0.0332	1,818.9625
NaturalGas Unmitigated	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	1,807.9595	1,807.9595	0.0347	0.0332	1,818.9625

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
Condo/Townhouse	1.00842e+007	0.0544	0.4647	0.1977	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1324	538.1324	0.0103	9.8700e-003	541.4074
Condo/Townhouse High Rise	7.70723e+006	0.0416	0.3551	0.1511	2.2700e-003		0.0287	0.0287		0.0287	0.0287	0.0000	411.2869	411.2869	7.8800e-003	7.5400e-003	413.7900
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	4.75455e+006	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	253.7209	253.7209	4.8600e-003	4.6500e-003	255.2650
Health Club	47025	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5094	2.5094	5.0000e-005	5.0000e-005	2.5247
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
Regional Shopping Center	476000	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.4012	25.4012	4.9000e-004	4.7000e-004	25.5558
Single Family Housing	1.01025e+007	0.0545	0.4655	0.1981	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	539.1089	539.1089	0.0103	9.8800e-003	542.3898
Strip Mall	25500	1.4000e-004	1.2500e-003	1.0500e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3608	1.3608	3.0000e-005	2.0000e-005	1.3691
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1827**	**1.5788**	**0.7934**	**9.9700e-003**		**0.1262**	**0.1262**		**0.1262**	**0.1262**	**0.0000**	**1,807.9595**	**1,807.9595**	**0.0347**	**0.0332**	**1,818.9625**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	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
Condo/Townhouse	1.00842e+007	0.0544	0.4647	0.1977	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1324	538.1324	0.0103	9.8700e-003	541.4074
Condo/Townhouse High Rise	7.70723e+006	0.0416	0.3551	0.1511	2.2700e-003		0.0287	0.0287		0.0287	0.0287	0.0000	411.2869	411.2869	7.8800e-003	7.5400e-003	413.7900
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	4.75455e+006	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	253.7209	253.7209	4.8600e-003	4.6500e-003	255.2650
Health Club	47025	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5094	2.5094	5.0000e-005	5.0000e-005	2.5247
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
Regional Shopping Center	476000	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.4012	25.4012	4.9000e-004	4.7000e-004	25.5558
Single Family Housing	1.01025e+007	0.0545	0.4655	0.1981	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	539.1089	539.1089	0.0103	9.8800e-003	542.3898
Strip Mall	25500	1.4000e-004	1.2500e-003	1.0500e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3608	1.3608	3.0000e-005	2.0000e-005	1.3691
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1827**	**1.5788**	**0.7934**	**9.9700e-003**		**0.1262**	**0.1262**		**0.1262**	**0.1262**	**0.0000**	**1,807.9595**	**1,807.9595**	**0.0347**	**0.0332**	**1,818.9625**

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
Condo/Townhouse	3.07852e+006	880.9694	0.0405	8.3800e-003	884.4170
Condo/Townhouse High Rise	2.35287e+006	673.3123	0.0310	6.4000e-003	675.9473
Elementary School	420114	120.2226	5.5300e-003	1.1400e-003	120.6931
General Office Building	6.32055e+006	1,808.7321	0.0831	0.0172	1,815.8107
Health Club	30125	8.6208	4.0000e-004	8.0000e-005	8.6545
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.2476e+006	1,215.5225	0.0559	0.0116	1,220.2795
Single Family Housing	2.47292e+006	707.6679	0.0325	6.7300e-003	710.4374
Strip Mall	227550	65.1173	2.9900e-003	6.2000e-004	65.3721
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,072.8188**	**0.2792**	**0.0578**	**6,096.5848**

5.3 Energy by Land Use - Electricity

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
Condo/Townhouse	3.07852e+006	880.9694	0.0405	8.3800e-003	884.4170
Condo/Townhouse High Rise	2.35287e+006	673.3123	0.0310	6.4000e-003	675.9473
Elementary School	420114	120.2226	5.5300e-003	1.1400e-003	120.6931
General Office Building	6.32055e+006	1,808.7321	0.0831	0.0172	1,815.8107
Health Club	30125	8.6208	4.0000e-004	8.0000e-005	8.6545
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.2476e+006	1,215.5225	0.0559	0.0116	1,220.2795
Single Family Housing	2.47292e+006	707.6679	0.0325	6.7300e-003	710.4374
Strip Mall	227550	65.1173	2.9900e-003	6.2000e-004	65.3721
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,072.8188**	**0.2792**	**0.0578**	**6,096.5848**

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	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Unmitigated	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1556	0.1308	9.8895	0.0157		1.5029	1.5029		1.5027	1.5027	167.1888	321.2795	488.4683	0.4986	0.0114	502.4564
Landscaping	0.4918	0.1873	16.2678	8.6000e-004		0.0901	0.0901		0.0901	0.0901	0.0000	26.5977	26.5977	0.0257	0.0000	27.1365
Total	**20.5620**	**0.3181**	**26.1573**	**0.0166**		**1.5930**	**1.5930**		**1.5928**	**1.5928**	**167.1888**	**347.8772**	**515.0660**	**0.5243**	**0.0114**	**529.5929**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1556	0.1308	9.8895	0.0157		1.5029	1.5029		1.5027	1.5027	167.1888	321.2795	488.4683	0.4986	0.0114	502.4564
Landscaping	0.4918	0.1873	16.2678	8.6000e-004		0.0901	0.0901		0.0901	0.0901	0.0000	26.5977	26.5977	0.0257	0.0000	27.1365
Total	**20.5620**	**0.3181**	**26.1573**	**0.0166**		**1.5930**	**1.5930**		**1.5928**	**1.5928**	**167.1888**	**347.8772**	**515.0660**	**0.5243**	**0.0114**	**529.5929**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,258.7348	6.6907	0.1678	1,451.2645
Unmitigated	1,258.7348	6.6919	0.1681	1,451.3676

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.6723	21.2133	9.8000e-004	2.0000e-004	21.2963
Condo/Townhouse	45.6078 / 28.7528	275.8262	1.4982	0.0376	318.9359
Condo/Townhouse High Rise	34.8574 / 21.9753	210.8100	1.1450	0.0287	243.7582
Elementary School	1.81818 / 4.67532	22.2160	0.0602	1.6000e-003	23.9785
General Office Building	77.3142 / 47.3861	463.2700	2.5395	0.0637	536.3326
Health Club	0.147858 / 0.0906226	0.8860	4.8600e-003	1.2000e-004	1.0257
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	20.7403 / 12.7118	124.2768	0.6812	0.0171	143.8766
Single Family Housing	22.0872 / 13.9245	133.5787	0.7255	0.0182	154.4561
Strip Mall	1.11109 / 0.680989	6.6577	0.0365	9.1000e-004	7.7077
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,258.7348**	**6.6919**	**0.1681**	**1,451.3676**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.6723	21.2133	9.8000e-004	2.0000e-004	21.2963
Condo/Townhouse	45.6078 / 28.7528	275.8262	1.4979	0.0375	318.9128
Condo/Townhouse High Rise	34.8574 / 21.9753	210.8100	1.1448	0.0287	243.7405
Elementary School	1.81818 / 4.67532	22.2160	0.0602	1.6000e-003	23.9776
General Office Building	77.3142 / 47.3861	463.2700	2.5390	0.0636	536.2935
Health Club	0.147858 / 0.0906226	0.8860	4.8600e-003	1.2000e-004	1.0256
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	20.7403 / 12.7118	124.2768	0.6811	0.0171	143.8661
Single Family Housing	22.0872 / 13.9245	133.5787	0.7254	0.0182	154.4449
Strip Mall	1.11109 / 0.680989	6.6577	0.0365	9.1000e-004	7.7071
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,258.7348**	**6.6907**	**0.1678**	**1,451.2645**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	385.8858	22.8052	0.0000	864.7950
Mitigated	385.8858	22.8052	0.0000	864.7950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.48	0.0974	5.7600e-003	0.0000	0.2184
Condo/Townhouse	322	65.3631	3.8629	0.0000	146.4829
Condo/Townhouse High Rise	246.1	49.9561	2.9523	0.0000	111.9548
Elementary School	136.88	27.7854	1.6421	0.0000	62.2689
General Office Building	404.55	82.1200	4.8532	0.0000	184.0362
Health Club	14.25	2.8926	0.1710	0.0000	6.4826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	294	59.6793	3.5270	0.0000	133.7453
Single Family Housing	466.99	94.7948	5.6022	0.0000	212.4411
Strip Mall	15.75	3.1971	0.1889	0.0000	7.1649
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**385.8858**	**22.8052**	**0.0000**	**864.7950**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.48	0.0974	5.7600e-003	0.0000	0.2184
Condo/Townhouse	322	65.3631	3.8629	0.0000	146.4829
Condo/Townhouse High Rise	246.1	49.9561	2.9523	0.0000	111.9548
Elementary School	136.88	27.7854	1.6421	0.0000	62.2689
General Office Building	404.55	82.1200	4.8532	0.0000	184.0362
Health Club	14.25	2.8926	0.1710	0.0000	6.4826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	294	59.6793	3.5270	0.0000	133.7453
Single Family Housing	466.99	94.7948	5.6022	0.0000	212.4411
Strip Mall	15.75	3.1971	0.1889	0.0000	7.1649
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**385.8858**	**22.8052**	**0.0000**	**864.7950**

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Utility Installation & Building Construction

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only construction, no need to factor in RPS

Land Use - Client

Construction Phase - Based on Client provided data

Off-road Equipment -

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Trips and VMT - From yearly analysis

On-road Fugitive Dust - Offroad equipment modeled as vendor trips is assumed to operate on 100% unpaved area

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstructionPhase	NumDays	4,650.00	152.00
tblConstructionPhase	NumDays	4,650.00	261.00
tblConstructionPhase	NumDays	4,650.00	261.00
tblConstructionPhase	NumDays	4,650.00	262.00
tblConstructionPhase	NumDays	4,650.00	261.00
tblConstructionPhase	NumDays	4,650.00	260.00

tblConstructionPhase	NumDays	4,650.00	260.00
tblConstructionPhase	NumDays	4,650.00	262.00
tblConstructionPhase	PhaseEndDate	12/29/2017	12/31/2017
tblConstructionPhase	PhaseStartDate	12/31/2022	1/1/2023
tblConstructionPhase	PhaseStartDate	12/30/2023	1/1/2024
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	419.00	34.00
tblTripsAndVMT	VendorTripNumber	419.00	34.00
tblTripsAndVMT	VendorTripNumber	419.00	110.00
tblTripsAndVMT	VendorTripNumber	419.00	222.00
tblTripsAndVMT	VendorTripNumber	419.00	26.00
tblTripsAndVMT	VendorTripNumber	419.00	10.00
tblTripsAndVMT	VendorTripNumber	419.00	6.00
tblTripsAndVMT	VendorTripNumber	419.00	11.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	194.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	194.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	385.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	651.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	172.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	64.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	43.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	72.00

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					
2017	1.1533	4.3080	19.4129	0.0462	3.1629	0.0731	3.2360	0.8434	0.0673	0.9107	0.0000	3,910.6090	3,910.6090	0.1654	0.0000	3,914.0820
2018	1.0445	3.9429	17.7959	0.0462	3.1629	0.0695	3.2324	0.8434	0.0641	0.9075	0.0000	3,784.2601	3,784.2601	0.1541	0.0000	3,787.4957
2019	2.2227	10.3899	36.5806	0.1019	6.5807	0.1852	6.7659	1.7603	0.1707	1.9310	0.0000	8,251.9575	8,251.9575	0.2936	0.0000	8,258.1229
2020	3.7951	17.8966	61.4653	0.1811	11.3848	0.3333	11.7180	3.0497	0.3072	3.3569	0.0000	14,304.3143	14,304.3143	0.4776	0.0000	14,314.3447
2021	0.7361	2.2742	12.6315	0.0398	2.7747	0.0482	2.8229	0.7394	0.0445	0.7839	0.0000	2,985.8246	2,985.8246	0.1158	0.0000	2,988.2566
2022	0.2632	0.7931	4.4737	0.0149	1.0348	0.0181	1.0529	0.2758	0.0167	0.2925	0.0000	1,103.6043	1,103.6043	0.0414	0.0000	1,104.4739
2023	0.1616	0.4215	2.7800	9.8300e-003	0.6901	0.0113	0.7014	0.1838	0.0105	0.1943	0.0000	715.1406	715.1406	0.0265	0.0000	715.6977
2024	0.2650	0.7248	4.5238	0.0168	1.1623	0.0200	1.1824	0.3098	0.0185	0.3282	0.0000	1,212.9086	1,212.9086	0.0435	0.0000	1,213.8217
Total	**9.6415**	**40.7510**	**159.6637**	**0.4568**	**29.9532**	**0.7588**	**30.7120**	**8.0055**	**0.6995**	**8.7050**	**0.0000**	**36,268.6189**	**36,268.6189**	**1.3179**	**0.0000**	**36,296.2952**

2.1 Overall Construction (Maximum Daily Emission)

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					
2017	1.1533	4.3080	19.4129	0.0462	3.1629	0.0731	3.2360	0.8434	0.0673	0.9107	0.0000	3,910.6090	3,910.6090	0.1654	0.0000	3,914.0820
2018	1.0445	3.9429	17.7959	0.0462	3.1629	0.0695	3.2324	0.8434	0.0641	0.9075	0.0000	3,784.2601	3,784.2601	0.1541	0.0000	3,787.4957
2019	2.2227	10.3899	36.5806	0.1019	6.5807	0.1852	6.7659	1.7603	0.1707	1.9310	0.0000	8,251.9575	8,251.9575	0.2936	0.0000	8,258.1229
2020	3.7951	17.8966	61.4653	0.1811	11.3848	0.3333	11.7180	3.0497	0.3072	3.3569	0.0000	14,304.3143	14,304.3143	0.4776	0.0000	14,314.3447
2021	0.7361	2.2742	12.6315	0.0398	2.7747	0.0482	2.8229	0.7394	0.0445	0.7839	0.0000	2,985.8246	2,985.8246	0.1158	0.0000	2,988.2566
2022	0.2632	0.7931	4.4737	0.0149	1.0348	0.0181	1.0529	0.2758	0.0167	0.2925	0.0000	1,103.6043	1,103.6043	0.0414	0.0000	1,104.4739
2023	0.1616	0.4215	2.7800	9.8300e-003	0.6901	0.0113	0.7014	0.1838	0.0105	0.1943	0.0000	715.1406	715.1406	0.0265	0.0000	715.6977
2024	0.2650	0.7248	4.5238	0.0168	1.1623	0.0200	1.1824	0.3098	0.0185	0.3282	0.0000	1,212.9086	1,212.9086	0.0435	0.0000	1,213.8217
Total	**9.6415**	**40.7510**	**159.6637**	**0.4568**	**29.9532**	**0.7588**	**30.7120**	**8.0055**	**0.6995**	**8.7050**	**0.0000**	**36,268.6189**	**36,268.6189**	**1.3179**	**0.0000**	**36,296.2952**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Total	**584.5193**	**233.7937**	**1,922.0956**	**5.2098**	**251.2667**	**126.7729**	**378.0396**	**67.2149**	**126.3578**	**193.5727**	**14,743.5296**	**328,756.4382**	**343,499.9678**	**53.5712**	**1.2009**	**344,997.2382**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Total	**584.5193**	**233.7937**	**1,922.0956**	**5.2098**	**251.2667**	**126.7729**	**378.0396**	**67.2149**	**126.3578**	**193.5727**	**14,743.5296**	**328,756.4382**	**343,499.9678**	**53.5712**	**1.2009**	**344,997.2382**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Building Construction 2017	Building Construction	6/1/2017	12/31/2017	5	152	
2	Building Construction 2018	Building Construction	1/1/2018	12/31/2018	5	261	
3	Building Construction 2019	Building Construction	1/1/2019	12/31/2019	5	261	
4	Building Construction 2020	Building Construction	1/1/2020	12/31/2020	5	262	
5	Building Construction 2021	Building Construction	1/1/2021	12/31/2021	5	261	
6	Builidng Construction 2022	Building Construction	1/1/2022	12/30/2022	5	260	
7	Building Construction 2023	Building Construction	1/1/2023	12/29/2023	5	260	
8	Building Construction 2024	Building Construction	1/1/2024	12/31/2024	5	262	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction 2017	Cranes	0	7.00	226	0.29
Building Construction 2018	Cranes	0	7.00	226	0.29
Building Construction 2019	Cranes	0	7.00	226	0.29
Building Construction 2020	Cranes	0	7.00	226	0.29
Building Construction 2021	Cranes	0	7.00	226	0.29
Builidng Construction 2022	Cranes	0	7.00	226	0.29
Building Construction 2023	Cranes	0	7.00	226	0.29
Building Construction 2024	Cranes	0	7.00	226	0.29

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
Building Construction 2017	0	194.00	34.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2018	0	194.00	34.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2019	0	385.00	110.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2020	0	651.00	222.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2021	0	172.00	26.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Builidng Construction 2022	0	64.00	10.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2023	0	43.00	6.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2024	0	72.00	11.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction 2017 - 2017

Unmitigated Construction On-Site

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

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	0.2768	3.0127	3.3564	8.4500e-003	0.2428	0.0472	0.2900	0.0691	0.0434	0.1125		834.9015	834.9015	5.9200e-003		835.0259
Worker	0.8765	1.2954	16.0565	0.0378	2.9201	0.0259	2.9460	0.7743	0.0239	0.7982		3,075.7074	3,075.7074	0.1595		3,079.0562
Total	**1.1533**	**4.3080**	**19.4129**	**0.0462**	**3.1629**	**0.0731**	**3.2360**	**0.8434**	**0.0673**	**0.9107**		**3,910.6090**	**3,910.6090**	**0.1654**		**3,914.0820**

3.2 Building Construction 2017 - 2017

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.2768	3.0127	3.3564	8.4500e-003	0.2428	0.0472	0.2900	0.0691	0.0434	0.1125		834.9015	834.9015	5.9200e-003		835.0259
Worker	0.8765	1.2954	16.0565	0.0378	2.9201	0.0259	2.9460	0.7743	0.0239	0.7982		3,075.7074	3,075.7074	0.1595		3,079.0562
Total	**1.1533**	**4.3080**	**19.4129**	**0.0462**	**3.1629**	**0.0731**	**3.2360**	**0.8434**	**0.0673**	**0.9107**		**3,910.6090**	**3,910.6090**	**0.1654**		**3,914.0820**

3.3 Building Construction 2018 - 2018

Unmitigated Construction On-Site

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

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	0.2612	2.7669	3.2053	8.4400e-003	0.2428	0.0445	0.2873	0.0691	0.0409	0.1100		821.1121	821.1121	5.8800e-003		821.2357
Worker	0.7834	1.1761	14.5906	0.0378	2.9201	0.0251	2.9452	0.7743	0.0232	0.7975		2,963.1480	2,963.1480	0.1482		2,966.2601
Total	**1.0445**	**3.9429**	**17.7959**	**0.0462**	**3.1629**	**0.0695**	**3.2324**	**0.8434**	**0.0641**	**0.9075**		**3,784.2601**	**3,784.2601**	**0.1541**		**3,787.4957**

3.3 Building Construction 2018 - 2018

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.2612	2.7669	3.2053	8.4400e-003	0.2428	0.0445	0.2873	0.0691	0.0409	0.1100		821.1121	821.1121	5.8800e-003		821.2357
Worker	0.7834	1.1761	14.5906	0.0378	2.9201	0.0251	2.9452	0.7743	0.0232	0.7975		2,963.1480	2,963.1480	0.1482		2,966.2601
Total	**1.0445**	**3.9429**	**17.7959**	**0.0462**	**3.1629**	**0.0695**	**3.2324**	**0.8434**	**0.0641**	**0.9075**		**3,784.2601**	**3,784.2601**	**0.1541**		**3,787.4957**

3.4 Building Construction 2019 - 2019

Unmitigated Construction On-Site

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

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	0.8021	8.2492	9.9880	0.0272	0.7856	0.1368	0.9224	0.2235	0.1258	0.3494		2,601.9579	2,601.9579	0.0186		2,602.3483
Worker	1.4206	2.1407	26.5927	0.0747	5.7951	0.0485	5.8435	1.5367	0.0449	1.5816		5,649.9996	5,649.9996	0.2750		5,655.7746
Total	**2.2227**	**10.3899**	**36.5806**	**0.1019**	**6.5807**	**0.1852**	**6.7659**	**1.7603**	**0.1707**	**1.9310**		**8,251.9575**	**8,251.9575**	**0.2936**		**8,258.1229**

3.4 Building Construction 2019 - 2019

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.8021	8.2492	9.9880	0.0272	0.7856	0.1368	0.9224	0.2235	0.1258	0.3494		2,601.9579	2,601.9579	0.0186		2,602.3483
Worker	1.4206	2.1407	26.5927	0.0747	5.7951	0.0485	5.8435	1.5367	0.0449	1.5816		5,649.9996	5,649.9996	0.2750		5,655.7746
Total	**2.2227**	**10.3899**	**36.5806**	**0.1019**	**6.5807**	**0.1852**	**6.7659**	**1.7603**	**0.1707**	**1.9310**		**8,251.9575**	**8,251.9575**	**0.2936**		**8,258.1229**

3.5 Building Construction 2020 - 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	1.5486	14.5392	19.5416	0.0548	1.5858	0.2523	1.8381	0.4513	0.2321	0.6833		5,134.2058	5,134.2058	0.0367		5,134.9764
Worker	2.2464	3.3574	41.9237	0.1263	9.7990	0.0810	9.8800	2.5984	0.0751	2.6735		9,170.1085	9,170.1085	0.4409		9,179.3683
Total	**3.7951**	**17.8966**	**61.4653**	**0.1811**	**11.3848**	**0.3333**	**11.7180**	**3.0497**	**0.3072**	**3.3569**		**14,304.3143**	**14,304.3143**	**0.4776**		**14,314.3447**

3.5 Building Construction 2020 - 2020

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	1.5486	14.5392	19.5416	0.0548	1.5858	0.2523	1.8381	0.4513	0.2321	0.6833		5,134.2058	5,134.2058	0.0367		5,134.9764
Worker	2.2464	3.3574	41.9237	0.1263	9.7990	0.0810	9.8800	2.5984	0.0751	2.6735		9,170.1085	9,170.1085	0.4409		9,179.3683
Total	**3.7951**	**17.8966**	**61.4653**	**0.1811**	**11.3848**	**0.3333**	**11.7180**	**3.0497**	**0.3072**	**3.3569**		**14,304.3143**	**14,304.3143**	**0.4776**		**14,314.3447**

3.6 Building Construction 2021 - 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	0.1755	1.4456	2.2225	6.4100e-003	0.1857	0.0269	0.2126	0.0529	0.0248	0.0776		600.8422	600.8422	4.3200e-003		600.9329
Worker	0.5606	0.8286	10.4090	0.0334	2.5890	0.0213	2.6103	0.6865	0.0198	0.7063		2,384.9824	2,384.9824	0.1115		2,387.3237
Total	**0.7361**	**2.2742**	**12.6315**	**0.0398**	**2.7747**	**0.0482**	**2.8229**	**0.7394**	**0.0445**	**0.7839**		**2,985.8246**	**2,985.8246**	**0.1158**		**2,988.2566**

3.6 Building Construction 2021 - 2021

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1755	1.4456	2.2225	6.4100e-003	0.1857	0.0269	0.2126	0.0529	0.0248	0.0776		600.8422	600.8422	4.3200e-003		600.9329
Worker	0.5606	0.8286	10.4090	0.0334	2.5890	0.0213	2.6103	0.6865	0.0198	0.7063		2,384.9824	2,384.9824	0.1115		2,387.3237
Total	**0.7361**	**2.2742**	**12.6315**	**0.0398**	**2.7747**	**0.0482**	**2.8229**	**0.7394**	**0.0445**	**0.7839**		**2,985.8246**	**2,985.8246**	**0.1158**		**2,988.2566**

3.7 Builidng Construction 2022 - 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	0.0662	0.5044	0.8338	2.4600e-003	0.0714	0.0102	0.0817	0.0203	9.4200e-003	0.0298		230.9027	230.9027	1.7000e-003		230.9383
Worker	0.1970	0.2888	3.6399	0.0124	0.9633	7.8900e-003	0.9712	0.2555	7.3100e-003	0.2628		872.7017	872.7017	0.0397		873.5356
Total	**0.2632**	**0.7931**	**4.4737**	**0.0149**	**1.0348**	**0.0181**	**1.0529**	**0.2758**	**0.0167**	**0.2925**		**1,103.6043**	**1,103.6043**	**0.0414**		**1,104.4739**

3.7 Builidng Construction 2022 - 2022

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0662	0.5044	0.8338	2.4600e-003	0.0714	0.0102	0.0817	0.0203	9.4200e-003	0.0298		230.9027	230.9027	1.7000e-003		230.9383
Worker	0.1970	0.2888	3.6399	0.0124	0.9633	7.8900e-003	0.9712	0.2555	7.3100e-003	0.2628		872.7017	872.7017	0.0397		873.5356
Total	**0.2632**	**0.7931**	**4.4737**	**0.0149**	**1.0348**	**0.0181**	**1.0529**	**0.2758**	**0.0167**	**0.2925**		**1,103.6043**	**1,103.6043**	**0.0414**		**1,104.4739**

3.8 Building Construction 2023 - 2023

Unmitigated Construction On-Site

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

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	0.0367	0.2392	0.4792	1.4700e-003	0.0429	6.0600e-003	0.0489	0.0122	5.5800e-003	0.0178		137.8840	137.8840	9.1000e-004		137.9031
Worker	0.1249	0.1822	2.3009	8.3500e-003	0.6472	5.2700e-003	0.6525	0.1716	4.8900e-003	0.1765		577.2566	577.2566	0.0256		577.7946
Total	**0.1616**	**0.4215**	**2.7800**	**9.8200e-003**	**0.6901**	**0.0113**	**0.7014**	**0.1838**	**0.0105**	**0.1943**		**715.1406**	**715.1406**	**0.0265**		**715.6977**

3.8 Building Construction 2023 - 2023

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0367	0.2392	0.4792	1.4700e-003	0.0429	6.0600e-003	0.0489	0.0122	5.5800e-003	0.0178		137.8840	137.8840	9.1000e-004		137.9031
Worker	0.1249	0.1822	2.3009	8.3500e-003	0.6472	5.2700e-003	0.6525	0.1716	4.8900e-003	0.1765		577.2566	577.2566	0.0256		577.7946
Total	**0.1616**	**0.4215**	**2.7800**	**9.8200e-003**	**0.6901**	**0.0113**	**0.7014**	**0.1838**	**0.0105**	**0.1943**		**715.1406**	**715.1406**	**0.0265**		**715.6977**

3.9 Building Construction 2024 - 2024

Unmitigated Construction On-Site

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

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	0.0662	0.4362	0.8602	2.7000e-003	0.0786	0.0111	0.0897	0.0224	0.0102	0.0326		253.3474	253.3474	1.6900e-003		253.3830
Worker	0.1988	0.2886	3.6636	0.0141	1.0838	8.9000e-003	1.0927	0.2874	8.2600e-003	0.2956		959.5611	959.5611	0.0418		960.4387
Total	**0.2650**	**0.7248**	**4.5238**	**0.0168**	**1.1623**	**0.0200**	**1.1824**	**0.3098**	**0.0185**	**0.3282**		**1,212.9086**	**1,212.9086**	**0.0435**		**1,213.8217**

3.9 Building Construction 2024 - 2024

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0662	0.4362	0.8602	2.7000e-003	0.0786	0.0111	0.0897	0.0224	0.0102	0.0326		253.3474	253.3474	1.6900e-003		253.3830
Worker	0.1988	0.2886	3.6636	0.0141	1.0838	8.9000e-003	1.0927	0.2874	8.2600e-003	0.2956		959.5611	959.5611	0.0418		960.4387
Total	**0.2650**	**0.7248**	**4.5238**	**0.0168**	**1.1623**	**0.0200**	**1.1824**	**0.3098**	**0.0185**	**0.3282**		**1,212.9086**	**1,212.9086**	**0.0435**		**1,213.8217**

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	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Unmitigated	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
NaturalGas Unmitigated	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461

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
Condo/Townhouse	27628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21115.7	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13026.2	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	128.836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1304.11	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27678.1	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	69.863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	27.628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21.1157	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13.0262	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	0.128836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1.30411	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27.6781	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	0.069863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Unmitigated	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Utility Installation & Building Construction

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only construction, no need to factor in RPS

Land Use - Client

Construction Phase - Based on Client provided data

Off-road Equipment -

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Off-road Equipment - no offroad equipment in this run

Trips and VMT - From yearly analysis

On-road Fugitive Dust - Offroad equipment modeled as vendor trips is assumed to operate on 100% unpaved area

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstructionPhase	NumDays	4,650.00	152.00
tblConstructionPhase	NumDays	4,650.00	261.00
tblConstructionPhase	NumDays	4,650.00	261.00
tblConstructionPhase	NumDays	4,650.00	262.00
tblConstructionPhase	NumDays	4,650.00	261.00
tblConstructionPhase	NumDays	4,650.00	260.00

tblConstructionPhase	NumDays	4,650.00	260.00
tblConstructionPhase	NumDays	4,650.00	262.00
tblConstructionPhase	PhaseEndDate	12/29/2017	12/31/2017
tblConstructionPhase	PhaseStartDate	12/31/2022	1/1/2023
tblConstructionPhase	PhaseStartDate	12/30/2023	1/1/2024
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	419.00	34.00
tblTripsAndVMT	VendorTripNumber	419.00	34.00
tblTripsAndVMT	VendorTripNumber	419.00	110.00
tblTripsAndVMT	VendorTripNumber	419.00	222.00
tblTripsAndVMT	VendorTripNumber	419.00	26.00
tblTripsAndVMT	VendorTripNumber	419.00	10.00
tblTripsAndVMT	VendorTripNumber	419.00	6.00
tblTripsAndVMT	VendorTripNumber	419.00	11.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	194.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	194.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	385.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	651.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	172.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	64.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	43.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	72.00

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					
2017	1.2036	4.5284	18.9866	0.0440	3.1629	0.0735	3.2364	0.8434	0.0677	0.9111	0.0000	3,731.0322	3,731.0322	0.1655	0.0000	3,734.5086
2018	1.0874	4.1425	17.4073	0.0440	3.1629	0.0699	3.2328	0.8434	0.0645	0.9079	0.0000	3,610.8983	3,610.8983	0.1542	0.0000	3,614.1374
2019	2.3265	10.8315	36.8111	0.0974	6.5807	0.1864	6.7671	1.7603	0.1718	1.9320	0.0000	7,913.3103	7,913.3103	0.2941	0.0000	7,919.4871
2020	3.9810	18.6197	62.7589	0.1735	11.3848	0.3352	11.7199	3.0497	0.3089	3.3586	0.0000	13,747.2145	13,747.2145	0.4788	0.0000	13,757.2685
2021	0.7639	2.3996	12.3157	0.0379	2.7747	0.0484	2.8231	0.7394	0.0447	0.7841	0.0000	2,846.1876	2,846.1876	0.1160	0.0000	2,848.6225
2022	0.2732	0.8367	4.3721	0.0142	1.0348	0.0182	1.0530	0.2758	0.0168	0.2926	0.0000	1,052.3632	1,052.3632	0.0415	0.0000	1,053.2339
2023	0.1677	0.4461	2.7034	9.3400e-003	0.6901	0.0114	0.7015	0.1838	0.0105	0.1943	0.0000	681.3066	681.3066	0.0266	0.0000	681.8644
2024	0.2752	0.7646	4.4199	0.0160	1.1623	0.0201	1.1824	0.3098	0.0186	0.3283	0.0000	1,156.3389	1,156.3389	0.0435	0.0000	1,157.2533
Total	**10.0784**	**42.5691**	**159.7748**	**0.4363**	**29.9532**	**0.7631**	**30.7162**	**8.0055**	**0.7034**	**8.7089**	**0.0000**	**34,738.6515**	**34,738.6515**	**1.3202**	**0.0000**	**34,766.3757**

2.1 Overall Construction (Maximum Daily Emission)

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					
2017	1.2036	4.5284	18.9866	0.0440	3.1629	0.0735	3.2364	0.8434	0.0677	0.9111	0.0000	3,731.0322	3,731.0322	0.1655	0.0000	3,734.5086
2018	1.0874	4.1425	17.4073	0.0440	3.1629	0.0699	3.2328	0.8434	0.0645	0.9079	0.0000	3,610.8983	3,610.8983	0.1542	0.0000	3,614.1374
2019	2.3265	10.8315	36.8111	0.0974	6.5807	0.1864	6.7671	1.7603	0.1718	1.9320	0.0000	7,913.3103	7,913.3103	0.2941	0.0000	7,919.4871
2020	3.9810	18.6197	62.7589	0.1735	11.3848	0.3352	11.7199	3.0497	0.3089	3.3586	0.0000	13,747.2145	13,747.2145	0.4788	0.0000	13,757.2685
2021	0.7639	2.3996	12.3157	0.0379	2.7747	0.0484	2.8231	0.7394	0.0447	0.7841	0.0000	2,846.1876	2,846.1876	0.1160	0.0000	2,848.6225
2022	0.2732	0.8367	4.3721	0.0142	1.0348	0.0182	1.0530	0.2758	0.0168	0.2926	0.0000	1,052.3632	1,052.3632	0.0415	0.0000	1,053.2339
2023	0.1677	0.4461	2.7034	9.3400e-003	0.6901	0.0114	0.7015	0.1838	0.0105	0.1943	0.0000	681.3066	681.3066	0.0266	0.0000	681.8644
2024	0.2752	0.7646	4.4199	0.0160	1.1623	0.0201	1.1824	0.3098	0.0186	0.3283	0.0000	1,156.3389	1,156.3389	0.0435	0.0000	1,157.2533
Total	**10.0784**	**42.5691**	**159.7748**	**0.4363**	**29.9532**	**0.7631**	**30.7162**	**8.0055**	**0.7034**	**8.7089**	**0.0000**	**34,738.6515**	**34,738.6515**	**1.3202**	**0.0000**	**34,766.3757**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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					
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Area	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Total	**588.1308**	**245.3138**	**1,923.1355**	**5.0350**	**251.2667**	**126.7866**	**378.0532**	**67.2149**	**126.3703**	**193.5853**	**14,743.5296**	**316,668.2746**	**331,411.8041**	**53.5837**	**1.2009**	**332,909.3385**

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					
Mobile	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Area	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Total	**588.1308**	**245.3138**	**1,923.1355**	**5.0350**	**251.2667**	**126.7866**	**378.0532**	**67.2149**	**126.3703**	**193.5853**	**14,743.5296**	**316,668.2746**	**331,411.8041**	**53.5837**	**1.2009**	**332,909.3385**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Building Construction 2017	Building Construction	6/1/2017	12/31/2017	5	152	
2	Building Construction 2018	Building Construction	1/1/2018	12/31/2018	5	261	
3	Building Construction 2019	Building Construction	1/1/2019	12/31/2019	5	261	
4	Building Construction 2020	Building Construction	1/1/2020	12/31/2020	5	262	
5	Building Construction 2021	Building Construction	1/1/2021	12/31/2021	5	261	
6	Builidng Construction 2022	Building Construction	1/1/2022	12/30/2022	5	260	
7	Building Construction 2023	Building Construction	1/1/2023	12/29/2023	5	260	
8	Building Construction 2024	Building Construction	1/1/2024	12/31/2024	5	262	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction 2017	Cranes	0	7.00	226	0.29
Building Construction 2018	Cranes	0	7.00	226	0.29
Building Construction 2019	Cranes	0	7.00	226	0.29
Building Construction 2020	Cranes	0	7.00	226	0.29
Building Construction 2021	Cranes	0	7.00	226	0.29
Builidng Construction 2022	Cranes	0	7.00	226	0.29
Building Construction 2023	Cranes	0	7.00	226	0.29
Building Construction 2024	Cranes	0	7.00	226	0.29

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
Building Construction 2017	0	194.00	34.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2018	0	194.00	34.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2019	0	385.00	110.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2020	0	651.00	222.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2021	0	172.00	26.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Builidng Construction 2022	0	64.00	10.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2023	0	43.00	6.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction 2024	0	72.00	11.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction 2017 - 2017

Unmitigated Construction On-Site

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

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	0.3025	3.0916	4.1018	8.4000e-003	0.2428	0.0476	0.2904	0.0691	0.0438	0.1129		828.7704	828.7704	6.0800e-003		828.8981
Worker	0.9011	1.4368	14.8848	0.0356	2.9201	0.0259	2.9460	0.7743	0.0239	0.7982		2,902.2619	2,902.2619	0.1595		2,905.6106
Total	**1.2036**	**4.5284**	**18.9866**	**0.0440**	**3.1629**	**0.0735**	**3.2364**	**0.8434**	**0.0677**	**0.9111**		**3,731.0322**	**3,731.0322**	**0.1655**		**3,734.5086**

3.2 Building Construction 2017 - 2017

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.3025	3.0916	4.1018	8.4000e-003	0.2428	0.0476	0.2904	0.0691	0.0438	0.1129		828.7704	828.7704	6.0800e-003		828.8981
Worker	0.9011	1.4368	14.8848	0.0356	2.9201	0.0259	2.9460	0.7743	0.0239	0.7982		2,902.2619	2,902.2619	0.1595		2,905.6106
Total	**1.2036**	**4.5284**	**18.9866**	**0.0440**	**3.1629**	**0.0735**	**3.2364**	**0.8434**	**0.0677**	**0.9111**		**3,731.0322**	**3,731.0322**	**0.1655**		**3,734.5086**

3.3 Building Construction 2018 - 2018

Unmitigated Construction On-Site

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

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	0.2843	2.8381	3.9427	8.3900e-003	0.2428	0.0449	0.2876	0.0691	0.0413	0.1103		815.0710	815.0710	6.0500e-003		815.1980
Worker	0.8031	1.3044	13.4645	0.0356	2.9201	0.0251	2.9452	0.7743	0.0232	0.7975		2,795.8273	2,795.8273	0.1482		2,798.9394
Total	**1.0874**	**4.1425**	**17.4073**	**0.0440**	**3.1629**	**0.0699**	**3.2328**	**0.8434**	**0.0645**	**0.9079**		**3,610.8983**	**3,610.8983**	**0.1542**		**3,614.1374**

3.3 Building Construction 2018 - 2018

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.2843	2.8381	3.9427	8.3900e-003	0.2428	0.0449	0.2876	0.0691	0.0413	0.1103		815.0710	815.0710	6.0500e-003		815.1980
Worker	0.8031	1.3044	13.4645	0.0356	2.9201	0.0251	2.9452	0.7743	0.0232	0.7975		2,795.8273	2,795.8273	0.1482		2,798.9394
Total	**1.0874**	**4.1425**	**17.4073**	**0.0440**	**3.1629**	**0.0699**	**3.2328**	**0.8434**	**0.0645**	**0.9079**		**3,610.8983**	**3,610.8983**	**0.1542**		**3,614.1374**

3.4 Building Construction 2019 - 2019

Unmitigated Construction On-Site

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

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	0.8717	8.4573	12.3447	0.0270	0.7856	0.1379	0.9235	0.2235	0.1269	0.3504		2,582.7055	2,582.7055	0.0191		2,583.1073
Worker	1.4548	2.3742	24.4664	0.0704	5.7951	0.0485	5.8435	1.5367	0.0449	1.5816		5,330.6048	5,330.6048	0.2750		5,336.3798
Total	**2.3265**	**10.8315**	**36.8111**	**0.0974**	**6.5807**	**0.1864**	**6.7671**	**1.7603**	**0.1718**	**1.9320**		**7,913.3103**	**7,913.3103**	**0.2941**		**7,919.4871**

3.4 Building Construction 2019 - 2019

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.8717	8.4573	12.3447	0.0270	0.7856	0.1379	0.9235	0.2235	0.1269	0.3504		2,582.7055	2,582.7055	0.0191		2,583.1073
Worker	1.4548	2.3742	24.4664	0.0704	5.7951	0.0485	5.8435	1.5367	0.0449	1.5816		5,330.6048	5,330.6048	0.2750		5,336.3798
Total	**2.3265**	**10.8315**	**36.8111**	**0.0974**	**6.5807**	**0.1864**	**6.7671**	**1.7603**	**0.1718**	**1.9320**		**7,913.3103**	**7,913.3103**	**0.2941**		**7,919.4871**

3.5 Building Construction 2020 - 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	1.6810	14.8975	24.2529	0.0545	1.5858	0.2542	1.8400	0.4513	0.2338	0.6851		5,096.1199	5,096.1199	0.0378		5,096.9141
Worker	2.3000	3.7222	38.5060	0.1190	9.7990	0.0810	9.8800	2.5984	0.0751	2.6735		8,651.0946	8,651.0946	0.4409		8,660.3544
Total	**3.9810**	**18.6197**	**62.7589**	**0.1735**	**11.3848**	**0.3352**	**11.7199**	**3.0497**	**0.3089**	**3.3586**		**13,747.2145**	**13,747.2145**	**0.4788**		**13,757.2685**

3.5 Building Construction 2020 - 2020

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	1.6810	14.8975	24.2529	0.0545	1.5858	0.2542	1.8400	0.4513	0.2338	0.6851		5,096.1199	5,096.1199	0.0378		5,096.9141
Worker	2.3000	3.7222	38.5060	0.1190	9.7990	0.0810	9.8800	2.5984	0.0751	2.6735		8,651.0946	8,651.0946	0.4409		8,660.3544
Total	**3.9810**	**18.6197**	**62.7589**	**0.1735**	**11.3848**	**0.3352**	**11.7199**	**3.0497**	**0.3089**	**3.3586**		**13,747.2145**	**13,747.2145**	**0.4788**		**13,757.2685**

3.6 Building Construction 2021 - 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	0.1901	1.4813	2.7697	6.3700e-003	0.1857	0.0271	0.2128	0.0529	0.0249	0.0778		596.3812	596.3812	4.4600e-003		596.4748
Worker	0.5738	0.9184	9.5459	0.0315	2.5890	0.0213	2.6103	0.6865	0.0198	0.7063		2,249.8064	2,249.8064	0.1115		2,252.1477
Total	**0.7639**	**2.3996**	**12.3157**	**0.0379**	**2.7747**	**0.0484**	**2.8231**	**0.7394**	**0.0447**	**0.7841**		**2,846.1876**	**2,846.1876**	**0.1160**		**2,848.6225**

3.6 Building Construction 2021 - 2021

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1901	1.4813	2.7697	6.3700e-003	0.1857	0.0271	0.2128	0.0529	0.0249	0.0778		596.3812	596.3812	4.4600e-003		596.4748
Worker	0.5738	0.9184	9.5459	0.0315	2.5890	0.0213	2.6103	0.6865	0.0198	0.7063		2,249.8064	2,249.8064	0.1115		2,252.1477
Total	**0.7639**	**2.3996**	**12.3157**	**0.0379**	**2.7747**	**0.0484**	**2.8231**	**0.7394**	**0.0447**	**0.7841**		**2,846.1876**	**2,846.1876**	**0.1160**		**2,848.6225**

3.7 Builidng Construction 2022 - 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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	0.0715	0.5168	1.0390	2.4500e-003	0.0714	0.0103	0.0817	0.0203	9.4800e-003	0.0298		229.1880	229.1880	1.7500e-003		229.2248
Worker	0.2017	0.3199	3.3331	0.0117	0.9633	7.8900e-003	0.9712	0.2555	7.3100e-003	0.2628		823.1751	823.1751	0.0397		824.0091
Total	**0.2732**	**0.8367**	**4.3721**	**0.0142**	**1.0348**	**0.0182**	**1.0530**	**0.2758**	**0.0168**	**0.2926**		**1,052.3632**	**1,052.3632**	**0.0415**		**1,053.2339**

3.7 Builidng Construction 2022 - 2022

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0715	0.5168	1.0390	2.4500e-003	0.0714	0.0103	0.0817	0.0203	9.4800e-003	0.0298		229.1880	229.1880	1.7500e-003		229.2248
Worker	0.2017	0.3199	3.3331	0.0117	0.9633	7.8900e-003	0.9712	0.2555	7.3100e-003	0.2628		823.1751	823.1751	0.0397		824.0091
Total	**0.2732**	**0.8367**	**4.3721**	**0.0142**	**1.0348**	**0.0182**	**1.0530**	**0.2758**	**0.0168**	**0.2926**		**1,052.3632**	**1,052.3632**	**0.0415**		**1,053.2339**

3.8 Building Construction 2023 - 2023

Unmitigated Construction On-Site

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

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	0.0398	0.2443	0.5998	1.4600e-003	0.0429	6.1100e-003	0.0490	0.0122	5.6200e-003	0.0178		136.8550	136.8550	9.4000e-004		136.8748
Worker	0.1279	0.2018	2.1035	7.8700e-003	0.6472	5.2700e-003	0.6525	0.1716	4.8900e-003	0.1765		544.4516	544.4516	0.0256		544.9896
Total	**0.1677**	**0.4461**	**2.7034**	**9.3300e-003**	**0.6901**	**0.0114**	**0.7015**	**0.1838**	**0.0105**	**0.1943**		**681.3066**	**681.3066**	**0.0266**		**681.8644**

3.8 Building Construction 2023 - 2023

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0398	0.2443	0.5998	1.4600e-003	0.0429	6.1100e-003	0.0490	0.0122	5.6200e-003	0.0178		136.8550	136.8550	9.4000e-004		136.8748
Worker	0.1279	0.2018	2.1035	7.8700e-003	0.6472	5.2700e-003	0.6525	0.1716	4.8900e-003	0.1765		544.4516	544.4516	0.0256		544.9896
Total	**0.1677**	**0.4461**	**2.7034**	**9.3300e-003**	**0.6901**	**0.0114**	**0.7015**	**0.1838**	**0.0105**	**0.1943**		**681.3066**	**681.3066**	**0.0266**		**681.8644**

3.9 Building Construction 2024 - 2024

Unmitigated Construction On-Site

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

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	0.0716	0.4452	1.0761	2.6900e-003	0.0786	0.0112	0.0898	0.0224	0.0103	0.0327		251.4608	251.4608	1.7500e-003		251.4976
Worker	0.2035	0.3194	3.3438	0.0133	1.0838	8.9000e-003	1.0927	0.2874	8.2600e-003	0.2956		904.8781	904.8781	0.0418		905.7557
Total	**0.2752**	**0.7646**	**4.4199**	**0.0160**	**1.1623**	**0.0201**	**1.1825**	**0.3098**	**0.0186**	**0.3283**		**1,156.3389**	**1,156.3389**	**0.0435**		**1,157.2533**

3.9 Building Construction 2024 - 2024

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0716	0.4452	1.0761	2.6900e-003	0.0786	0.0112	0.0898	0.0224	0.0103	0.0327		251.4608	251.4608	1.7500e-003		251.4976
Worker	0.2035	0.3194	3.3438	0.0133	1.0838	8.9000e-003	1.0927	0.2874	8.2600e-003	0.2956		904.8781	904.8781	0.0418		905.7557
Total	**0.2752**	**0.7646**	**4.4199**	**0.0160**	**1.1623**	**0.0201**	**1.1825**	**0.3098**	**0.0186**	**0.3283**		**1,156.3389**	**1,156.3389**	**0.0435**		**1,157.2533**

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	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Unmitigated	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
NaturalGas Unmitigated	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461

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
Condo/Townhouse	27628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21115.7	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13026.2	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	128.836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1304.11	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27678.1	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	69.863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	27.628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21.1157	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13.0262	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	0.128836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1.30411	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27.6781	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	0.069863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Unmitigated	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Architectural Coating

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only construction run, no need to factor in RPS

Land Use - Based on Project Description provided by the Client

Construction Phase - Based on Client provided information.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - From yearly analysis

On-road Fugitive Dust -

Architectural Coating - Updated to include Parking Lot SQFT for Architectural Coating

Vehicle Trips -

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
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tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstructionPhase	NumDays	330.00	23.00
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tblConstructionPhase	NumDays	330.00	125.00
tblConstructionPhase	NumDays	330.00	125.00
tblConstructionPhase	NumDays	330.00	33.00
tblConstructionPhase	NumDays	330.00	17.00
tblConstructionPhase	NumDays	330.00	8.00
tblConstructionPhase	NumDays	330.00	17.00
tblConstructionPhase	PhaseEndDate	3/9/2018	5/8/2018
tblConstructionPhase	PhaseEndDate	10/30/2018	6/24/2019
tblConstructionPhase	PhaseEndDate	12/16/2019	6/23/2020
tblConstructionPhase	PhaseEndDate	8/7/2020	2/16/2021
tblConstructionPhase	PhaseEndDate	3/11/2021	1/25/2022
tblConstructionPhase	PhaseEndDate	2/4/2022	1/11/2023
tblConstructionPhase	PhaseEndDate	2/3/2023	1/23/2024
tblConstructionPhase	PhaseStartDate	11/2/2017	1/1/2018
tblConstructionPhase	PhaseStartDate	5/9/2018	1/1/2019
tblConstructionPhase	PhaseStartDate	6/25/2019	1/1/2020
tblConstructionPhase	PhaseStartDate	6/24/2020	1/1/2021
tblConstructionPhase	PhaseStartDate	2/17/2021	1/1/2022
tblConstructionPhase	PhaseStartDate	1/26/2022	1/1/2023
tblConstructionPhase	PhaseStartDate	1/12/2023	1/1/2024
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53

tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	316.00	39.00
tblTripsAndVMT	WorkerTripNumber	316.00	39.00
tblTripsAndVMT	WorkerTripNumber	316.00	77.00
tblTripsAndVMT	WorkerTripNumber	316.00	130.00
tblTripsAndVMT	WorkerTripNumber	316.00	34.00
tblTripsAndVMT	WorkerTripNumber	316.00	13.00
tblTripsAndVMT	WorkerTripNumber	316.00	9.00
tblTripsAndVMT	WorkerTripNumber	316.00	14.00
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40

tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
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tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CW_TL	18.50	16.60
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tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
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tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	HO_TL	12.90	8.70
tblVehicleTrips	HO_TL	12.90	8.70
tblVehicleTrips	HO_TL	12.90	8.70
tblVehicleTrips	HS_TL	9.60	5.90
tblVehicleTrips	HS_TL	9.60	5.90
tblVehicleTrips	HS_TL	9.60	5.90
tblVehicleTrips	HW_TL	19.80	14.70
tblVehicleTrips	HW_TL	19.80	14.70
tblVehicleTrips	HW_TL	19.80	14.70

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					
2017	25.1301	0.0285	0.0567	1.2000e-004	6.6200e-003	2.0500e-003	8.6700e-003	1.7600e-003	2.0500e-003	3.8100e-003	0.0000	9.1214	9.1214	6.4000e-004	0.0000	9.1350
2018	25.1451	0.1047	0.2130	4.7000e-004	0.0265	7.1600e-003	0.0336	7.0300e-003	7.1400e-003	0.0142	0.0000	35.5789	35.5789	2.3600e-003	0.0000	35.6285
2019	25.1581	0.1452	0.4289	1.0800e-003	0.0710	8.6500e-003	0.0797	0.0189	8.6100e-003	0.0275	0.0000	77.3848	77.3848	4.4700e-003	0.0000	77.4785
2020	25.1666	0.1530	0.6077	1.7000e-003	0.1199	7.9400e-003	0.1278	0.0318	7.8700e-003	0.0397	0.0000	115.4971	115.4971	6.2300e-003	0.0000	115.6279
2021	25.1297	0.0283	0.0620	1.5000e-004	8.2800e-003	1.6200e-003	9.9000e-003	2.2000e-003	1.6200e-003	3.8200e-003	0.0000	10.9779	10.9779	6.2000e-004	0.0000	10.9909
2022	25.1263	0.0125	0.0213	5.0000e-005	1.6300e-003	7.1000e-004	2.3400e-003	4.3000e-004	7.1000e-004	1.1400e-003	0.0000	3.4806	3.4806	2.0000e-004	0.0000	3.4849
2023	25.1251	5.3900e-003	9.0500e-003	2.0000e-005	5.3000e-004	2.9000e-004	8.2000e-004	1.4000e-004	2.9000e-004	4.3000e-004	0.0000	1.4416	1.4416	8.0000e-005	0.0000	1.4432
2024	25.1261	0.0109	0.0211	5.0000e-005	1.7600e-003	5.3000e-004	2.2900e-003	4.7000e-004	5.3000e-004	1.0000e-003	0.0000	3.5492	3.5492	1.8000e-004	0.0000	3.5531
Total	**201.1071**	**0.4885**	**1.4197**	**3.6400e-003**	**0.2362**	**0.0290**	**0.2652**	**0.0627**	**0.0288**	**0.0916**	**0.0000**	**257.0314**	**257.0314**	**0.0148**	**0.0000**	**257.3419**

2.1 Overall Construction

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					
2017	25.1301	0.0285	0.0567	1.2000e-004	6.6200e-003	2.0500e-003	8.6700e-003	1.7600e-003	2.0500e-003	3.8100e-003	0.0000	9.1214	9.1214	6.4000e-004	0.0000	9.1350
2018	25.1451	0.1047	0.2130	4.7000e-004	0.0265	7.1600e-003	0.0336	7.0300e-003	7.1400e-003	0.0142	0.0000	35.5789	35.5789	2.3600e-003	0.0000	35.6285
2019	25.1581	0.1452	0.4289	1.0800e-003	0.0710	8.6500e-003	0.0797	0.0189	8.6100e-003	0.0275	0.0000	77.3847	77.3847	4.4700e-003	0.0000	77.4785
2020	25.1666	0.1530	0.6077	1.7000e-003	0.1199	7.9400e-003	0.1278	0.0318	7.8700e-003	0.0397	0.0000	115.4971	115.4971	6.2300e-003	0.0000	115.6279
2021	25.1297	0.0283	0.0620	1.5000e-004	8.2800e-003	1.6200e-003	9.9000e-003	2.2000e-003	1.6200e-003	3.8200e-003	0.0000	10.9779	10.9779	6.2000e-004	0.0000	10.9909
2022	25.1263	0.0125	0.0213	5.0000e-005	1.6300e-003	7.1000e-004	2.3400e-003	4.3000e-004	7.1000e-004	1.1400e-003	0.0000	3.4806	3.4806	2.0000e-004	0.0000	3.4849
2023	25.1251	5.3900e-003	9.0500e-003	2.0000e-005	5.3000e-004	2.9000e-004	8.2000e-004	1.4000e-004	2.9000e-004	4.3000e-004	0.0000	1.4416	1.4416	8.0000e-005	0.0000	1.4432
2024	25.1261	0.0109	0.0211	5.0000e-005	1.7600e-003	5.3000e-004	2.2900e-003	4.7000e-004	5.3000e-004	1.0000e-003	0.0000	3.5492	3.5492	1.8000e-004	0.0000	3.5531
Total	**201.1071**	**0.4885**	**1.4197**	**3.6400e-003**	**0.2362**	**0.0290**	**0.2652**	**0.0627**	**0.0288**	**0.0916**	**0.0000**	**257.0314**	**257.0314**	**0.0148**	**0.0000**	**257.3419**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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**

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	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Energy	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	7,880.7783	7,880.7783	0.3138	0.0909	7,915.5473
Mobile	12.1737	29.2302	131.7574	0.4624	30.1194	0.6366	30.7560	8.0701	0.5874	8.6576	0.0000	31,271.2749	31,271.2749	1.0330	0.0000	31,292.9676
Waste						0.0000	0.0000		0.0000	0.0000	385.8858	0.0000	385.8858	22.8052	0.0000	864.7950
Water						0.0000	0.0000		0.0000	0.0000	64.6196	1,194.1152	1,258.7348	6.6919	0.1681	1,451.3676
Total	**32.9184**	**31.1271**	**158.7081**	**0.4890**	**30.1194**	**2.3559**	**32.4752**	**8.0701**	**2.3064**	**10.3766**	**617.6942**	**40,694.0455**	**41,311.7397**	**31.3682**	**0.2703**	**42,054.2704**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Energy	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	7,880.7783	7,880.7783	0.3138	0.0909	7,915.5473
Mobile	12.1737	29.2302	131.7574	0.4624	30.1194	0.6366	30.7560	8.0701	0.5874	8.6576	0.0000	31,271.2749	31,271.2749	1.0330	0.0000	31,292.9676
Waste						0.0000	0.0000		0.0000	0.0000	385.8858	0.0000	385.8858	22.8052	0.0000	864.7950
Water						0.0000	0.0000		0.0000	0.0000	64.6196	1,194.1152	1,258.7348	6.6907	0.1678	1,451.2645
Total	**32.9184**	**31.1271**	**158.7081**	**0.4890**	**30.1194**	**2.3559**	**32.4752**	**8.0701**	**2.3064**	**10.3766**	**617.6942**	**40,694.0455**	**41,311.7397**	**31.3670**	**0.2701**	**42,054.1673**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**	**0.09**	**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	Architectural Coating 1	Architectural Coating	10/1/2017	11/1/2017	5	23	
2	Architectural Coating 2	Architectural Coating	1/1/2018	5/8/2018	5	92	
3	Architectural Coating 3	Architectural Coating	1/1/2019	6/24/2019	5	125	
4	Architectural Coating 4	Architectural Coating	1/1/2020	6/23/2020	5	125	
5	Architectural Coating 5	Architectural Coating	1/1/2021	2/16/2021	5	33	
6	Architectural Coating 6	Architectural Coating	1/1/2022	1/25/2022	5	17	
7	Architectural Coating 7	Architectural Coating	1/1/2023	1/11/2023	5	8	
8	Architectural Coating 8	Architectural Coating	1/1/2024	1/23/2024	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 3,736,530; Residential Outdoor: 1,245,510; Non-Residential Indoor: 2,318,201; Non-Residential Outdoor: 772,733 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating 1	Air Compressors	1	6.00	78	0.48
Architectural Coating 2	Air Compressors	1	6.00	78	0.48
Architectural Coating 3	Air Compressors	1	6.00	78	0.48
Architectural Coating 4	Air Compressors	1	6.00	78	0.48
Architectural Coating 5	Air Compressors	1	6.00	78	0.48
Architectural Coating 6	Air Compressors	1	6.00	78	0.48
Architectural Coating 7	Air Compressors	1	6.00	78	0.48
Architectural Coating 8	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating 1	1	39.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 2	1	39.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 3	1	77.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 4	1	130.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 5	1	34.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 6	1	13.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 7	1	9.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 8	1	14.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Architectural Coating 1 - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8200e-003	0.0251	0.0215	3.0000e-005		1.9900e-003	1.9900e-003		1.9900e-003	1.9900e-003	0.0000	2.9362	2.9362	3.1000e-004	0.0000	2.9428
Total	**25.1281**	**0.0251**	**0.0215**	**3.0000e-005**		**1.9900e-003**	**1.9900e-003**		**1.9900e-003**	**1.9900e-003**	**0.0000**	**2.9362**	**2.9362**	**3.1000e-004**	**0.0000**	**2.9428**

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	1.9800e-003	3.4100e-003	0.0352	8.0000e-005	6.6200e-003	6.0000e-005	6.6800e-003	1.7600e-003	6.0000e-005	1.8100e-003	0.0000	6.1852	6.1852	3.3000e-004	0.0000	6.1922
Total	**1.9800e-003**	**3.4100e-003**	**0.0352**	**8.0000e-005**	**6.6200e-003**	**6.0000e-005**	**6.6800e-003**	**1.7600e-003**	**6.0000e-005**	**1.8100e-003**	**0.0000**	**6.1852**	**6.1852**	**3.3000e-004**	**0.0000**	**6.1922**

3.2 Architectural Coating 1 - 2017

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	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8200e-003	0.0251	0.0215	3.0000e-005		1.9900e-003	1.9900e-003		1.9900e-003	1.9900e-003	0.0000	2.9362	2.9362	3.1000e-004	0.0000	2.9428
Total	**25.1281**	**0.0251**	**0.0215**	**3.0000e-005**		**1.9900e-003**	**1.9900e-003**		**1.9900e-003**	**1.9900e-003**	**0.0000**	**2.9362**	**2.9362**	**3.1000e-004**	**0.0000**	**2.9428**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9800e-003	3.4100e-003	0.0352	8.0000e-005	6.6200e-003	6.0000e-005	6.6800e-003	1.7600e-003	6.0000e-005	1.8100e-003	0.0000	6.1852	6.1852	3.3000e-004	0.0000	6.1922
Total	**1.9800e-003**	**3.4100e-003**	**0.0352**	**8.0000e-005**	**6.6200e-003**	**6.0000e-005**	**6.6800e-003**	**1.7600e-003**	**6.0000e-005**	**1.8100e-003**	**0.0000**	**6.1852**	**6.1852**	**3.3000e-004**	**0.0000**	**6.1922**

3.3 Architectural Coating 2 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0137	0.0923	0.0853	1.4000e-004		6.9300e-003	6.9300e-003		6.9300e-003	6.9300e-003	0.0000	11.7450	11.7450	1.1200e-003	0.0000	11.7684
Total	**25.1380**	**0.0923**	**0.0853**	**1.4000e-004**		**6.9300e-003**	**6.9300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**11.7450**	**11.7450**	**1.1200e-003**	**0.0000**	**11.7684**

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	7.0400e-003	0.0124	0.1277	3.3000e-004	0.0265	2.3000e-004	0.0267	7.0300e-003	2.1000e-004	7.2400e-003	0.0000	23.8339	23.8339	1.2400e-003	0.0000	23.8600
Total	**7.0400e-003**	**0.0124**	**0.1277**	**3.3000e-004**	**0.0265**	**2.3000e-004**	**0.0267**	**7.0300e-003**	**2.1000e-004**	**7.2400e-003**	**0.0000**	**23.8339**	**23.8339**	**1.2400e-003**	**0.0000**	**23.8600**

3.3 Architectural Coating 2 - 2018

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	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0137	0.0923	0.0853	1.4000e-004		6.9300e-003	6.9300e-003		6.9300e-003	6.9300e-003	0.0000	11.7450	11.7450	1.1200e-003	0.0000	11.7684
Total	**25.1380**	**0.0923**	**0.0853**	**1.4000e-004**		**6.9300e-003**	**6.9300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**11.7450**	**11.7450**	**1.1200e-003**	**0.0000**	**11.7684**

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	7.0400e-003	0.0124	0.1277	3.3000e-004	0.0265	2.3000e-004	0.0267	7.0300e-003	2.1000e-004	7.2400e-003	0.0000	23.8339	23.8339	1.2400e-003	0.0000	23.8600
Total	**7.0400e-003**	**0.0124**	**0.1277**	**3.3000e-004**	**0.0265**	**2.3000e-004**	**0.0267**	**7.0300e-003**	**2.1000e-004**	**7.2400e-003**	**0.0000**	**23.8339**	**23.8339**	**1.2400e-003**	**0.0000**	**23.8600**

3.4 Architectural Coating 3 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0167	0.1147	0.1151	1.9000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	15.9578	15.9578	1.3500e-003	0.0000	15.9861
Total	**25.1409**	**0.1147**	**0.1151**	**1.9000e-004**		**8.0500e-003**	**8.0500e-003**		**8.0500e-003**	**8.0500e-003**	**0.0000**	**15.9578**	**15.9578**	**1.3500e-003**	**0.0000**	**15.9861**

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	0.0172	0.0305	0.3138	8.9000e-004	0.0710	6.1000e-004	0.0716	0.0189	5.6000e-004	0.0194	0.0000	61.4269	61.4269	3.1200e-003	0.0000	61.4924
Total	**0.0172**	**0.0305**	**0.3138**	**8.9000e-004**	**0.0710**	**6.1000e-004**	**0.0716**	**0.0189**	**5.6000e-004**	**0.0194**	**0.0000**	**61.4269**	**61.4269**	**3.1200e-003**	**0.0000**	**61.4924**

3.4 Architectural Coating 3 - 2019

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	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0167	0.1147	0.1151	1.9000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	15.9578	15.9578	1.3500e-003	0.0000	15.9861
Total	**25.1409**	**0.1147**	**0.1151**	**1.9000e-004**		**8.0500e-003**	**8.0500e-003**		**8.0500e-003**	**8.0500e-003**	**0.0000**	**15.9578**	**15.9578**	**1.3500e-003**	**0.0000**	**15.9861**

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	0.0172	0.0305	0.3138	8.9000e-004	0.0710	6.1000e-004	0.0716	0.0189	5.6000e-004	0.0194	0.0000	61.4269	61.4269	3.1200e-003	0.0000	61.4924
Total	**0.0172**	**0.0305**	**0.3138**	**8.9000e-004**	**0.0710**	**6.1000e-004**	**0.0716**	**0.0189**	**5.6000e-004**	**0.0194**	**0.0000**	**61.4269**	**61.4269**	**3.1200e-003**	**0.0000**	**61.4924**

3.5 Architectural Coating 4 - 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					
Archit. Coating	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0151	0.1052	0.1145	1.9000e-004		6.9300e-003	6.9300e-003		6.9300e-003	6.9300e-003	0.0000	15.9578	15.9578	1.2400e-003	0.0000	15.9838
Total	**25.1394**	**0.1052**	**0.1145**	**1.9000e-004**		**6.9300e-003**	**6.9300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**15.9578**	**15.9578**	**1.2400e-003**	**0.0000**	**15.9838**

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	0.0272	0.0478	0.4933	1.5100e-003	0.1199	1.0100e-003	0.1209	0.0318	9.4000e-004	0.0328	0.0000	99.5393	99.5393	4.9900e-003	0.0000	99.6441
Total	**0.0272**	**0.0478**	**0.4933**	**1.5100e-003**	**0.1199**	**1.0100e-003**	**0.1209**	**0.0318**	**9.4000e-004**	**0.0328**	**0.0000**	**99.5393**	**99.5393**	**4.9900e-003**	**0.0000**	**99.6441**

3.5 Architectural Coating 4 - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0151	0.1052	0.1145	1.9000e-004		6.9300e-003	6.9300e-003		6.9300e-003	6.9300e-003	0.0000	15.9578	15.9578	1.2400e-003	0.0000	15.9838
Total	**25.1394**	**0.1052**	**0.1145**	**1.9000e-004**		**6.9300e-003**	**6.9300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**15.9578**	**15.9578**	**1.2400e-003**	**0.0000**	**15.9838**

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	0.0272	0.0478	0.4933	1.5100e-003	0.1199	1.0100e-003	0.1209	0.0318	9.4000e-004	0.0328	0.0000	99.5393	99.5393	4.9900e-003	0.0000	99.6441
Total	**0.0272**	**0.0478**	**0.4933**	**1.5100e-003**	**0.1199**	**1.0100e-003**	**0.1209**	**0.0318**	**9.4000e-004**	**0.0328**	**0.0000**	**99.5393**	**99.5393**	**4.9900e-003**	**0.0000**	**99.6441**

3.6 Architectural Coating 5 - 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					
Archit. Coating	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6100e-003	0.0252	0.0300	5.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	4.2129	4.2129	2.9000e-004	0.0000	4.2189
Total	**25.1279**	**0.0252**	**0.0300**	**5.0000e-005**		**1.5500e-003**	**1.5500e-003**		**1.5500e-003**	**1.5500e-003**	**0.0000**	**4.2129**	**4.2129**	**2.9000e-004**	**0.0000**	**4.2189**

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	1.7700e-003	3.0800e-003	0.0320	1.0000e-004	8.2800e-003	7.0000e-005	8.3500e-003	2.2000e-003	6.0000e-005	2.2600e-003	0.0000	6.7651	6.7651	3.3000e-004	0.0000	6.7720
Total	**1.7700e-003**	**3.0800e-003**	**0.0320**	**1.0000e-004**	**8.2800e-003**	**7.0000e-005**	**8.3500e-003**	**2.2000e-003**	**6.0000e-005**	**2.2600e-003**	**0.0000**	**6.7651**	**6.7651**	**3.3000e-004**	**0.0000**	**6.7720**

3.6 Architectural Coating 5 - 2021

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	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6100e-003	0.0252	0.0300	5.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	4.2129	4.2129	2.9000e-004	0.0000	4.2189
Total	**25.1279**	**0.0252**	**0.0300**	**5.0000e-005**		**1.5500e-003**	**1.5500e-003**		**1.5500e-003**	**1.5500e-003**	**0.0000**	**4.2129**	**4.2129**	**2.9000e-004**	**0.0000**	**4.2189**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7700e-003	3.0800e-003	0.0320	1.0000e-004	8.2800e-003	7.0000e-005	8.3500e-003	2.2000e-003	6.0000e-005	2.2600e-003	0.0000	6.7651	6.7651	3.3000e-004	0.0000	6.7720
Total	**1.7700e-003**	**3.0800e-003**	**0.0320**	**1.0000e-004**	**8.2800e-003**	**7.0000e-005**	**8.3500e-003**	**2.2000e-003**	**6.0000e-005**	**2.2600e-003**	**0.0000**	**6.7651**	**6.7651**	**3.3000e-004**	**0.0000**	**6.7720**

3.7 Architectural Coating 6 - 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					
Archit. Coating	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7400e-003	0.0120	0.0154	3.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	2.1703	2.1703	1.4000e-004	0.0000	2.1732
Total	**25.1260**	**0.0120**	**0.0154**	**3.0000e-005**		**6.9000e-004**	**6.9000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**2.1703**	**2.1703**	**1.4000e-004**	**0.0000**	**2.1732**

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	3.3000e-004	5.7000e-004	5.9100e-003	2.0000e-005	1.6300e-003	1.0000e-005	1.6400e-003	4.3000e-004	1.0000e-005	4.5000e-004	0.0000	1.3103	1.3103	6.0000e-005	0.0000	1.3116
Total	**3.3000e-004**	**5.7000e-004**	**5.9100e-003**	**2.0000e-005**	**1.6300e-003**	**1.0000e-005**	**1.6400e-003**	**4.3000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3103**	**1.3103**	**6.0000e-005**	**0.0000**	**1.3116**

3.7 Architectural Coating 6 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7400e-003	0.0120	0.0154	3.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	2.1703	2.1703	1.4000e-004	0.0000	2.1732
Total	**25.1260**	**0.0120**	**0.0154**	**3.0000e-005**		**6.9000e-004**	**6.9000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**2.1703**	**2.1703**	**1.4000e-004**	**0.0000**	**2.1732**

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	3.3000e-004	5.7000e-004	5.9100e-003	2.0000e-005	1.6300e-003	1.0000e-005	1.6400e-003	4.3000e-004	1.0000e-005	4.5000e-004	0.0000	1.3103	1.3103	6.0000e-005	0.0000	1.3116
Total	**3.3000e-004**	**5.7000e-004**	**5.9100e-003**	**2.0000e-005**	**1.6300e-003**	**1.0000e-005**	**1.6400e-003**	**4.3000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3103**	**1.3103**	**6.0000e-005**	**0.0000**	**1.3116**

3.8 Architectural Coating 7 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7000e-004	5.2100e-003	7.2400e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0226
Total	**25.1250**	**5.2100e-003**	**7.2400e-003**	**1.0000e-005**		**2.8000e-004**	**2.8000e-004**		**2.8000e-004**	**2.8000e-004**	**0.0000**	**1.0213**	**1.0213**	**6.0000e-005**	**0.0000**	**1.0226**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.7000e-004	1.8100e-003	1.0000e-005	5.3000e-004	0.0000	5.4000e-004	1.4000e-004	0.0000	1.5000e-004	0.0000	0.4203	0.4203	2.0000e-005	0.0000	0.4207
Total	**1.0000e-004**	**1.7000e-004**	**1.8100e-003**	**1.0000e-005**	**5.3000e-004**	**0.0000**	**5.4000e-004**	**1.4000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4203**	**0.4203**	**2.0000e-005**	**0.0000**	**0.4207**

3.8 Architectural Coating 7 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7000e-004	5.2100e-003	7.2400e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0226
Total	**25.1250**	**5.2100e-003**	**7.2400e-003**	**1.0000e-005**		**2.8000e-004**	**2.8000e-004**		**2.8000e-004**	**2.8000e-004**	**0.0000**	**1.0213**	**1.0213**	**6.0000e-005**	**0.0000**	**1.0226**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.7000e-004	1.8100e-003	1.0000e-005	5.3000e-004	0.0000	5.4000e-004	1.4000e-004	0.0000	1.5000e-004	0.0000	0.4203	0.4203	2.0000e-005	0.0000	0.4207
Total	**1.0000e-004**	**1.7000e-004**	**1.8100e-003**	**1.0000e-005**	**5.3000e-004**	**0.0000**	**5.4000e-004**	**1.4000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4203**	**0.4203**	**2.0000e-005**	**0.0000**	**0.4207**

3.9 Architectural Coating 8 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0104	0.0154	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.1703	2.1703	1.2000e-004	0.0000	2.1728
Total	**25.1258**	**0.0104**	**0.0154**	**3.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**2.1703**	**2.1703**	**1.2000e-004**	**0.0000**	**2.1728**

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	3.2000e-004	5.4000e-004	5.6800e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3789	1.3789	6.0000e-005	0.0000	1.3802
Total	**3.2000e-004**	**5.4000e-004**	**5.6800e-003**	**2.0000e-005**	**1.7600e-003**	**1.0000e-005**	**1.7700e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.3789**	**1.3789**	**6.0000e-005**	**0.0000**	**1.3802**

3.9 Architectural Coating 8 - 2024

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	25.1243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0104	0.0154	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.1703	2.1703	1.2000e-004	0.0000	2.1728
Total	**25.1258**	**0.0104**	**0.0154**	**3.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**2.1703**	**2.1703**	**1.2000e-004**	**0.0000**	**2.1728**

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	3.2000e-004	5.4000e-004	5.6800e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3789	1.3789	6.0000e-005	0.0000	1.3802
Total	**3.2000e-004**	**5.4000e-004**	**5.6800e-003**	**2.0000e-005**	**1.7600e-003**	**1.0000e-005**	**1.7700e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.3789**	**1.3789**	**6.0000e-005**	**0.0000**	**1.3802**

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	12.1737	29.2302	131.7574	0.4624	30.1194	0.6366	30.7560	8.0701	0.5874	8.6576	0.0000	31,271.2749	31,271.2749	1.0330	0.0000	31,292.9676
Unmitigated	12.1737	29.2302	131.7574	0.4624	30.1194	0.6366	30.7560	8.0701	0.5874	8.6576	0.0000	31,271.2749	31,271.2749	1.0330	0.0000	31,292.9676

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	25,622	25,622
Condo/Townhouse	4,613.00	5,012.00	4249.00	15,780,408	15,780,408
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	12,060,740	12,060,740
Elementary School	967.50	0.00	0.00	2,381,697	2,381,697
General Office Building	4,789.35	1,030.95	426.30	11,691,142	11,691,142
Health Club	82.33	52.18	66.83	162,126	162,126
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	25,081,204	25,081,204
Single Family Housing	3,244.23	3,417.12	2973.03	11,038,035	11,038,035
Strip Mall	664.80	630.60	306.45	1,158,150	1,158,150
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	79,379,125	79,379,125

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
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

4.4 Fleet Mix

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	6,072.8188	6,072.8188	0.2792	0.0578	6,096.5848
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,072.8188	6,072.8188	0.2792	0.0578	6,096.5848
NaturalGas Mitigated	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	1,807.9595	1,807.9595	0.0347	0.0332	1,818.9625
NaturalGas Unmitigated	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	1,807.9595	1,807.9595	0.0347	0.0332	1,818.9625

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					
Condo/Townhouse	1.00842e+007	0.0544	0.4647	0.1977	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1324	538.1324	0.0103	9.8700e-003	541.4074
Condo/Townhouse High Rise	7.70723e+006	0.0416	0.3551	0.1511	2.2700e-003		0.0287	0.0287		0.0287	0.0287	0.0000	411.2869	411.2869	7.8800e-003	7.5400e-003	413.7900
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	4.75455e+006	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	253.7209	253.7209	4.8600e-003	4.6500e-003	255.2650
Health Club	47025	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5094	2.5094	5.0000e-005	5.0000e-005	2.5247
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
Regional Shopping Center	476000	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.4012	25.4012	4.9000e-004	4.7000e-004	25.5558
Single Family Housing	1.01025e+007	0.0545	0.4655	0.1981	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	539.1089	539.1089	0.0103	9.8800e-003	542.3898
Strip Mall	25500	1.4000e-004	1.2500e-003	1.0500e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3608	1.3608	3.0000e-005	2.0000e-005	1.3691
Unenclosed Parking with Elevator	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
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
Total		**0.1827**	**1.5788**	**0.7934**	**9.9700e-003**		**0.1262**	**0.1262**		**0.1262**	**0.1262**	**0.0000**	**1,807.9595**	**1,807.9595**	**0.0347**	**0.0332**	**1,818.9625**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse High Rise	7.70723e+006	0.0416	0.3551	0.1511	2.2700e-003		0.0287	0.0287		0.0287	0.0287	0.0000	411.2869	411.2869	7.8800e-003	7.5400e-003	413.7900
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	4.75455e+006	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	253.7209	253.7209	4.8600e-003	4.6500e-003	255.2650
Health Club	47025	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5094	2.5094	5.0000e-005	5.0000e-005	2.5247
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
Regional Shopping Center	476000	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.4012	25.4012	4.9000e-004	4.7000e-004	25.5558
Single Family Housing	1.01025e+007	0.0545	0.4655	0.1981	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	539.1089	539.1089	0.0103	9.8800e-003	542.3898
Strip Mall	25500	1.4000e-004	1.2500e-003	1.0500e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3608	1.3608	3.0000e-005	2.0000e-005	1.3691
Unenclosed Parking with Elevator	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
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
Condo/Townhouse	1.00842e+007	0.0544	0.4647	0.1977	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1324	538.1324	0.0103	9.8700e-003	541.4074
Total		**0.1827**	**1.5788**	**0.7934**	**9.9700e-003**		**0.1262**	**0.1262**		**0.1262**	**0.1262**	**0.0000**	**1,807.9595**	**1,807.9595**	**0.0347**	**0.0332**	**1,818.9625**

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
Condo/Townhouse	3.07852e+006	880.9694	0.0405	8.3800e-003	884.4170
Condo/Townhouse High Rise	2.35287e+006	673.3123	0.0310	6.4000e-003	675.9473
Elementary School	420114	120.2226	5.5300e-003	1.1400e-003	120.6931
General Office Building	6.32055e+006	1,808.7321	0.0831	0.0172	1,815.8107
Health Club	30125	8.6208	4.0000e-004	8.0000e-005	8.6545
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.2476e+006	1,215.5225	0.0559	0.0116	1,220.2795
Single Family Housing	2.47292e+006	707.6679	0.0325	6.7300e-003	710.4374
Strip Mall	227550	65.1173	2.9900e-003	6.2000e-004	65.3721
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,072.8188**	**0.2792**	**0.0578**	**6,096.5848**

5.3 Energy by Land Use - Electricity

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
Condo/Townhouse	3.07852e+006	880.9694	0.0405	8.3800e-003	884.4170
Condo/Townhouse High Rise	2.35287e+006	673.3123	0.0310	6.4000e-003	675.9473
Elementary School	420114	120.2226	5.5300e-003	1.1400e-003	120.6931
General Office Building	6.32055e+006	1,808.7321	0.0831	0.0172	1,815.8107
Health Club	30125	8.6208	4.0000e-004	8.0000e-005	8.6545
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.2476e+006	1,215.5225	0.0559	0.0116	1,220.2795
Single Family Housing	2.47292e+006	707.6679	0.0325	6.7300e-003	710.4374
Strip Mall	227550	65.1173	2.9900e-003	6.2000e-004	65.3721
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,072.8188**	**0.2792**	**0.0578**	**6,096.5848**

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	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Unmitigated	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1556	0.1308	9.8895	0.0157		1.5029	1.5029		1.5027	1.5027	167.1888	321.2795	488.4683	0.4986	0.0114	502.4564
Landscaping	0.4918	0.1873	16.2678	8.6000e-004		0.0901	0.0901		0.0901	0.0901	0.0000	26.5977	26.5977	0.0257	0.0000	27.1365
Total	**20.5620**	**0.3181**	**26.1573**	**0.0166**		**1.5930**	**1.5930**		**1.5928**	**1.5928**	**167.1888**	**347.8772**	**515.0660**	**0.5243**	**0.0114**	**529.5929**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1556	0.1308	9.8895	0.0157		1.5029	1.5029		1.5027	1.5027	167.1888	321.2795	488.4683	0.4986	0.0114	502.4564
Landscaping	0.4918	0.1873	16.2678	8.6000e-004		0.0901	0.0901		0.0901	0.0901	0.0000	26.5977	26.5977	0.0257	0.0000	27.1365
Total	**20.5620**	**0.3181**	**26.1573**	**0.0166**		**1.5930**	**1.5930**		**1.5928**	**1.5928**	**167.1888**	**347.8772**	**515.0660**	**0.5243**	**0.0114**	**529.5929**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,258.7348	6.6907	0.1678	1,451.2645
Unmitigated	1,258.7348	6.6919	0.1681	1,451.3676

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.6723	21.2133	9.8000e-004	2.0000e-004	21.2963
Condo/Townhouse	45.6078 / 28.7528	275.8262	1.4982	0.0376	318.9359
Condo/Townhouse High Rise	34.8574 / 21.9753	210.8100	1.1450	0.0287	243.7582
Elementary School	1.81818 / 4.67532	22.2160	0.0602	1.6000e-003	23.9785
General Office Building	77.3142 / 47.3861	463.2700	2.5395	0.0637	536.3326
Health Club	0.147858 / 0.0906226	0.8860	4.8600e-003	1.2000e-004	1.0257
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	20.7403 / 12.7118	124.2768	0.6812	0.0171	143.8766
Single Family Housing	22.0872 / 13.9245	133.5787	0.7255	0.0182	154.4561
Strip Mall	1.11109 / 0.680989	6.6577	0.0365	9.1000e-004	7.7077
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,258.7348**	**6.6919**	**0.1681**	**1,451.3676**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.6723	21.2133	9.8000e-004	2.0000e-004	21.2963
Condo/Townhouse	45.6078 / 28.7528	275.8262	1.4979	0.0375	318.9128
Condo/Townhouse High Rise	34.8574 / 21.9753	210.8100	1.1448	0.0287	243.7405
Elementary School	1.81818 / 4.67532	22.2160	0.0602	1.6000e-003	23.9776
General Office Building	77.3142 / 47.3861	463.2700	2.5390	0.0636	536.2935
Health Club	0.147858 / 0.0906226	0.8860	4.8600e-003	1.2000e-004	1.0256
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	20.7403 / 12.7118	124.2768	0.6811	0.0171	143.8661
Single Family Housing	22.0872 / 13.9245	133.5787	0.7254	0.0182	154.4449
Strip Mall	1.11109 / 0.680989	6.6577	0.0365	9.1000e-004	7.7071
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,258.7348**	**6.6907**	**0.1678**	**1,451.2645**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	385.8858	22.8052	0.0000	864.7950
Mitigated	385.8858	22.8052	0.0000	864.7950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.48	0.0974	5.7600e-003	0.0000	0.2184
Condo/Townhouse	322	65.3631	3.8629	0.0000	146.4829
Condo/Townhouse High Rise	246.1	49.9561	2.9523	0.0000	111.9548
Elementary School	136.88	27.7854	1.6421	0.0000	62.2689
General Office Building	404.55	82.1200	4.8532	0.0000	184.0362
Health Club	14.25	2.8926	0.1710	0.0000	6.4826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	294	59.6793	3.5270	0.0000	133.7453
Single Family Housing	466.99	94.7948	5.6022	0.0000	212.4411
Strip Mall	15.75	3.1971	0.1889	0.0000	7.1649
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**385.8858**	**22.8052**	**0.0000**	**864.7950**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.48	0.0974	5.7600e-003	0.0000	0.2184
Condo/Townhouse	322	65.3631	3.8629	0.0000	146.4829
Condo/Townhouse High Rise	246.1	49.9561	2.9523	0.0000	111.9548
Elementary School	136.88	27.7854	1.6421	0.0000	62.2689
General Office Building	404.55	82.1200	4.8532	0.0000	184.0362
Health Club	14.25	2.8926	0.1710	0.0000	6.4826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	294	59.6793	3.5270	0.0000	133.7453
Single Family Housing	466.99	94.7948	5.6022	0.0000	212.4411
Strip Mall	15.75	3.1971	0.1889	0.0000	7.1649
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**385.8858**	**22.8052**	**0.0000**	**864.7950**

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Architectural Coating

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only construction run, no need to factor in RPS

Land Use - Based on Project Description provided by the Client

Construction Phase - Based on Client provided information.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - From yearly analysis

On-road Fugitive Dust -

Architectural Coating - Updated to include Parking Lot SQFT for Architectural Coating

Vehicle Trips -

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstructionPhase	NumDays	330.00	23.00
tblConstructionPhase	NumDays	330.00	92.00
tblConstructionPhase	NumDays	330.00	125.00
tblConstructionPhase	NumDays	330.00	125.00
tblConstructionPhase	NumDays	330.00	33.00
tblConstructionPhase	NumDays	330.00	17.00
tblConstructionPhase	NumDays	330.00	8.00
tblConstructionPhase	NumDays	330.00	17.00
tblConstructionPhase	PhaseEndDate	3/9/2018	5/8/2018
tblConstructionPhase	PhaseEndDate	10/30/2018	6/24/2019
tblConstructionPhase	PhaseEndDate	12/16/2019	6/23/2020
tblConstructionPhase	PhaseEndDate	8/7/2020	2/16/2021
tblConstructionPhase	PhaseEndDate	3/11/2021	1/25/2022
tblConstructionPhase	PhaseEndDate	2/4/2022	1/11/2023
tblConstructionPhase	PhaseEndDate	2/3/2023	1/23/2024
tblConstructionPhase	PhaseStartDate	11/2/2017	1/1/2018
tblConstructionPhase	PhaseStartDate	5/9/2018	1/1/2019
tblConstructionPhase	PhaseStartDate	6/25/2019	1/1/2020
tblConstructionPhase	PhaseStartDate	6/24/2020	1/1/2021
tblConstructionPhase	PhaseStartDate	2/17/2021	1/1/2022
tblConstructionPhase	PhaseStartDate	1/26/2022	1/1/2023
tblConstructionPhase	PhaseStartDate	1/12/2023	1/1/2024
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53

tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	316.00	39.00
tblTripsAndVMT	WorkerTripNumber	316.00	39.00
tblTripsAndVMT	WorkerTripNumber	316.00	77.00
tblTripsAndVMT	WorkerTripNumber	316.00	130.00
tblTripsAndVMT	WorkerTripNumber	316.00	34.00
tblTripsAndVMT	WorkerTripNumber	316.00	13.00
tblTripsAndVMT	WorkerTripNumber	316.00	9.00
tblTripsAndVMT	WorkerTripNumber	316.00	14.00
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40

tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	HO_TL	12.90	8.70
tblVehicleTrips	HO_TL	12.90	8.70
tblVehicleTrips	HO_TL	12.90	8.70
tblVehicleTrips	HS_TL	9.60	5.90
tblVehicleTrips	HS_TL	9.60	5.90
tblVehicleTrips	HS_TL	9.60	5.90
tblVehicleTrips	HW_TL	19.80	14.70
tblVehicleTrips	HW_TL	19.80	14.70
tblVehicleTrips	HW_TL	19.80	14.70

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					
2017	2,185.2279	2.4454	5.0959	0.0106	0.5870	0.1785	0.7656	0.1557	0.1781	0.3338	0.0000	899.7604	899.7604	0.0618	0.0000	901.0576
2018	546.6360	2.2422	4.7874	0.0106	0.5870	0.1556	0.7426	0.1557	0.1552	0.3109	0.0000	877.1329	877.1329	0.0565	0.0000	878.3202
2019	402.5389	2.2635	7.1599	0.0179	1.1590	0.1385	1.2975	0.3073	0.1378	0.4451	0.0000	1,411.4480	1,411.4480	0.0788	0.0000	1,413.1022
2020	402.6791	2.3543	10.2033	0.0282	1.9568	0.1271	2.0839	0.5189	0.1259	0.6448	0.0000	2,112.6525	2,112.6525	0.1098	0.0000	2,114.9592
2021	1,523.0129	1.6907	3.8752	9.5800e-003	0.5118	0.0983	0.6101	0.1357	0.0980	0.2337	0.0000	752.8981	752.8981	0.0414	0.0000	753.7665
2022	2,956.0413	1.4671	2.5529	5.5000e-003	0.1957	0.0833	0.2790	0.0519	0.0832	0.1351	0.0000	458.7156	458.7156	0.0264	0.0000	459.2698
2023	6,281.2859	1.3411	2.2927	4.7200e-003	0.1355	0.0719	0.2074	0.0359	0.0718	0.1078	0.0000	402.2692	402.2692	0.0222	0.0000	402.7354
2024	2,956.0162	1.2749	2.5225	5.7100e-003	0.2107	0.0627	0.2734	0.0559	0.0625	0.1184	0.0000	468.0294	468.0294	0.0240	0.0000	468.5328
Total	**17,253.4381**	**15.0793**	**38.4897**	**0.0928**	**5.3435**	**0.9159**	**6.2594**	**1.4170**	**0.9126**	**2.3296**	**0.0000**	**7,382.9060**	**7,382.9060**	**0.4208**	**0.0000**	**7,391.7436**

2.1 Overall Construction (Maximum Daily Emission)

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					
2017	2,185.2279	2.4454	5.0959	0.0106	0.5870	0.1785	0.7656	0.1557	0.1781	0.3338	0.0000	899.7604	899.7604	0.0618	0.0000	901.0576
2018	546.6360	2.2422	4.7874	0.0106	0.5870	0.1556	0.7426	0.1557	0.1552	0.3109	0.0000	877.1329	877.1329	0.0565	0.0000	878.3202
2019	402.5389	2.2635	7.1599	0.0179	1.1590	0.1385	1.2975	0.3073	0.1378	0.4451	0.0000	1,411.4480	1,411.4480	0.0788	0.0000	1,413.1022
2020	402.6791	2.3543	10.2033	0.0282	1.9568	0.1271	2.0839	0.5189	0.1259	0.6448	0.0000	2,112.6525	2,112.6525	0.1098	0.0000	2,114.9592
2021	1,523.0129	1.6907	3.8752	9.5800e-003	0.5118	0.0983	0.6101	0.1357	0.0980	0.2337	0.0000	752.8981	752.8981	0.0414	0.0000	753.7665
2022	2,956.0413	1.4671	2.5529	5.5000e-003	0.1957	0.0833	0.2790	0.0519	0.0832	0.1351	0.0000	458.7156	458.7156	0.0264	0.0000	459.2698
2023	6,281.2859	1.3411	2.2927	4.7200e-003	0.1355	0.0719	0.2074	0.0359	0.0718	0.1078	0.0000	402.2692	402.2692	0.0222	0.0000	402.7354
2024	2,956.0162	1.2749	2.5225	5.7100e-003	0.2107	0.0627	0.2734	0.0559	0.0625	0.1184	0.0000	468.0294	468.0294	0.0240	0.0000	468.5328
Total	**17,253.4381**	**15.0793**	**38.4897**	**0.0928**	**5.3435**	**0.9159**	**6.2594**	**1.4170**	**0.9126**	**2.3296**	**0.0000**	**7,382.9060**	**7,382.9060**	**0.4208**	**0.0000**	**7,391.7436**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	78.7820	174.5806	828.6905	3.0599	196.3973	4.0719	200.4691	52.5371	3.7573	56.2945		227,577.4626	227,577.4626	7.2882		227,730.5143
Total	**577.8863**	**195.1944**	**1,754.3388**	**4.3800**	**196.3973**	**125.7193**	**322.1166**	**52.5371**	**125.3859**	**177.9231**	**14,743.5296**	**267,064.2017**	**281,807.7313**	**51.6918**	**1.2009**	**283,265.5347**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	78.7820	174.5806	828.6905	3.0599	196.3973	4.0719	200.4691	52.5371	3.7573	56.2945		227,577.4626	227,577.4626	7.2882		227,730.5143
Total	**577.8863**	**195.1944**	**1,754.3388**	**4.3800**	**196.3973**	**125.7193**	**322.1166**	**52.5371**	**125.3859**	**177.9231**	**14,743.5296**	**267,064.2017**	**281,807.7313**	**51.6918**	**1.2009**	**283,265.5347**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Architectural Coating 1	Architectural Coating	10/1/2017	11/1/2017	5	23	
2	Architectural Coating 2	Architectural Coating	1/1/2018	5/8/2018	5	92	
3	Architectural Coating 3	Architectural Coating	1/1/2019	6/24/2019	5	125	
4	Architectural Coating 4	Architectural Coating	1/1/2020	6/23/2020	5	125	
5	Architectural Coating 5	Architectural Coating	1/1/2021	2/16/2021	5	33	
6	Architectural Coating 6	Architectural Coating	1/1/2022	1/25/2022	5	17	
7	Architectural Coating 7	Architectural Coating	1/1/2023	1/11/2023	5	8	
8	Architectural Coating 8	Architectural Coating	1/1/2024	1/23/2024	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 3,736,530; Residential Outdoor: 1,245,510; Non-Residential Indoor: 2,318,201; Non-Residential Outdoor: 772,733 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating 1	Air Compressors	1	6.00	78	0.48
Architectural Coating 2	Air Compressors	1	6.00	78	0.48
Architectural Coating 3	Air Compressors	1	6.00	78	0.48
Architectural Coating 4	Air Compressors	1	6.00	78	0.48
Architectural Coating 5	Air Compressors	1	6.00	78	0.48
Architectural Coating 6	Air Compressors	1	6.00	78	0.48
Architectural Coating 7	Air Compressors	1	6.00	78	0.48
Architectural Coating 8	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating 1	1	39.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 2	1	39.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 3	1	77.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 4	1	130.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 5	1	34.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 6	1	13.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 7	1	9.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 8	1	14.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Architectural Coating 1 - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2,184.7193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**2,185.0517**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.1762	0.2604	3.2279	7.6000e-003	0.5870	5.2100e-003	0.5922	0.1557	4.8000e-003	0.1605		618.3123	618.3123	0.0321		618.9855
Total	**0.1762**	**0.2604**	**3.2279**	**7.6000e-003**	**0.5870**	**5.2100e-003**	**0.5922**	**0.1557**	**4.8000e-003**	**0.1605**		**618.3123**	**618.3123**	**0.0321**		**618.9855**

3.2 Architectural Coating 1 - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2,184.7193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**2,185.0517**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.1762	0.2604	3.2279	7.6000e-003	0.5870	5.2100e-003	0.5922	0.1557	4.8000e-003	0.1605		618.3123	618.3123	0.0321		618.9855
Total	**0.1762**	**0.2604**	**3.2279**	**7.6000e-003**	**0.5870**	**5.2100e-003**	**0.5922**	**0.1557**	**4.8000e-003**	**0.1605**		**618.3123**	**618.3123**	**0.0321**		**618.9855**

3.3 Architectural Coating 2 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	546.1798					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**546.4785**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	0.1575	0.2364	2.9332	7.5900e-003	0.5870	5.0400e-003	0.5921	0.1557	4.6600e-003	0.1603		595.6844	595.6844	0.0298		596.3100
Total	**0.1575**	**0.2364**	**2.9332**	**7.5900e-003**	**0.5870**	**5.0400e-003**	**0.5921**	**0.1557**	**4.6600e-003**	**0.1603**		**595.6844**	**595.6844**	**0.0298**		**596.3100**

3.3 Architectural Coating 2 - 2018

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	546.1798					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**546.4785**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	0.1575	0.2364	2.9332	7.5900e-003	0.5870	5.0400e-003	0.5921	0.1557	4.6600e-003	0.1603		595.6844	595.6844	0.0298		596.3100
Total	**0.1575**	**0.2364**	**2.9332**	**7.5900e-003**	**0.5870**	**5.0400e-003**	**0.5921**	**0.1557**	**4.6600e-003**	**0.1603**		**595.6844**	**595.6844**	**0.0298**		**596.3100**

3.4 Architectural Coating 3 - 2019

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	401.9884					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		281.9473
Total	**402.2548**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**281.9473**

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	0.2841	0.4281	5.3185	0.0149	1.1590	9.6900e-003	1.1687	0.3073	8.9800e-003	0.3163		1,129.9999	1,129.9999	0.0550		1,131.1549
Total	**0.2841**	**0.4281**	**5.3185**	**0.0149**	**1.1590**	**9.6900e-003**	**1.1687**	**0.3073**	**8.9800e-003**	**0.3163**		**1,129.9999**	**1,129.9999**	**0.0550**		**1,131.1549**

3.4 Architectural Coating 3 - 2019

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	401.9884					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		281.9473
Total	**402.2548**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**281.9473**

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	0.2841	0.4281	5.3185	0.0149	1.1590	9.6900e-003	1.1687	0.3073	8.9800e-003	0.3163		1,129.9999	1,129.9999	0.0550		1,131.1549
Total	**0.2841**	**0.4281**	**5.3185**	**0.0149**	**1.1590**	**9.6900e-003**	**1.1687**	**0.3073**	**8.9800e-003**	**0.3163**		**1,129.9999**	**1,129.9999**	**0.0550**		**1,131.1549**

3.5 Architectural Coating 4 - 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					
Archit. Coating	401.9884					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9057
Total	**402.2305**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9057**

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	0.4486	0.6704	8.3719	0.0252	1.9568	0.0162	1.9730	0.5189	0.0150	0.5339		1,831.2045	1,831.2045	0.0881		1,833.0536
Total	**0.4486**	**0.6704**	**8.3719**	**0.0252**	**1.9568**	**0.0162**	**1.9730**	**0.5189**	**0.0150**	**0.5339**		**1,831.2045**	**1,831.2045**	**0.0881**		**1,833.0536**

3.5 Architectural Coating 4 - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	401.9884					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9057
Total	**402.2305**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9057**

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	0.4486	0.6704	8.3719	0.0252	1.9568	0.0162	1.9730	0.5189	0.0150	0.5339		1,831.2045	1,831.2045	0.0881		1,833.0536
Total	**0.4486**	**0.6704**	**8.3719**	**0.0252**	**1.9568**	**0.0162**	**1.9730**	**0.5189**	**0.0150**	**0.5339**		**1,831.2045**	**1,831.2045**	**0.0881**		**1,833.0536**

3.6 Architectural Coating 5 - 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					
Archit. Coating	1,522.6832					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537
Total	**1,522.9021**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.8537**

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	0.1108	0.1638	2.0576	6.6100e-003	0.5118	4.2100e-003	0.5160	0.1357	3.9100e-003	0.1396		471.4500	471.4500	0.0220		471.9128
Total	**0.1108**	**0.1638**	**2.0576**	**6.6100e-003**	**0.5118**	**4.2100e-003**	**0.5160**	**0.1357**	**3.9100e-003**	**0.1396**		**471.4500**	**471.4500**	**0.0220**		**471.9128**

3.6 Architectural Coating 5 - 2021

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	1,522.6832					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.8537
Total	**1,522.9021**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.8537**

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	0.1108	0.1638	2.0576	6.6100e-003	0.5118	4.2100e-003	0.5160	0.1357	3.9100e-003	0.1396		471.4500	471.4500	0.0220		471.9128
Total	**0.1108**	**0.1638**	**2.0576**	**6.6100e-003**	**0.5118**	**4.2100e-003**	**0.5160**	**0.1357**	**3.9100e-003**	**0.1396**		**471.4500**	**471.4500**	**0.0220**		**471.9128**

3.7 Architectural Coating 6 - 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	2,955.7968					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		281.8329
Total	**2,956.0013**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.8329**

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	0.0400	0.0587	0.7394	2.5300e-003	0.1957	1.6000e-003	0.1973	0.0519	1.4900e-003	0.0534		177.2675	177.2675	8.0700e-003		177.4369
Total	**0.0400**	**0.0587**	**0.7394**	**2.5300e-003**	**0.1957**	**1.6000e-003**	**0.1973**	**0.0519**	**1.4900e-003**	**0.0534**		**177.2675**	**177.2675**	**8.0700e-003**		**177.4369**

3.7 Architectural Coating 6 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2,955.7968					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		281.8329
Total	**2,956.0013**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.8329**

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	0.0400	0.0587	0.7394	2.5300e-003	0.1957	1.6000e-003	0.1973	0.0519	1.4900e-003	0.0534		177.2675	177.2675	8.0700e-003		177.4369
Total	**0.0400**	**0.0587**	**0.7394**	**2.5300e-003**	**0.1957**	**1.6000e-003**	**0.1973**	**0.0519**	**1.4900e-003**	**0.0534**		**177.2675**	**177.2675**	**8.0700e-003**		**177.4369**

3.8 Architectural Coating 7 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6,281.0681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8017
Total	**6,281.2598**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8017**

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	0.0262	0.0381	0.4816	1.7500e-003	0.1355	1.1000e-003	0.1366	0.0359	1.0200e-003	0.0370		120.8212	120.8212	5.3600e-003		120.9338
Total	**0.0262**	**0.0381**	**0.4816**	**1.7500e-003**	**0.1355**	**1.1000e-003**	**0.1366**	**0.0359**	**1.0200e-003**	**0.0370**		**120.8212**	**120.8212**	**5.3600e-003**		**120.9338**

3.8 Architectural Coating 7 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6,281.0681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8017
Total	**6,281.2598**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8017**

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	0.0262	0.0381	0.4816	1.7500e-003	0.1355	1.1000e-003	0.1366	0.0359	1.0200e-003	0.0370		120.8212	120.8212	5.3600e-003		120.9338
Total	**0.0262**	**0.0381**	**0.4816**	**1.7500e-003**	**0.1355**	**1.1000e-003**	**0.1366**	**0.0359**	**1.0200e-003**	**0.0370**		**120.8212**	**120.8212**	**5.3600e-003**		**120.9338**

3.9 Architectural Coating 8 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2,955.7968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.7809
Total	**2,955.9775**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.7809**

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	0.0387	0.0561	0.7124	2.7400e-003	0.2107	1.7300e-003	0.2125	0.0559	1.6100e-003	0.0575		186.5813	186.5813	8.1300e-003		186.7520
Total	**0.0387**	**0.0561**	**0.7124**	**2.7400e-003**	**0.2107**	**1.7300e-003**	**0.2125**	**0.0559**	**1.6100e-003**	**0.0575**		**186.5813**	**186.5813**	**8.1300e-003**		**186.7520**

3.9 Architectural Coating 8 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2,955.7968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.7809
Total	**2,955.9775**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.7809**

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	0.0387	0.0561	0.7124	2.7400e-003	0.2107	1.7300e-003	0.2125	0.0559	1.6100e-003	0.0575		186.5813	186.5813	8.1300e-003		186.7520
Total	**0.0387**	**0.0561**	**0.7124**	**2.7400e-003**	**0.2107**	**1.7300e-003**	**0.2125**	**0.0559**	**1.6100e-003**	**0.0575**		**186.5813**	**186.5813**	**8.1300e-003**		**186.7520**

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	78.7820	174.5806	828.6905	3.0599	196.3973	4.0719	200.4691	52.5371	3.7573	56.2945		227,577.4626	227,577.4626	7.2882		227,730.5143
Unmitigated	78.7820	174.5806	828.6905	3.0599	196.3973	4.0719	200.4691	52.5371	3.7573	56.2945		227,577.4626	227,577.4626	7.2882		227,730.5143

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	25,622	25,622
Condo/Townhouse	4,613.00	5,012.00	4249.00	15,780,408	15,780,408
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	12,060,740	12,060,740
Elementary School	967.50	0.00	0.00	2,381,697	2,381,697
General Office Building	4,789.35	1,030.95	426.30	11,691,142	11,691,142
Health Club	82.33	52.18	66.83	162,126	162,126
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	25,081,204	25,081,204
Single Family Housing	3,244.23	3,417.12	2973.03	11,038,035	11,038,035
Strip Mall	664.80	630.60	306.45	1,158,150	1,158,150
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	79,379,125	79,379,125

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
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

4.4 Fleet Mix

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	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
NaturalGas Unmitigated	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461

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					
Condo/Townhouse	27628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21115.7	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13026.2	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	128.836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1304.11	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27678.1	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	69.863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	21.1157	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13.0262	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	0.128836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1.30411	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27.6781	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	0.069863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Condo/Townhouse	27.628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Unmitigated	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Architectural Coating

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only construction run, no need to factor in RPS

Land Use - Based on Project Description provided by the Client

Construction Phase - Based on Client provided information.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - From yearly analysis

On-road Fugitive Dust -

Architectural Coating - Updated to include Parking Lot SQFT for Architectural Coating

Vehicle Trips -

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	764,802.00	772,733.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,294,405.00	2,318,201.00
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstructionPhase	NumDays	330.00	23.00
tblConstructionPhase	NumDays	330.00	92.00
tblConstructionPhase	NumDays	330.00	125.00
tblConstructionPhase	NumDays	330.00	125.00
tblConstructionPhase	NumDays	330.00	33.00
tblConstructionPhase	NumDays	330.00	17.00
tblConstructionPhase	NumDays	330.00	8.00
tblConstructionPhase	NumDays	330.00	17.00
tblConstructionPhase	PhaseEndDate	3/9/2018	5/8/2018
tblConstructionPhase	PhaseEndDate	10/30/2018	6/24/2019
tblConstructionPhase	PhaseEndDate	12/16/2019	6/23/2020
tblConstructionPhase	PhaseEndDate	8/7/2020	2/16/2021
tblConstructionPhase	PhaseEndDate	3/11/2021	1/25/2022
tblConstructionPhase	PhaseEndDate	2/4/2022	1/11/2023
tblConstructionPhase	PhaseEndDate	2/3/2023	1/23/2024
tblConstructionPhase	PhaseStartDate	11/2/2017	1/1/2018
tblConstructionPhase	PhaseStartDate	5/9/2018	1/1/2019
tblConstructionPhase	PhaseStartDate	6/25/2019	1/1/2020
tblConstructionPhase	PhaseStartDate	6/24/2020	1/1/2021
tblConstructionPhase	PhaseStartDate	2/17/2021	1/1/2022
tblConstructionPhase	PhaseStartDate	1/26/2022	1/1/2023
tblConstructionPhase	PhaseStartDate	1/12/2023	1/1/2024
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53

tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	316.00	39.00
tblTripsAndVMT	WorkerTripNumber	316.00	39.00
tblTripsAndVMT	WorkerTripNumber	316.00	77.00
tblTripsAndVMT	WorkerTripNumber	316.00	130.00
tblTripsAndVMT	WorkerTripNumber	316.00	34.00
tblTripsAndVMT	WorkerTripNumber	316.00	13.00
tblTripsAndVMT	WorkerTripNumber	316.00	9.00
tblTripsAndVMT	WorkerTripNumber	316.00	14.00
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40

tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CC_TL	10.10	8.40
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CNW_TL	7.90	6.90
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	CW_TL	18.50	16.60
tblVehicleTrips	HO_TL	12.90	8.70
tblVehicleTrips	HO_TL	12.90	8.70
tblVehicleTrips	HO_TL	12.90	8.70
tblVehicleTrips	HS_TL	9.60	5.90
tblVehicleTrips	HS_TL	9.60	5.90
tblVehicleTrips	HS_TL	9.60	5.90
tblVehicleTrips	HW_TL	19.80	14.70
tblVehicleTrips	HW_TL	19.80	14.70
tblVehicleTrips	HW_TL	19.80	14.70

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					
2017	2,185.2328	2.4739	4.8604	0.0101	0.5870	0.1785	0.7656	0.1557	0.1781	0.3338	0.0000	864.8924	864.8924	0.0618	0.0000	866.1897
2018	546.6399	2.2680	4.5610	0.0101	0.5870	0.1556	0.7426	0.1557	0.1552	0.3109	0.0000	843.4963	843.4963	0.0565	0.0000	844.6835
2019	402.5458	2.3102	6.7346	0.0171	1.1590	0.1385	1.2975	0.3073	0.1378	0.4451	0.0000	1,347.5690	1,347.5690	0.0788	0.0000	1,349.2232
2020	402.6898	2.4271	9.5208	0.0267	1.9568	0.1271	2.0839	0.5189	0.1259	0.6448	0.0000	2,009.0092	2,009.0092	0.1098	0.0000	2,011.3159
2021	1,523.0155	1.7084	3.7045	9.2000e-003	0.5118	0.0983	0.6101	0.1357	0.0980	0.2337	0.0000	726.1772	726.1772	0.0414	0.0000	727.0457
2022	2,956.0423	1.4735	2.4906	5.3500e-003	0.1957	0.0833	0.2790	0.0519	0.0832	0.1351	0.0000	448.6555	448.6555	0.0264	0.0000	449.2097
2023	6,281.2865	1.3452	2.2514	4.6200e-003	0.1355	0.0719	0.2074	0.0359	0.0718	0.1078	0.0000	395.4030	395.4030	0.0222	0.0000	395.8692
2024	2,956.0171	1.2809	2.4603	5.5500e-003	0.2107	0.0627	0.2734	0.0559	0.0625	0.1184	0.0000	457.3966	457.3966	0.0240	0.0000	457.9000
Total	**17,253.4697**	**15.2872**	**36.5837**	**0.0888**	**5.3435**	**0.9159**	**6.2594**	**1.4170**	**0.9126**	**2.3296**	**0.0000**	**7,092.5993**	**7,092.5993**	**0.4208**	**0.0000**	**7,101.4369**

2.1 Overall Construction (Maximum Daily Emission)

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					
2017	2,185.2328	2.4739	4.8604	0.0101	0.5870	0.1785	0.7656	0.1557	0.1781	0.3338	0.0000	864.8924	864.8924	0.0618	0.0000	866.1897
2018	546.6399	2.2680	4.5610	0.0101	0.5870	0.1556	0.7426	0.1557	0.1552	0.3109	0.0000	843.4963	843.4963	0.0565	0.0000	844.6835
2019	402.5458	2.3102	6.7346	0.0171	1.1590	0.1385	1.2975	0.3073	0.1378	0.4451	0.0000	1,347.5690	1,347.5690	0.0788	0.0000	1,349.2232
2020	402.6898	2.4271	9.5208	0.0267	1.9568	0.1271	2.0839	0.5189	0.1259	0.6448	0.0000	2,009.0092	2,009.0092	0.1098	0.0000	2,011.3159
2021	1,523.0155	1.7084	3.7045	9.2000e-003	0.5118	0.0983	0.6101	0.1357	0.0980	0.2337	0.0000	726.1772	726.1772	0.0414	0.0000	727.0457
2022	2,956.0423	1.4735	2.4906	5.3500e-003	0.1957	0.0833	0.2790	0.0519	0.0832	0.1351	0.0000	448.6555	448.6555	0.0264	0.0000	449.2097
2023	6,281.2865	1.3452	2.2514	4.6200e-003	0.1355	0.0719	0.2074	0.0359	0.0718	0.1078	0.0000	395.4030	395.4030	0.0222	0.0000	395.8692
2024	2,956.0171	1.2809	2.4603	5.5500e-003	0.2107	0.0627	0.2734	0.0559	0.0625	0.1184	0.0000	457.3966	457.3966	0.0240	0.0000	457.9000
Total	**17,253.4697**	**15.2872**	**36.5837**	**0.0888**	**5.3435**	**0.9159**	**6.2594**	**1.4170**	**0.9126**	**2.3296**	**0.0000**	**7,092.5993**	**7,092.5993**	**0.4208**	**0.0000**	**7,101.4369**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	82.6062	183.6567	845.5007	2.9227	196.3973	4.0855	200.4828	52.5371	3.7699	56.3070		218,058.9303	218,058.9303	7.3008		218,212.2460
Total	**581.7105**	**204.2705**	**1,771.1490**	**4.2429**	**196.3973**	**125.7330**	**322.1303**	**52.5371**	**125.3985**	**177.9356**	**14,743.5296**	**257,545.6694**	**272,289.1990**	**51.7044**	**1.2009**	**273,747.2663**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	82.6062	183.6567	845.5007	2.9227	196.3973	4.0855	200.4828	52.5371	3.7699	56.3070		218,058.9303	218,058.9303	7.3008		218,212.2460
Total	**581.7105**	**204.2705**	**1,771.1490**	**4.2429**	**196.3973**	**125.7330**	**322.1303**	**52.5371**	**125.3985**	**177.9356**	**14,743.5296**	**257,545.6694**	**272,289.1990**	**51.7044**	**1.2009**	**273,747.2663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Architectural Coating 1	Architectural Coating	10/1/2017	11/1/2017	5	23	
2	Architectural Coating 2	Architectural Coating	1/1/2018	5/8/2018	5	92	
3	Architectural Coating 3	Architectural Coating	1/1/2019	6/24/2019	5	125	
4	Architectural Coating 4	Architectural Coating	1/1/2020	6/23/2020	5	125	
5	Architectural Coating 5	Architectural Coating	1/1/2021	2/16/2021	5	33	
6	Architectural Coating 6	Architectural Coating	1/1/2022	1/25/2022	5	17	
7	Architectural Coating 7	Architectural Coating	1/1/2023	1/11/2023	5	8	
8	Architectural Coating 8	Architectural Coating	1/1/2024	1/23/2024	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 3,736,530; Residential Outdoor: 1,245,510; Non-Residential Indoor: 2,318,201; Non-Residential Outdoor: 772,733 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating 1	Air Compressors	1	6.00	78	0.48
Architectural Coating 2	Air Compressors	1	6.00	78	0.48
Architectural Coating 3	Air Compressors	1	6.00	78	0.48
Architectural Coating 4	Air Compressors	1	6.00	78	0.48
Architectural Coating 5	Air Compressors	1	6.00	78	0.48
Architectural Coating 6	Air Compressors	1	6.00	78	0.48
Architectural Coating 7	Air Compressors	1	6.00	78	0.48
Architectural Coating 8	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating 1	1	39.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 2	1	39.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 3	1	77.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 4	1	130.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 5	1	34.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 6	1	13.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 7	1	9.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating 8	1	14.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Architectural Coating 1 - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2,184.7193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**2,185.0517**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.1812	0.2889	2.9923	7.1600e-003	0.5870	5.2100e-003	0.5922	0.1557	4.8000e-003	0.1605		583.4444	583.4444	0.0321		584.1176
Total	**0.1812**	**0.2889**	**2.9923**	**7.1600e-003**	**0.5870**	**5.2100e-003**	**0.5922**	**0.1557**	**4.8000e-003**	**0.1605**		**583.4444**	**583.4444**	**0.0321**		**584.1176**

3.2 Architectural Coating 1 - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2,184.7193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**2,185.0517**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.1812	0.2889	2.9923	7.1600e-003	0.5870	5.2100e-003	0.5922	0.1557	4.8000e-003	0.1605		583.4444	583.4444	0.0321		584.1176
Total	**0.1812**	**0.2889**	**2.9923**	**7.1600e-003**	**0.5870**	**5.2100e-003**	**0.5922**	**0.1557**	**4.8000e-003**	**0.1605**		**583.4444**	**583.4444**	**0.0321**		**584.1176**

3.3 Architectural Coating 2 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	546.1798					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**546.4785**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	0.1615	0.2622	2.7068	7.1600e-003	0.5870	5.0400e-003	0.5921	0.1557	4.6600e-003	0.1603		562.0478	562.0478	0.0298		562.6734
Total	**0.1615**	**0.2622**	**2.7068**	**7.1600e-003**	**0.5870**	**5.0400e-003**	**0.5921**	**0.1557**	**4.6600e-003**	**0.1603**		**562.0478**	**562.0478**	**0.0298**		**562.6734**

3.3 Architectural Coating 2 - 2018

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	546.1798					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**546.4785**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	0.1615	0.2622	2.7068	7.1600e-003	0.5870	5.0400e-003	0.5921	0.1557	4.6600e-003	0.1603		562.0478	562.0478	0.0298		562.6734
Total	**0.1615**	**0.2622**	**2.7068**	**7.1600e-003**	**0.5870**	**5.0400e-003**	**0.5921**	**0.1557**	**4.6600e-003**	**0.1603**		**562.0478**	**562.0478**	**0.0298**		**562.6734**

3.4 Architectural Coating 3 - 2019

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	401.9884					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		281.9473
Total	**402.2548**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**281.9473**

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	0.2910	0.4748	4.8933	0.0141	1.1590	9.6900e-003	1.1687	0.3073	8.9800e-003	0.3163		1,066.1210	1,066.1210	0.0550		1,067.2760
Total	**0.2910**	**0.4748**	**4.8933**	**0.0141**	**1.1590**	**9.6900e-003**	**1.1687**	**0.3073**	**8.9800e-003**	**0.3163**		**1,066.1210**	**1,066.1210**	**0.0550**		**1,067.2760**

3.4 Architectural Coating 3 - 2019

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	401.9884					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		281.9473
Total	**402.2548**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**281.9473**

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	0.2910	0.4748	4.8933	0.0141	1.1590	9.6900e-003	1.1687	0.3073	8.9800e-003	0.3163		1,066.1210	1,066.1210	0.0550		1,067.2760
Total	**0.2910**	**0.4748**	**4.8933**	**0.0141**	**1.1590**	**9.6900e-003**	**1.1687**	**0.3073**	**8.9800e-003**	**0.3163**		**1,066.1210**	**1,066.1210**	**0.0550**		**1,067.2760**

3.5 Architectural Coating 4 - 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					
Archit. Coating	401.9884					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9057
Total	**402.2305**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9057**

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	0.4593	0.7433	7.6894	0.0238	1.9568	0.0162	1.9730	0.5189	0.0150	0.5339		1,727.5611	1,727.5611	0.0881		1,729.4103
Total	**0.4593**	**0.7433**	**7.6894**	**0.0238**	**1.9568**	**0.0162**	**1.9730**	**0.5189**	**0.0150**	**0.5339**		**1,727.5611**	**1,727.5611**	**0.0881**		**1,729.4103**

3.5 Architectural Coating 4 - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	401.9884					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9057
Total	**402.2305**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9057**

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	0.4593	0.7433	7.6894	0.0238	1.9568	0.0162	1.9730	0.5189	0.0150	0.5339		1,727.5611	1,727.5611	0.0881		1,729.4103
Total	**0.4593**	**0.7433**	**7.6894**	**0.0238**	**1.9568**	**0.0162**	**1.9730**	**0.5189**	**0.0150**	**0.5339**		**1,727.5611**	**1,727.5611**	**0.0881**		**1,729.4103**

3.6 Architectural Coating 5 - 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					
Archit. Coating	1,522.6832					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537
Total	**1,522.9021**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.8537**

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	0.1134	0.1815	1.8870	6.2300e-003	0.5118	4.2100e-003	0.5160	0.1357	3.9100e-003	0.1396		444.7292	444.7292	0.0220		445.1920
Total	**0.1134**	**0.1815**	**1.8870**	**6.2300e-003**	**0.5118**	**4.2100e-003**	**0.5160**	**0.1357**	**3.9100e-003**	**0.1396**		**444.7292**	**444.7292**	**0.0220**		**445.1920**

3.6 Architectural Coating 5 - 2021

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	1,522.6832					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.8537
Total	**1,522.9021**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.8537**

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	0.1134	0.1815	1.8870	6.2300e-003	0.5118	4.2100e-003	0.5160	0.1357	3.9100e-003	0.1396		444.7292	444.7292	0.0220		445.1920
Total	**0.1134**	**0.1815**	**1.8870**	**6.2300e-003**	**0.5118**	**4.2100e-003**	**0.5160**	**0.1357**	**3.9100e-003**	**0.1396**		**444.7292**	**444.7292**	**0.0220**		**445.1920**

3.7 Architectural Coating 6 - 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	2,955.7968					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		281.8329
Total	**2,956.0013**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.8329**

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	0.0410	0.0650	0.6770	2.3800e-003	0.1957	1.6000e-003	0.1973	0.0519	1.4900e-003	0.0534		167.2075	167.2075	8.0700e-003		167.3769
Total	**0.0410**	**0.0650**	**0.6770**	**2.3800e-003**	**0.1957**	**1.6000e-003**	**0.1973**	**0.0519**	**1.4900e-003**	**0.0534**		**167.2075**	**167.2075**	**8.0700e-003**		**167.3769**

3.7 Architectural Coating 6 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2,955.7968					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		281.8329
Total	**2,956.0013**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.8329**

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	0.0410	0.0650	0.6770	2.3800e-003	0.1957	1.6000e-003	0.1973	0.0519	1.4900e-003	0.0534		167.2075	167.2075	8.0700e-003		167.3769
Total	**0.0410**	**0.0650**	**0.6770**	**2.3800e-003**	**0.1957**	**1.6000e-003**	**0.1973**	**0.0519**	**1.4900e-003**	**0.0534**		**167.2075**	**167.2075**	**8.0700e-003**		**167.3769**

3.8 Architectural Coating 7 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6,281.0681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8017
Total	**6,281.2598**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8017**

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	0.0268	0.0422	0.4403	1.6500e-003	0.1355	1.1000e-003	0.1366	0.0359	1.0200e-003	0.0370		113.9550	113.9550	5.3600e-003		114.0676
Total	**0.0268**	**0.0422**	**0.4403**	**1.6500e-003**	**0.1355**	**1.1000e-003**	**0.1366**	**0.0359**	**1.0200e-003**	**0.0370**		**113.9550**	**113.9550**	**5.3600e-003**		**114.0676**

3.8 Architectural Coating 7 - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6,281.0681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8017
Total	**6,281.2598**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8017**

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	0.0268	0.0422	0.4403	1.6500e-003	0.1355	1.1000e-003	0.1366	0.0359	1.0200e-003	0.0370		113.9550	113.9550	5.3600e-003		114.0676
Total	**0.0268**	**0.0422**	**0.4403**	**1.6500e-003**	**0.1355**	**1.1000e-003**	**0.1366**	**0.0359**	**1.0200e-003**	**0.0370**		**113.9550**	**113.9550**	**5.3600e-003**		**114.0676**

3.9 Architectural Coating 8 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2,955.7968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.7809
Total	**2,955.9775**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.7809**

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	0.0396	0.0621	0.6502	2.5800e-003	0.2107	1.7300e-003	0.2125	0.0559	1.6100e-003	0.0575		175.9485	175.9485	8.1300e-003		176.1192
Total	**0.0396**	**0.0621**	**0.6502**	**2.5800e-003**	**0.2107**	**1.7300e-003**	**0.2125**	**0.0559**	**1.6100e-003**	**0.0575**		**175.9485**	**175.9485**	**8.1300e-003**		**176.1192**

3.9 Architectural Coating 8 - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2,955.7968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.7809
Total	**2,955.9775**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.7809**

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	0.0396	0.0621	0.6502	2.5800e-003	0.2107	1.7300e-003	0.2125	0.0559	1.6100e-003	0.0575		175.9485	175.9485	8.1300e-003		176.1192
Total	**0.0396**	**0.0621**	**0.6502**	**2.5800e-003**	**0.2107**	**1.7300e-003**	**0.2125**	**0.0559**	**1.6100e-003**	**0.0575**		**175.9485**	**175.9485**	**8.1300e-003**		**176.1192**

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	82.6062	183.6567	845.5007	2.9227	196.3973	4.0855	200.4828	52.5371	3.7699	56.3070		218,058.9303	218,058.9303	7.3008		218,212.2460
Unmitigated	82.6062	183.6567	845.5007	2.9227	196.3973	4.0855	200.4828	52.5371	3.7699	56.3070		218,058.9303	218,058.9303	7.3008		218,212.2460

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	25,622	25,622
Condo/Townhouse	4,613.00	5,012.00	4249.00	15,780,408	15,780,408
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	12,060,740	12,060,740
Elementary School	967.50	0.00	0.00	2,381,697	2,381,697
General Office Building	4,789.35	1,030.95	426.30	11,691,142	11,691,142
Health Club	82.33	52.18	66.83	162,126	162,126
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	25,081,204	25,081,204
Single Family Housing	3,244.23	3,417.12	2973.03	11,038,035	11,038,035
Strip Mall	664.80	630.60	306.45	1,158,150	1,158,150
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	79,379,125	79,379,125

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
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

4.4 Fleet Mix

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	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
NaturalGas Unmitigated	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461

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					
Condo/Townhouse	27628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21115.7	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13026.2	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	128.836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1304.11	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27678.1	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	69.863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	27.628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21.1157	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13.0262	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	0.128836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1.30411	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27.6781	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	0.069863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Unmitigated	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Site Prep, Grading & Paving - onsite trucks only

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land Use Type, Unit Amount, and Population based on Newhall provided information.

Construction Phase - Client provided - days of construction phase

Off-road Equipment - Client provided equipment list

Off-road Equipment - Client provided equipment list

Off-road Equipment - Client provided

Off-road Equipment - Client Provided

Off-road Equipment - Client Provided

Trips and VMT - Onsite trucks modeled as worker trips

On-road Fugitive Dust - Offroad equipment modeled as vendor trips, operate on 100% unpaved area

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstructionPhase	NumDays	465.00	250.00
tblConstructionPhase	NumDays	330.00	15.00
tblConstructionPhase	NumDays	330.00	15.00
tblConstructionPhase	NumDays	180.00	30.00
tblConstructionPhase	PhaseEndDate	1/16/2017	3/10/2017
tblConstructionPhase	PhaseEndDate	3/31/2017	9/1/2017
tblConstructionPhase	PhaseStartDate	12/27/2016	2/20/2017
tblConstructionPhase	PhaseStartDate	3/11/2017	8/14/2017
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	HorsePower	162.00	157.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	125.00	89.00

tblOffRoadEquipment	HorsePower	125.00	89.00
tblOffRoadEquipment	HorsePower	130.00	82.00
tblOffRoadEquipment	HorsePower	130.00	82.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	255.00	358.00
tblOffRoadEquipment	HorsePower	361.00	356.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	208.00	82.00
tblOffRoadEquipment	HorsePower	208.00	82.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	400.00	381.00
tblOffRoadEquipment	HorsePower	167.00	196.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.60
tblOffRoadEquipment	UsageHours	8.00	20.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	6.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	8.00	2.00
tblTripsAndVMT	WorkerTripNumber	58.00	6.00
tblTripsAndVMT	WorkerTripNumber	10.00	1.00
tblTripsAndVMT	WorkerTripNumber	10.00	1.00

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					
2015	0.0152	0.1303	0.0783	1.0000e-004	0.3207	0.0108	0.3315	0.0321	9.9400e-003	0.0420	0.0000	9.0286	9.0286	2.6100e-003	0.0000	9.0835
2016	2.7988	33.2740	19.6368	0.0271	13.3215	1.4839	14.8054	2.1857	1.3652	3.5509	0.0000	2,553.8757	2,553.8757	0.7677	0.0000	2,569.9970
2017	0.0607	0.2774	0.1665	2.2000e-004	0.1988	0.0183	0.2170	0.0198	0.0168	0.0366	0.0000	20.1090	20.1090	6.1100e-003	0.0000	20.2373
Total	**2.8746**	**33.6817**	**19.8816**	**0.0274**	**13.8410**	**1.5130**	**15.3540**	**2.2375**	**1.3919**	**3.6295**	**0.0000**	**2,583.0133**	**2,583.0133**	**0.7764**	**0.0000**	**2,599.3177**

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					
2015	0.0152	0.1303	0.0783	1.0000e-004	0.3795	0.0108	0.3903	0.0379	9.9400e-003	0.0478	0.0000	9.0286	9.0286	2.6100e-003	0.0000	9.0834
2016	2.7988	33.2740	19.6368	0.0271	13.5702	1.4839	15.0541	1.6875	1.3652	3.0527	0.0000	2,553.8727	2,553.8727	0.7677	0.0000	2,569.9939
2017	0.0607	0.2774	0.1665	2.2000e-004	0.2435	0.0183	0.2617	0.0243	0.0168	0.0411	0.0000	20.1090	20.1090	6.1100e-003	0.0000	20.2373
Total	**2.8746**	**33.6817**	**19.8816**	**0.0274**	**14.1932**	**1.5130**	**15.7061**	**1.7496**	**1.3919**	**3.1415**	**0.0000**	**2,583.0103**	**2,583.0103**	**0.7764**	**0.0000**	**2,599.3147**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**-2.54**	**0.00**	**-2.29**	**21.81**	**0.00**	**13.44**	**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	tons/yr										MT/yr					
Area	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Energy	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	7,880.7783	7,880.7783	0.3138	0.0909	7,915.5473
Mobile	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Waste						0.0000	0.0000		0.0000	0.0000	385.8858	0.0000	385.8858	22.8052	0.0000	864.7950
Water						0.0000	0.0000		0.0000	0.0000	64.6196	1,194.1152	1,258.7348	6.6919	0.1681	1,451.3676
Total	**33.9677**	**37.9133**	**183.9819**	**0.6187**	**38.8288**	**2.5262**	**41.3550**	**10.4037**	**2.4636**	**12.8673**	**617.6942**	**49,466.7340**	**50,084.4281**	**31.6438**	**0.2703**	**50,832.7470**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Energy	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	7,880.7783	7,880.7783	0.3138	0.0909	7,915.5473
Mobile	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Waste						0.0000	0.0000		0.0000	0.0000	385.8858	0.0000	385.8858	22.8052	0.0000	864.7950
Water						0.0000	0.0000		0.0000	0.0000	64.6196	1,194.1152	1,258.7348	6.6907	0.1678	1,451.2645
Total	**33.9677**	**37.9133**	**183.9819**	**0.6187**	**38.8288**	**2.5262**	**41.3550**	**10.4037**	**2.4636**	**12.8673**	**617.6942**	**49,466.7340**	**50,084.4281**	**31.6426**	**0.2701**	**50,832.6439**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**	**0.09**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2015	1/11/2016	5	30	
2	Grading	Grading	1/12/2016	12/26/2016	5	250	
3	Paving1	Paving	2/20/2017	3/10/2017	5	15	
4	Paving2	Paving	8/14/2017	9/1/2017	5	15	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 2625

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	2	8.00	82	0.43
Site Preparation	Tractors/Loaders/Backhoes	1	6.00	75	0.37
Grading	Crawler Tractors	4	8.00	82	0.43
Grading	Excavators	1	1.60	157	0.38
Grading	Graders	1	8.00	162	0.41
Grading	Off-Highway Trucks	1	4.00	381	0.38
Grading	Other Material Handling Equipment	6	8.00	196	0.40
Grading	Rubber Tired Dozers	1	20.00	358	0.40
Grading	Scrapers	8	8.00	356	0.48
Grading	Tractors/Loaders/Backhoes	1	4.00	75	0.37
Paving1	Graders	1	8.00	162	0.41
Paving1	Pavers	1	8.00	89	0.42
Paving1	Paving Equipment	1	8.00	82	0.36
Paving1	Rollers	1	8.00	84	0.38
Paving2	Graders	1	8.00	162	0.41
Paving2	Pavers	1	8.00	89	0.42
Paving2	Paving Equipment	1	8.00	82	0.36
Paving2	Rollers	1	8.00	84	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	2.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	23	6.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving1	4	1.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving2	4	1.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0159	0.0000	0.0159	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0151	0.1301	0.0761	9.0000e-005		0.0108	0.0108		9.9400e-003	9.9400e-003	0.0000	8.6876	8.6876	2.5900e-003	0.0000	8.7421
Total	**0.0151**	**0.1301**	**0.0761**	**9.0000e-005**	**0.0159**	**0.0108**	**0.0267**	**1.7200e-003**	**9.9400e-003**	**0.0117**	**0.0000**	**8.6876**	**8.6876**	**2.5900e-003**	**0.0000**	**8.7421**

3.2 Site Preparation - 2015

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	1.3000e-004	2.1000e-004	2.2100e-003	0.0000	0.3048	0.0000	0.3048	0.0304	0.0000	0.0304	0.0000	0.3409	0.3409	2.0000e-005	0.0000	0.3414
Total	**1.3000e-004**	**2.1000e-004**	**2.2100e-003**	**0.0000**	**0.3048**	**0.0000**	**0.3048**	**0.0304**	**0.0000**	**0.0304**	**0.0000**	**0.3409**	**0.3409**	**2.0000e-005**	**0.0000**	**0.3414**

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					6.2000e-003	0.0000	6.2000e-003	6.7000e-004	0.0000	6.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0151	0.1301	0.0761	9.0000e-005		0.0108	0.0108		9.9400e-003	9.9400e-003	0.0000	8.6876	8.6876	2.5900e-003	0.0000	8.7421
Total	**0.0151**	**0.1301**	**0.0761**	**9.0000e-005**	**6.2000e-003**	**0.0108**	**0.0170**	**6.7000e-004**	**9.9400e-003**	**0.0106**	**0.0000**	**8.6876**	**8.6876**	**2.5900e-003**	**0.0000**	**8.7421**

3.2 Site Preparation - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	2.1000e-004	2.2100e-003	0.0000	0.3733	0.0000	0.3733	0.0372	0.0000	0.0372	0.0000	0.3409	0.3409	2.0000e-005	0.0000	0.3414
Total	**1.3000e-004**	**2.1000e-004**	**2.2100e-003**	**0.0000**	**0.3733**	**0.0000**	**0.3733**	**0.0372**	**0.0000**	**0.0372**	**0.0000**	**0.3409**	**0.3409**	**2.0000e-005**	**0.0000**	**0.3414**

3.2 Site Preparation - 2016

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					0.0159	0.0000	0.0159	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.4800e-003	0.0386	0.0231	3.0000e-005		3.2000e-003	3.2000e-003		2.9500e-003	2.9500e-003	0.0000	2.6150	2.6150	7.9000e-004	0.0000	2.6316
Total	**4.4800e-003**	**0.0386**	**0.0231**	**3.0000e-005**	**0.0159**	**3.2000e-003**	**0.0191**	**1.7200e-003**	**2.9500e-003**	**4.6700e-003**	**0.0000**	**2.6150**	**2.6150**	**7.9000e-004**	**0.0000**	**2.6316**

3.2 Site Preparation - 2016

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	3.0000e-005	6.0000e-005	6.1000e-004	0.0000	0.0928	0.0000	0.0928	9.2400e-003	0.0000	9.2400e-003	0.0000	0.1003	0.1003	1.0000e-005	0.0000	0.1004
Total	**3.0000e-005**	**6.0000e-005**	**6.1000e-004**	**0.0000**	**0.0928**	**0.0000**	**0.0928**	**9.2400e-003**	**0.0000**	**9.2400e-003**	**0.0000**	**0.1003**	**0.1003**	**1.0000e-005**	**0.0000**	**0.1004**

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					6.2000e-003	0.0000	6.2000e-003	6.7000e-004	0.0000	6.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.4800e-003	0.0386	0.0231	3.0000e-005		3.2000e-003	3.2000e-003		2.9500e-003	2.9500e-003	0.0000	2.6150	2.6150	7.9000e-004	0.0000	2.6316
Total	**4.4800e-003**	**0.0386**	**0.0231**	**3.0000e-005**	**6.2000e-003**	**3.2000e-003**	**9.4000e-003**	**6.7000e-004**	**2.9500e-003**	**3.6200e-003**	**0.0000**	**2.6150**	**2.6150**	**7.9000e-004**	**0.0000**	**2.6316**

3.2 Site Preparation - 2016

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	3.0000e-005	6.0000e-005	6.1000e-004	0.0000	0.1136	0.0000	0.1136	0.0113	0.0000	0.0113	0.0000	0.1003	0.1003	1.0000e-005	0.0000	0.1004
Total	**3.0000e-005**	**6.0000e-005**	**6.1000e-004**	**0.0000**	**0.1136**	**0.0000**	**0.1136**	**0.0113**	**0.0000**	**0.0113**	**0.0000**	**0.1003**	**0.1003**	**1.0000e-005**	**0.0000**	**0.1004**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2738	0.0000	3.2738	1.1847	0.0000	1.1847	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7906	33.2291	19.5479	0.0269		1.4806	1.4806		1.3621	1.3621	0.0000	2,540.4145	2,540.4145	0.7663	0.0000	2,556.5064
Total	**2.7906**	**33.2291**	**19.5479**	**0.0269**	**3.2738**	**1.4806**	**4.7544**	**1.1847**	**1.3621**	**2.5469**	**0.0000**	**2,540.4145**	**2,540.4145**	**0.7663**	**0.0000**	**2,556.5064**

3.3 Grading - 2016

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	3.7200e-003	6.3100e-003	0.0653	1.4000e-004	9.9391	1.0000e-004	9.9392	0.9900	1.0000e-004	0.9901	0.0000	10.7459	10.7459	6.0000e-004	0.0000	10.7586
Total	**3.7200e-003**	**6.3100e-003**	**0.0653**	**1.4000e-004**	**9.9391**	**1.0000e-004**	**9.9392**	**0.9900**	**1.0000e-004**	**0.9901**	**0.0000**	**10.7459**	**10.7459**	**6.0000e-004**	**0.0000**	**10.7586**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2768	0.0000	1.2768	0.4621	0.0000	0.4621	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7906	33.2290	19.5478	0.0269		1.4806	1.4806		1.3621	1.3621	0.0000	2,540.4115	2,540.4115	0.7663	0.0000	2,556.5034
Total	**2.7906**	**33.2290**	**19.5478**	**0.0269**	**1.2768**	**1.4806**	**2.7574**	**0.4621**	**1.3621**	**1.8242**	**0.0000**	**2,540.4115**	**2,540.4115**	**0.7663**	**0.0000**	**2,556.5034**

3.3 Grading - 2016

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	3.7200e-003	6.3100e-003	0.0653	1.4000e-004	12.1736	1.0000e-004	12.1737	1.2134	1.0000e-004	1.2135	0.0000	10.7459	10.7459	6.0000e-004	0.0000	10.7586
Total	**3.7200e-003**	**6.3100e-003**	**0.0653**	**1.4000e-004**	**12.1736**	**1.0000e-004**	**12.1737**	**1.2134**	**1.0000e-004**	**1.2135**	**0.0000**	**10.7459**	**10.7459**	**6.0000e-004**	**0.0000**	**10.7586**

3.4 Paving1 - 2017

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	0.0144	0.1387	0.0827	1.1000e-004		9.1200e-003	9.1200e-003		8.3900e-003	8.3900e-003	0.0000	9.9511	9.9511	3.0500e-003	0.0000	10.0151
Paving	0.0159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0303**	**0.1387**	**0.0827**	**1.1000e-004**		**9.1200e-003**	**9.1200e-003**		**8.3900e-003**	**8.3900e-003**	**0.0000**	**9.9511**	**9.9511**	**3.0500e-003**	**0.0000**	**10.0151**

3.4 Paving1 - 2017

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	3.0000e-005	6.0000e-005	5.9000e-004	0.0000	0.0994	0.0000	0.0994	9.9000e-003	0.0000	9.9000e-003	0.0000	0.1034	0.1034	1.0000e-005	0.0000	0.1036
Total	**3.0000e-005**	**6.0000e-005**	**5.9000e-004**	**0.0000**	**0.0994**	**0.0000**	**0.0994**	**9.9000e-003**	**0.0000**	**9.9000e-003**	**0.0000**	**0.1034**	**0.1034**	**1.0000e-005**	**0.0000**	**0.1036**

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	0.0144	0.1387	0.0827	1.1000e-004		9.1200e-003	9.1200e-003		8.3900e-003	8.3900e-003	0.0000	9.9511	9.9511	3.0500e-003	0.0000	10.0151
Paving	0.0159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0303**	**0.1387**	**0.0827**	**1.1000e-004**		**9.1200e-003**	**9.1200e-003**		**8.3900e-003**	**8.3900e-003**	**0.0000**	**9.9511**	**9.9511**	**3.0500e-003**	**0.0000**	**10.0151**

3.4 Paving1 - 2017

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	3.0000e-005	6.0000e-005	5.9000e-004	0.0000	0.1217	0.0000	0.1217	0.0121	0.0000	0.0121	0.0000	0.1034	0.1034	1.0000e-005	0.0000	0.1036
Total	**3.0000e-005**	**6.0000e-005**	**5.9000e-004**	**0.0000**	**0.1217**	**0.0000**	**0.1217**	**0.0121**	**0.0000**	**0.0121**	**0.0000**	**0.1034**	**0.1034**	**1.0000e-005**	**0.0000**	**0.1036**

3.5 Paving2 - 2017

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	0.0144	0.1387	0.0827	1.1000e-004		9.1200e-003	9.1200e-003		8.3900e-003	8.3900e-003	0.0000	9.9511	9.9511	3.0500e-003	0.0000	10.0151
Paving	0.0159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0303**	**0.1387**	**0.0827**	**1.1000e-004**		**9.1200e-003**	**9.1200e-003**		**8.3900e-003**	**8.3900e-003**	**0.0000**	**9.9511**	**9.9511**	**3.0500e-003**	**0.0000**	**10.0151**

3.5 Paving2 - 2017

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	3.0000e-005	6.0000e-005	5.9000e-004	0.0000	0.0994	0.0000	0.0994	9.9000e-003	0.0000	9.9000e-003	0.0000	0.1034	0.1034	1.0000e-005	0.0000	0.1036
Total	**3.0000e-005**	**6.0000e-005**	**5.9000e-004**	**0.0000**	**0.0994**	**0.0000**	**0.0994**	**9.9000e-003**	**0.0000**	**9.9000e-003**	**0.0000**	**0.1034**	**0.1034**	**1.0000e-005**	**0.0000**	**0.1036**

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	0.0144	0.1387	0.0827	1.1000e-004		9.1200e-003	9.1200e-003		8.3900e-003	8.3900e-003	0.0000	9.9511	9.9511	3.0500e-003	0.0000	10.0151
Paving	0.0159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0303**	**0.1387**	**0.0827**	**1.1000e-004**		**9.1200e-003**	**9.1200e-003**		**8.3900e-003**	**8.3900e-003**	**0.0000**	**9.9511**	**9.9511**	**3.0500e-003**	**0.0000**	**10.0151**

3.5 Paving2 - 2017

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	3.0000e-005	6.0000e-005	5.9000e-004	0.0000	0.1217	0.0000	0.1217	0.0121	0.0000	0.0121	0.0000	0.1034	0.1034	1.0000e-005	0.0000	0.1036
Total	**3.0000e-005**	**6.0000e-005**	**5.9000e-004**	**0.0000**	**0.1217**	**0.0000**	**0.1217**	**0.0121**	**0.0000**	**0.0121**	**0.0000**	**0.1034**	**0.1034**	**1.0000e-005**	**0.0000**	**0.1036**

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	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Unmitigated	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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 Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,072.8188	6,072.8188	0.2792	0.0578	6,096.5848
NaturalGas Mitigated	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	1,807.9595	1,807.9595	0.0347	0.0332	1,818.9625
NaturalGas Unmitigated	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	1,807.9595	1,807.9595	0.0347	0.0332	1,818.9625
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,072.8188	6,072.8188	0.2792	0.0578	6,096.5848

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					
Condo/Townhouse High Rise	7.70723e+006	0.0416	0.3551	0.1511	2.2700e-003		0.0287	0.0287		0.0287	0.0287	0.0000	411.2869	411.2869	7.8800e-003	7.5400e-003	413.7900
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	4.75455e+006	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	253.7209	253.7209	4.8600e-003	4.6500e-003	255.2650
Health Club	47025	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5094	2.5094	5.0000e-005	5.0000e-005	2.5247
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
Regional Shopping Center	476000	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.4012	25.4012	4.9000e-004	4.7000e-004	25.5558
Single Family Housing	1.01025e+007	0.0545	0.4655	0.1981	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	539.1089	539.1089	0.0103	9.8800e-003	542.3898
Strip Mall	25500	1.4000e-004	1.2500e-003	1.0500e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3608	1.3608	3.0000e-005	2.0000e-005	1.3691
Unenclosed Parking with Elevator	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
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
Condo/Townhouse	1.00842e+007	0.0544	0.4647	0.1977	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1324	538.1324	0.0103	9.8700e-003	541.4074
Total		**0.1827**	**1.5788**	**0.7934**	**9.9700e-003**		**0.1262**	**0.1262**		**0.1262**	**0.1262**	**0.0000**	**1,807.9595**	**1,807.9595**	**0.0347**	**0.0332**	**1,818.9625**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse High Rise	7.70723e+006	0.0416	0.3551	0.1511	2.2700e-003		0.0287	0.0287		0.0287	0.0287	0.0000	411.2869	411.2869	7.8800e-003	7.5400e-003	413.7900
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	4.75455e+006	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	253.7209	253.7209	4.8600e-003	4.6500e-003	255.2650
Health Club	47025	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5094	2.5094	5.0000e-005	5.0000e-005	2.5247
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
Regional Shopping Center	476000	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.4012	25.4012	4.9000e-004	4.7000e-004	25.5558
Single Family Housing	1.01025e+007	0.0545	0.4655	0.1981	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	539.1089	539.1089	0.0103	9.8800e-003	542.3898
Strip Mall	25500	1.4000e-004	1.2500e-003	1.0500e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3608	1.3608	3.0000e-005	2.0000e-005	1.3691
Unenclosed Parking with Elevator	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
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
Condo/Townhouse	1.00842e+007	0.0544	0.4647	0.1977	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1324	538.1324	0.0103	9.8700e-003	541.4074
Total		**0.1827**	**1.5788**	**0.7934**	**9.9700e-003**		**0.1262**	**0.1262**		**0.1262**	**0.1262**	**0.0000**	**1,807.9595**	**1,807.9595**	**0.0347**	**0.0332**	**1,818.9625**

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
Condo/Townhouse	3.07852e+006	880.9694	0.0405	8.3800e-003	884.4170
Condo/Townhouse High Rise	2.35287e+006	673.3123	0.0310	6.4000e-003	675.9473
Elementary School	420114	120.2226	5.5300e-003	1.1400e-003	120.6931
General Office Building	6.32055e+006	1,808.7321	0.0831	0.0172	1,815.8107
Health Club	30125	8.6208	4.0000e-004	8.0000e-005	8.6545
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.2476e+006	1,215.5225	0.0559	0.0116	1,220.2795
Single Family Housing	2.47292e+006	707.6679	0.0325	6.7300e-003	710.4374
Strip Mall	227550	65.1173	2.9900e-003	6.2000e-004	65.3721
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,072.8188**	**0.2792**	**0.0578**	**6,096.5848**

5.3 Energy by Land Use - Electricity

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
Condo/Townhouse	3.07852e+006	880.9694	0.0405	8.3800e-003	884.4170
Condo/Townhouse High Rise	2.35287e+006	673.3123	0.0310	6.4000e-003	675.9473
Elementary School	420114	120.2226	5.5300e-003	1.1400e-003	120.6931
General Office Building	6.32055e+006	1,808.7321	0.0831	0.0172	1,815.8107
Health Club	30125	8.6208	4.0000e-004	8.0000e-005	8.6545
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.2476e+006	1,215.5225	0.0559	0.0116	1,220.2795
Single Family Housing	2.47292e+006	707.6679	0.0325	6.7300e-003	710.4374
Strip Mall	227550	65.1173	2.9900e-003	6.2000e-004	65.3721
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,072.8188**	**0.2792**	**0.0578**	**6,096.5848**

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	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Unmitigated	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1556	0.1308	9.8895	0.0157		1.5029	1.5029		1.5027	1.5027	167.1888	321.2795	488.4683	0.4986	0.0114	502.4564
Landscaping	0.4918	0.1873	16.2678	8.6000e-004		0.0901	0.0901		0.0901	0.0901	0.0000	26.5977	26.5977	0.0257	0.0000	27.1365
Total	**20.5620**	**0.3181**	**26.1573**	**0.0166**		**1.5930**	**1.5930**		**1.5928**	**1.5928**	**167.1888**	**347.8772**	**515.0660**	**0.5243**	**0.0114**	**529.5929**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1556	0.1308	9.8895	0.0157		1.5029	1.5029		1.5027	1.5027	167.1888	321.2795	488.4683	0.4986	0.0114	502.4564
Landscaping	0.4918	0.1873	16.2678	8.6000e-004		0.0901	0.0901		0.0901	0.0901	0.0000	26.5977	26.5977	0.0257	0.0000	27.1365
Total	**20.5620**	**0.3181**	**26.1573**	**0.0166**		**1.5930**	**1.5930**		**1.5928**	**1.5928**	**167.1888**	**347.8772**	**515.0660**	**0.5243**	**0.0114**	**529.5929**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,258.7348	6.6907	0.1678	1,451.2645
Unmitigated	1,258.7348	6.6919	0.1681	1,451.3676

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.6723	21.2133	9.8000e-004	2.0000e-004	21.2963
Condo/Townhouse	45.6078 / 28.7528	275.8262	1.4982	0.0376	318.9359
Condo/Townhouse High Rise	34.8574 / 21.9753	210.8100	1.1450	0.0287	243.7582
Elementary School	1.81818 / 4.67532	22.2160	0.0602	1.6000e-003	23.9785
General Office Building	77.3142 / 47.3861	463.2700	2.5395	0.0637	536.3326
Health Club	0.147858 / 0.0906226	0.8860	4.8600e-003	1.2000e-004	1.0257
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	20.7403 / 12.7118	124.2768	0.6812	0.0171	143.8766
Single Family Housing	22.0872 / 13.9245	133.5787	0.7255	0.0182	154.4561
Strip Mall	1.11109 / 0.680989	6.6577	0.0365	9.1000e-004	7.7077
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,258.7348**	**6.6919**	**0.1681**	**1,451.3676**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.6723	21.2133	9.8000e-004	2.0000e-004	21.2963
Condo/Townhouse	45.6078 / 28.7528	275.8262	1.4979	0.0375	318.9128
Condo/Townhouse High Rise	34.8574 / 21.9753	210.8100	1.1448	0.0287	243.7405
Elementary School	1.81818 / 4.67532	22.2160	0.0602	1.6000e-003	23.9776
General Office Building	77.3142 / 47.3861	463.2700	2.5390	0.0636	536.2935
Health Club	0.147858 / 0.0906226	0.8860	4.8600e-003	1.2000e-004	1.0256
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	20.7403 / 12.7118	124.2768	0.6811	0.0171	143.8661
Single Family Housing	22.0872 / 13.9245	133.5787	0.7254	0.0182	154.4449
Strip Mall	1.11109 / 0.680989	6.6577	0.0365	9.1000e-004	7.7071
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,258.7348**	**6.6907**	**0.1678**	**1,451.2645**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	385.8858	22.8052	0.0000	864.7950
Unmitigated	385.8858	22.8052	0.0000	864.7950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.48	0.0974	5.7600e-003	0.0000	0.2184
Condo/Townhouse	322	65.3631	3.8629	0.0000	146.4829
Condo/Townhouse High Rise	246.1	49.9561	2.9523	0.0000	111.9548
Elementary School	136.88	27.7854	1.6421	0.0000	62.2689
General Office Building	404.55	82.1200	4.8532	0.0000	184.0362
Health Club	14.25	2.8926	0.1710	0.0000	6.4826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	294	59.6793	3.5270	0.0000	133.7453
Single Family Housing	466.99	94.7948	5.6022	0.0000	212.4411
Strip Mall	15.75	3.1971	0.1889	0.0000	7.1649
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**385.8858**	**22.8052**	**0.0000**	**864.7950**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.48	0.0974	5.7600e-003	0.0000	0.2184
Condo/Townhouse	322	65.3631	3.8629	0.0000	146.4829
Condo/Townhouse High Rise	246.1	49.9561	2.9523	0.0000	111.9548
Elementary School	136.88	27.7854	1.6421	0.0000	62.2689
General Office Building	404.55	82.1200	4.8532	0.0000	184.0362
Health Club	14.25	2.8926	0.1710	0.0000	6.4826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	294	59.6793	3.5270	0.0000	133.7453
Single Family Housing	466.99	94.7948	5.6022	0.0000	212.4411
Strip Mall	15.75	3.1971	0.1889	0.0000	7.1649
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**385.8858**	**22.8052**	**0.0000**	**864.7950**

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Site Prep, Grading & Paving - onsite trucks only

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land Use Type, Unit Amount, and Population based on Newhall provided information.

Construction Phase - Client provided - days of construction phase

Off-road Equipment - Client provided equipment list

Off-road Equipment - Client provided equipment list

Off-road Equipment - Client provided

Off-road Equipment - Client Provided

Off-road Equipment - Client Provided

Trips and VMT - Onsite trucks modeled as worker trips

On-road Fugitive Dust - Offroad equipment modeled as vendor trips, operate on 100% unpaved area

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstructionPhase	NumDays	465.00	250.00
tblConstructionPhase	NumDays	330.00	15.00
tblConstructionPhase	NumDays	330.00	15.00
tblConstructionPhase	NumDays	180.00	30.00
tblConstructionPhase	PhaseEndDate	1/16/2017	3/10/2017
tblConstructionPhase	PhaseEndDate	3/31/2017	9/1/2017
tblConstructionPhase	PhaseStartDate	12/27/2016	2/20/2017
tblConstructionPhase	PhaseStartDate	3/11/2017	8/14/2017
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	HorsePower	162.00	157.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	125.00	89.00

tblOffRoadEquipment	HorsePower	125.00	89.00
tblOffRoadEquipment	HorsePower	130.00	82.00
tblOffRoadEquipment	HorsePower	130.00	82.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	255.00	358.00
tblOffRoadEquipment	HorsePower	361.00	356.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	208.00	82.00
tblOffRoadEquipment	HorsePower	208.00	82.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	400.00	381.00
tblOffRoadEquipment	HorsePower	167.00	196.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.60
tblOffRoadEquipment	UsageHours	8.00	20.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	6.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	8.00	2.00
tblTripsAndVMT	WorkerTripNumber	58.00	6.00
tblTripsAndVMT	WorkerTripNumber	10.00	1.00
tblTripsAndVMT	WorkerTripNumber	10.00	1.00

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					
2015	1.3204	11.3271	6.8182	8.3100e-003	30.1987	0.9396	31.1383	3.0167	0.8644	3.8811	0.0000	866.8161	866.8161	0.2505	0.0000	872.0773
2016	22.3548	265.8767	156.9309	0.2167	113.6051	11.8456	125.4507	18.1844	10.8979	29.0823	0.0000	22,501.4452	22,501.4452	6.7628	0.0000	22,643.4631
2017	4.0436	18.4936	11.1036	0.0145	14.5691	1.2168	15.7859	1.4511	1.1194	2.5705	0.0000	1,478.4117	1,478.4117	0.4490	0.0000	1,487.8395
Total	**27.7188**	**295.6974**	**174.8527**	**0.2395**	**158.3729**	**14.0019**	**172.3748**	**22.6521**	**12.8817**	**35.5339**	**0.0000**	**24,846.6729**	**24,846.6729**	**7.4622**	**0.0000**	**25,003.3799**

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					
2015	1.3204	11.3271	6.8182	8.3100e-003	36.1028	0.9396	37.0424	3.6019	0.8644	4.4663	0.0000	866.8161	866.8161	0.2505	0.0000	872.0773
2016	22.3548	265.8767	156.9309	0.2167	117.2819	11.8456	129.1274	14.3682	10.8979	25.2661	0.0000	22,501.4452	22,501.4452	6.7628	0.0000	22,643.4631
2017	4.0436	18.4936	11.1036	0.0145	17.8446	1.2168	19.0613	1.7786	1.1194	2.8980	0.0000	1,478.4117	1,478.4117	0.4490	0.0000	1,487.8395
Total	**27.7188**	**295.6974**	**174.8527**	**0.2395**	**171.2293**	**14.0019**	**185.2311**	**19.7487**	**12.8817**	**32.6304**	**0.0000**	**24,846.6729**	**24,846.6729**	**7.4622**	**0.0000**	**25,003.3799**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**-8.12**	**0.00**	**-7.46**	**12.82**	**0.00**	**8.17**	**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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Total	**584.5193**	**233.7937**	**1,922.0956**	**5.2098**	**251.2667**	**126.7729**	**378.0396**	**67.2149**	**126.3578**	**193.5727**	**14,743.5296**	**328,756.4382**	**343,499.9678**	**53.5712**	**1.2009**	**344,997.2382**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Total	**584.5193**	**233.7937**	**1,922.0956**	**5.2098**	**251.2667**	**126.7729**	**378.0396**	**67.2149**	**126.3578**	**193.5727**	**14,743.5296**	**328,756.4382**	**343,499.9678**	**53.5712**	**1.2009**	**344,997.2382**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2015	1/11/2016	5	30	
2	Grading	Grading	1/12/2016	12/26/2016	5	250	
3	Paving1	Paving	2/20/2017	3/10/2017	5	15	
4	Paving2	Paving	8/14/2017	9/1/2017	5	15	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 2625

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	2	8.00	82	0.43
Site Preparation	Tractors/Loaders/Backhoes	1	6.00	75	0.37
Grading	Crawler Tractors	4	8.00	82	0.43
Grading	Excavators	1	1.60	157	0.38
Grading	Graders	1	8.00	162	0.41
Grading	Off-Highway Trucks	1	4.00	381	0.38
Grading	Other Material Handling Equipment	6	8.00	196	0.40
Grading	Rubber Tired Dozers	1	20.00	358	0.40
Grading	Scrapers	8	8.00	356	0.48
Grading	Tractors/Loaders/Backhoes	1	4.00	75	0.37
Paving1	Graders	1	8.00	162	0.41
Paving1	Pavers	1	8.00	89	0.42
Paving1	Paving Equipment	1	8.00	82	0.36
Paving1	Rollers	1	8.00	84	0.38
Paving2	Graders	1	8.00	162	0.41
Paving2	Pavers	1	8.00	89	0.42
Paving2	Paving Equipment	1	8.00	82	0.36
Paving2	Rollers	1	8.00	84	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	2.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	23	6.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving1	4	1.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving2	4	1.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	1.3091	11.3108	6.6168	7.9200e-003		0.9393	0.9393		0.8642	0.8642		832.7380	832.7380	0.2486		837.9588
Total	**1.3091**	**11.3108**	**6.6168**	**7.9200e-003**	**1.0605**	**0.9393**	**1.9998**	**0.1145**	**0.8642**	**0.9787**		**832.7380**	**832.7380**	**0.2486**		**837.9588**

3.2 Site Preparation - 2015

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	0.0113	0.0163	0.2014	3.9000e-004	29.1382	2.9000e-004	29.1385	2.9022	2.7000e-004	2.9024		34.0780	34.0780	1.9300e-003		34.1185
Total	**0.0113**	**0.0163**	**0.2014**	**3.9000e-004**	**29.1382**	**2.9000e-004**	**29.1385**	**2.9022**	**2.7000e-004**	**2.9024**		**34.0780**	**34.0780**	**1.9300e-003**		**34.1185**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	1.3091	11.3108	6.6168	7.9200e-003		0.9393	0.9393		0.8642	0.8642	0.0000	832.7380	832.7380	0.2486		837.9588
Total	**1.3091**	**11.3108**	**6.6168**	**7.9200e-003**	**0.4136**	**0.9393**	**1.3529**	**0.0447**	**0.8642**	**0.9088**	**0.0000**	**832.7380**	**832.7380**	**0.2486**		**837.9588**

3.2 Site Preparation - 2015

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	0.0113	0.0163	0.2014	3.9000e-004	35.6892	2.9000e-004	35.6895	3.5573	2.7000e-004	3.5575		34.0780	34.0780	1.9300e-003		34.1185
Total	**0.0113**	**0.0163**	**0.2014**	**3.9000e-004**	**35.6892**	**2.9000e-004**	**35.6895**	**3.5573**	**2.7000e-004**	**3.5575**		**34.0780**	**34.0780**	**1.9300e-003**		**34.1185**

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	1.2786	11.0241	6.6048	7.9100e-003		0.9153	0.9153		0.8421	0.8421		823.5941	823.5941	0.2484		828.8110
Total	**1.2786**	**11.0241**	**6.6048**	**7.9100e-003**	**1.0605**	**0.9153**	**1.9758**	**0.1145**	**0.8421**	**0.9566**		**823.5941**	**823.5941**	**0.2484**		**828.8110**

3.2 Site Preparation - 2016

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	0.0101	0.0148	0.1827	3.9000e-004	29.1382	2.8000e-004	29.1385	2.9022	2.6000e-004	2.9024		32.9413	32.9413	1.7800e-003		32.9786
Total	**0.0101**	**0.0148**	**0.1827**	**3.9000e-004**	**29.1382**	**2.8000e-004**	**29.1385**	**2.9022**	**2.6000e-004**	**2.9024**		**32.9413**	**32.9413**	**1.7800e-003**		**32.9786**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	1.2786	11.0241	6.6048	7.9100e-003		0.9153	0.9153		0.8421	0.8421	0.0000	823.5941	823.5941	0.2484		828.8110
Total	**1.2786**	**11.0241**	**6.6048**	**7.9100e-003**	**0.4136**	**0.9153**	**1.3289**	**0.0447**	**0.8421**	**0.8867**	**0.0000**	**823.5941**	**823.5941**	**0.2484**		**828.8110**

3.2 Site Preparation - 2016

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	0.0101	0.0148	0.1827	3.9000e-004	35.6892	2.8000e-004	35.6895	3.5573	2.6000e-004	3.5575		32.9413	32.9413	1.7800e-003		32.9786
Total	**0.0101**	**0.0148**	**0.1827**	**3.9000e-004**	**35.6892**	**2.8000e-004**	**35.6895**	**3.5573**	**2.6000e-004**	**3.5575**		**32.9413**	**32.9413**	**1.7800e-003**		**32.9786**

3.3 Grading - 2016

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					26.1905	0.0000	26.1905	9.4779	0.0000	9.4779			0.0000			0.0000
Off-Road	22.3244	265.8324	156.3828	0.2155		11.8447	11.8447		10.8971	10.8971		22,402.6214	22,402.6214	6.7574		22,544.5274
Total	**22.3244**	**265.8324**	**156.3828**	**0.2155**	**26.1905**	**11.8447**	**38.0352**	**9.4779**	**10.8971**	**20.3751**		**22,402.6214**	**22,402.6214**	**6.7574**		**22,544.5274**

3.3 Grading - 2016

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	0.0304	0.0443	0.5481	1.1700e-003	87.4146	8.4000e-004	87.4155	8.7065	7.7000e-004	8.7072		98.8238	98.8238	5.3300e-003		98.9358
Total	**0.0304**	**0.0443**	**0.5481**	**1.1700e-003**	**87.4146**	**8.4000e-004**	**87.4155**	**8.7065**	**7.7000e-004**	**8.7072**		**98.8238**	**98.8238**	**5.3300e-003**		**98.9358**

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					10.2143	0.0000	10.2143	3.6964	0.0000	3.6964			0.0000			0.0000
Off-Road	22.3244	265.8324	156.3828	0.2155		11.8447	11.8447		10.8971	10.8971	0.0000	22,402.6214	22,402.6214	6.7574		22,544.5273
Total	**22.3244**	**265.8324**	**156.3828**	**0.2155**	**10.2143**	**11.8447**	**22.0590**	**3.6964**	**10.8971**	**14.5935**	**0.0000**	**22,402.6214**	**22,402.6214**	**6.7574**		**22,544.5273**

3.3 Grading - 2016

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	0.0304	0.0443	0.5481	1.1700e-003	107.0676	8.4000e-004	107.0684	10.6718	7.7000e-004	10.6725		98.8238	98.8238	5.3300e-003		98.9358
Total	**0.0304**	**0.0443**	**0.5481**	**1.1700e-003**	**107.0676**	**8.4000e-004**	**107.0684**	**10.6718**	**7.7000e-004**	**10.6725**		**98.8238**	**98.8238**	**5.3300e-003**		**98.9358**

3.4 Paving1 - 2017

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193		1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**		**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

3.4 Paving1 - 2017

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	4.5200e-003	6.6800e-003	0.0828	1.9000e-004	14.5691	1.3000e-004	14.5692	1.4511	1.2000e-004	1.4512		15.8542	15.8542	8.2000e-004		15.8714
Total	**4.5200e-003**	**6.6800e-003**	**0.0828**	**1.9000e-004**	**14.5691**	**1.3000e-004**	**14.5692**	**1.4511**	**1.2000e-004**	**1.4512**		**15.8542**	**15.8542**	**8.2000e-004**		**15.8714**

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193	0.0000	1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**	**0.0000**	**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

3.4 Paving1 - 2017

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	4.5200e-003	6.6800e-003	0.0828	1.9000e-004	17.8446	1.3000e-004	17.8447	1.7786	1.2000e-004	1.7788		15.8542	15.8542	8.2000e-004		15.8714
Total	**4.5200e-003**	**6.6800e-003**	**0.0828**	**1.9000e-004**	**17.8446**	**1.3000e-004**	**17.8447**	**1.7786**	**1.2000e-004**	**1.7788**		**15.8542**	**15.8542**	**8.2000e-004**		**15.8714**

3.5 Paving2 - 2017

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193		1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**		**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

3.5 Paving2 - 2017

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	4.5200e-003	6.6800e-003	0.0828	1.9000e-004	14.5691	1.3000e-004	14.5692	1.4511	1.2000e-004	1.4512		15.8542	15.8542	8.2000e-004		15.8714
Total	**4.5200e-003**	**6.6800e-003**	**0.0828**	**1.9000e-004**	**14.5691**	**1.3000e-004**	**14.5692**	**1.4511**	**1.2000e-004**	**1.4512**		**15.8542**	**15.8542**	**8.2000e-004**		**15.8714**

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193	0.0000	1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**	**0.0000**	**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

3.5 Paving2 - 2017

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	4.5200e-003	6.6800e-003	0.0828	1.9000e-004	17.8446	1.3000e-004	17.8447	1.7786	1.2000e-004	1.7788		15.8542	15.8542	8.2000e-004		15.8714
Total	**4.5200e-003**	**6.6800e-003**	**0.0828**	**1.9000e-004**	**17.8446**	**1.3000e-004**	**17.8447**	**1.7786**	**1.2000e-004**	**1.7788**		**15.8542**	**15.8542**	**8.2000e-004**		**15.8714**

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	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Unmitigated	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
NaturalGas Unmitigated	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461

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					
Condo/Townhouse High Rise	21115.7	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13026.2	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	128.836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1304.11	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27678.1	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	69.863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Condo/Townhouse	27628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13.0262	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	0.128836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1.30411	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27.6781	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	0.069863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Condo/Townhouse	27.628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21.1157	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Unmitigated	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Construction Emissions - Site Prep, Grading & Paving - onsite trucks only

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land Use Type, Unit Amount, and Population based on Newhall provided information.

Construction Phase - Client provided - days of construction phase

Off-road Equipment - Client provided equipment list

Off-road Equipment - Client provided equipment list

Off-road Equipment - Client provided

Off-road Equipment - Client Provided

Off-road Equipment - Client Provided

Trips and VMT - Onsite trucks modeled as worker trips

On-road Fugitive Dust - Offroad equipment modeled as vendor trips, operate on 100% unpaved area

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstructionPhase	NumDays	465.00	250.00
tblConstructionPhase	NumDays	330.00	15.00
tblConstructionPhase	NumDays	330.00	15.00
tblConstructionPhase	NumDays	180.00	30.00
tblConstructionPhase	PhaseEndDate	1/16/2017	3/10/2017
tblConstructionPhase	PhaseEndDate	3/31/2017	9/1/2017
tblConstructionPhase	PhaseStartDate	12/27/2016	2/20/2017
tblConstructionPhase	PhaseStartDate	3/11/2017	8/14/2017
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	HorsePower	162.00	157.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	125.00	89.00

tblOffRoadEquipment	HorsePower	125.00	89.00
tblOffRoadEquipment	HorsePower	130.00	82.00
tblOffRoadEquipment	HorsePower	130.00	82.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	80.00	84.00
tblOffRoadEquipment	HorsePower	255.00	358.00
tblOffRoadEquipment	HorsePower	361.00	356.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOffRoadEquipment	HorsePower	208.00	82.00
tblOffRoadEquipment	HorsePower	208.00	82.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	174.00	162.00
tblOffRoadEquipment	HorsePower	400.00	381.00
tblOffRoadEquipment	HorsePower	167.00	196.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.60
tblOffRoadEquipment	UsageHours	8.00	20.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	6.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	WorkerTripNumber	8.00	2.00
tblTripsAndVMT	WorkerTripNumber	58.00	6.00
tblTripsAndVMT	WorkerTripNumber	10.00	1.00
tblTripsAndVMT	WorkerTripNumber	10.00	1.00

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					
2015	1.3207	11.3289	6.8049	8.2800e-003	30.1987	0.9396	31.1383	3.0167	0.8644	3.8811	0.0000	864.8983	864.8983	0.2505	0.0000	870.1595
2016	22.3557	265.8815	156.8931	0.2166	113.6051	11.8456	125.4507	18.1844	10.8979	29.0823	0.0000	22,495.8794	22,495.8794	6.7628	0.0000	22,637.8973
2017	4.0438	18.4944	11.0976	0.0145	14.5691	1.2168	15.7859	1.4511	1.1194	2.5705	0.0000	1,477.5176	1,477.5176	0.4490	0.0000	1,486.9455
Total	**27.7202**	**295.7048**	**174.7956**	**0.2394**	**158.3729**	**14.0019**	**172.3748**	**22.6521**	**12.8817**	**35.5339**	**0.0000**	**24,838.2953**	**24,838.2953**	**7.4622**	**0.0000**	**24,995.0023**

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					
2015	1.3207	11.3289	6.8049	8.2800e-003	36.1028	0.9396	37.0424	3.6019	0.8644	4.4663	0.0000	864.8983	864.8983	0.2505	0.0000	870.1595
2016	22.3557	265.8815	156.8931	0.2166	117.2819	11.8456	129.1274	14.3682	10.8979	25.2661	0.0000	22,495.8793	22,495.8793	6.7628	0.0000	22,637.8973
2017	4.0438	18.4944	11.0976	0.0145	17.8446	1.2168	19.0613	1.7786	1.1194	2.8980	0.0000	1,477.5176	1,477.5176	0.4490	0.0000	1,486.9455
Total	**27.7202**	**295.7048**	**174.7956**	**0.2394**	**171.2293**	**14.0019**	**185.2311**	**19.7487**	**12.8817**	**32.6304**	**0.0000**	**24,838.2952**	**24,838.2952**	**7.4622**	**0.0000**	**24,995.0023**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**-8.12**	**0.00**	**-7.46**	**12.82**	**0.00**	**8.17**	**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					
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Area	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Total	**588.1308**	**245.3138**	**1,923.1355**	**5.0350**	**251.2667**	**126.7866**	**378.0532**	**67.2149**	**126.3703**	**193.5853**	**14,743.5296**	**316,668.2746**	**331,411.8041**	**53.5837**	**1.2009**	**332,909.3385**

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					
Mobile	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Area	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Total	**588.1308**	**245.3138**	**1,923.1355**	**5.0350**	**251.2667**	**126.7866**	**378.0532**	**67.2149**	**126.3703**	**193.5853**	**14,743.5296**	**316,668.2746**	**331,411.8041**	**53.5837**	**1.2009**	**332,909.3385**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2015	1/11/2016	5	30	
2	Grading	Grading	1/12/2016	12/26/2016	5	250	
3	Paving1	Paving	2/20/2017	3/10/2017	5	15	
4	Paving2	Paving	8/14/2017	9/1/2017	5	15	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 2625

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	2	8.00	82	0.43
Site Preparation	Tractors/Loaders/Backhoes	1	6.00	75	0.37
Grading	Crawler Tractors	4	8.00	82	0.43
Grading	Excavators	1	1.60	157	0.38
Grading	Graders	1	8.00	162	0.41
Grading	Off-Highway Trucks	1	4.00	381	0.38
Grading	Other Material Handling Equipment	6	8.00	196	0.40
Grading	Rubber Tired Dozers	1	20.00	358	0.40
Grading	Scrapers	8	8.00	356	0.48
Grading	Tractors/Loaders/Backhoes	1	4.00	75	0.37
Paving1	Graders	1	8.00	162	0.41
Paving1	Pavers	1	8.00	89	0.42
Paving1	Paving Equipment	1	8.00	82	0.36
Paving1	Rollers	1	8.00	84	0.38
Paving2	Graders	1	8.00	162	0.41
Paving2	Pavers	1	8.00	89	0.42
Paving2	Paving Equipment	1	8.00	82	0.36
Paving2	Rollers	1	8.00	84	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	2.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	23	6.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving1	4	1.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving2	4	1.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	1.3091	11.3108	6.6168	7.9200e-003		0.9393	0.9393		0.8642	0.8642		832.7380	832.7380	0.2486		837.9588
Total	**1.3091**	**11.3108**	**6.6168**	**7.9200e-003**	**1.0605**	**0.9393**	**1.9998**	**0.1145**	**0.8642**	**0.9787**		**832.7380**	**832.7380**	**0.2486**		**837.9588**

3.2 Site Preparation - 2015

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	0.0117	0.0181	0.1881	3.7000e-004	29.1382	2.9000e-004	29.1385	2.9022	2.7000e-004	2.9024		32.1603	32.1603	1.9300e-003		32.2007
Total	**0.0117**	**0.0181**	**0.1881**	**3.7000e-004**	**29.1382**	**2.9000e-004**	**29.1385**	**2.9022**	**2.7000e-004**	**2.9024**		**32.1603**	**32.1603**	**1.9300e-003**		**32.2007**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	1.3091	11.3108	6.6168	7.9200e-003		0.9393	0.9393		0.8642	0.8642	0.0000	832.7380	832.7380	0.2486		837.9588
Total	**1.3091**	**11.3108**	**6.6168**	**7.9200e-003**	**0.4136**	**0.9393**	**1.3529**	**0.0447**	**0.8642**	**0.9088**	**0.0000**	**832.7380**	**832.7380**	**0.2486**		**837.9588**

3.2 Site Preparation - 2015

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	0.0117	0.0181	0.1881	3.7000e-004	35.6892	2.9000e-004	35.6895	3.5573	2.7000e-004	3.5575		32.1603	32.1603	1.9300e-003		32.2007
Total	**0.0117**	**0.0181**	**0.1881**	**3.7000e-004**	**35.6892**	**2.9000e-004**	**35.6895**	**3.5573**	**2.7000e-004**	**3.5575**		**32.1603**	**32.1603**	**1.9300e-003**		**32.2007**

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	1.2786	11.0241	6.6048	7.9100e-003		0.9153	0.9153		0.8421	0.8421		823.5941	823.5941	0.2484		828.8110
Total	**1.2786**	**11.0241**	**6.6048**	**7.9100e-003**	**1.0605**	**0.9153**	**1.9758**	**0.1145**	**0.8421**	**0.9566**		**823.5941**	**823.5941**	**0.2484**		**828.8110**

3.2 Site Preparation - 2016

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	0.0104	0.0164	0.1701	3.7000e-004	29.1382	2.8000e-004	29.1385	2.9022	2.6000e-004	2.9024		31.0860	31.0860	1.7800e-003		31.1233
Total	**0.0104**	**0.0164**	**0.1701**	**3.7000e-004**	**29.1382**	**2.8000e-004**	**29.1385**	**2.9022**	**2.6000e-004**	**2.9024**		**31.0860**	**31.0860**	**1.7800e-003**		**31.1233**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	1.2786	11.0241	6.6048	7.9100e-003		0.9153	0.9153		0.8421	0.8421	0.0000	823.5941	823.5941	0.2484		828.8110
Total	**1.2786**	**11.0241**	**6.6048**	**7.9100e-003**	**0.4136**	**0.9153**	**1.3289**	**0.0447**	**0.8421**	**0.8867**	**0.0000**	**823.5941**	**823.5941**	**0.2484**		**828.8110**

3.2 Site Preparation - 2016

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	0.0104	0.0164	0.1701	3.7000e-004	35.6892	2.8000e-004	35.6895	3.5573	2.6000e-004	3.5575		31.0860	31.0860	1.7800e-003		31.1233
Total	**0.0104**	**0.0164**	**0.1701**	**3.7000e-004**	**35.6892**	**2.8000e-004**	**35.6895**	**3.5573**	**2.6000e-004**	**3.5575**		**31.0860**	**31.0860**	**1.7800e-003**		**31.1233**

3.3 Grading - 2016

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					26.1905	0.0000	26.1905	9.4779	0.0000	9.4779			0.0000			0.0000
Off-Road	22.3244	265.8324	156.3828	0.2155		11.8447	11.8447		10.8971	10.8971		22,402.6214	22,402.6214	6.7574		22,544.5274
Total	**22.3244**	**265.8324**	**156.3828**	**0.2155**	**26.1905**	**11.8447**	**38.0352**	**9.4779**	**10.8971**	**20.3751**		**22,402.6214**	**22,402.6214**	**6.7574**		**22,544.5274**

3.3 Grading - 2016

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	0.0313	0.0491	0.5102	1.1000e-003	87.4146	8.4000e-004	87.4155	8.7065	7.7000e-004	8.7072		93.2579	93.2579	5.3300e-003		93.3699
Total	**0.0313**	**0.0491**	**0.5102**	**1.1000e-003**	**87.4146**	**8.4000e-004**	**87.4155**	**8.7065**	**7.7000e-004**	**8.7072**		**93.2579**	**93.2579**	**5.3300e-003**		**93.3699**

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					10.2143	0.0000	10.2143	3.6964	0.0000	3.6964			0.0000			0.0000
Off-Road	22.3244	265.8324	156.3828	0.2155		11.8447	11.8447		10.8971	10.8971	0.0000	22,402.6214	22,402.6214	6.7574		22,544.5273
Total	**22.3244**	**265.8324**	**156.3828**	**0.2155**	**10.2143**	**11.8447**	**22.0590**	**3.6964**	**10.8971**	**14.5935**	**0.0000**	**22,402.6214**	**22,402.6214**	**6.7574**		**22,544.5273**

3.3 Grading - 2016

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	0.0313	0.0491	0.5102	1.1000e-003	107.0676	8.4000e-004	107.0684	10.6718	7.7000e-004	10.6725		93.2579	93.2579	5.3300e-003		93.3699
Total	**0.0313**	**0.0491**	**0.5102**	**1.1000e-003**	**107.0676**	**8.4000e-004**	**107.0684**	**10.6718**	**7.7000e-004**	**10.6725**		**93.2579**	**93.2579**	**5.3300e-003**		**93.3699**

3.4 Paving1 - 2017

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193		1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**		**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

3.4 Paving1 - 2017

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	4.6400e-003	7.4100e-003	0.0767	1.8000e-004	14.5691	1.3000e-004	14.5692	1.4511	1.2000e-004	1.4512		14.9601	14.9601	8.2000e-004		14.9774
Total	**4.6400e-003**	**7.4100e-003**	**0.0767**	**1.8000e-004**	**14.5691**	**1.3000e-004**	**14.5692**	**1.4511**	**1.2000e-004**	**1.4512**		**14.9601**	**14.9601**	**8.2000e-004**		**14.9774**

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193	0.0000	1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**	**0.0000**	**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

3.4 Paving1 - 2017

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	4.6400e-003	7.4100e-003	0.0767	1.8000e-004	17.8446	1.3000e-004	17.8447	1.7786	1.2000e-004	1.7788		14.9601	14.9601	8.2000e-004		14.9774
Total	**4.6400e-003**	**7.4100e-003**	**0.0767**	**1.8000e-004**	**17.8446**	**1.3000e-004**	**17.8447**	**1.7786**	**1.2000e-004**	**1.7788**		**14.9601**	**14.9601**	**8.2000e-004**		**14.9774**

3.5 Paving2 - 2017

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193		1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**		**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

3.5 Paving2 - 2017

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	4.6400e-003	7.4100e-003	0.0767	1.8000e-004	14.5691	1.3000e-004	14.5692	1.4511	1.2000e-004	1.4512		14.9601	14.9601	8.2000e-004		14.9774
Total	**4.6400e-003**	**7.4100e-003**	**0.0767**	**1.8000e-004**	**14.5691**	**1.3000e-004**	**14.5692**	**1.4511**	**1.2000e-004**	**1.4512**		**14.9601**	**14.9601**	**8.2000e-004**		**14.9774**

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	1.9187	18.4869	11.0209	0.0143		1.2166	1.2166		1.1193	1.1193	0.0000	1,462.5575	1,462.5575	0.4481		1,471.9681
Paving	2.1205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.0391**	**18.4869**	**11.0209**	**0.0143**		**1.2166**	**1.2166**		**1.1193**	**1.1193**	**0.0000**	**1,462.5575**	**1,462.5575**	**0.4481**		**1,471.9681**

3.5 Paving2 - 2017

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	4.6400e-003	7.4100e-003	0.0767	1.8000e-004	17.8446	1.3000e-004	17.8447	1.7786	1.2000e-004	1.7788		14.9601	14.9601	8.2000e-004		14.9774
Total	**4.6400e-003**	**7.4100e-003**	**0.0767**	**1.8000e-004**	**17.8446**	**1.3000e-004**	**17.8447**	**1.7786**	**1.2000e-004**	**1.7788**		**14.9601**	**14.9601**	**8.2000e-004**		**14.9774**

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	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Unmitigated	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

4.4 Fleet Mix

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	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
NaturalGas Unmitigated	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461

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					
Condo/Townhouse High Rise	21115.7	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13026.2	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	128.836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1304.11	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27678.1	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	69.863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Condo/Townhouse	27628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse High Rise	21.1157	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13.0262	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	0.128836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1.30411	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27.6781	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	0.069863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Condo/Townhouse	27.628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Unmitigated	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Const Emissions - Utility Inst & Bldg Const - Onsite Truck

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only construction, no need to factor in RPS

Land Use - Client

Construction Phase - Client Provided - All Construction Phases (utility installation dates shifted)

Off-road Equipment -

Off-road Equipment - Client Provided - Equipment type, unit, hrs/day and HP (when equipment fractions were give, 1 unit * number of total hrs was input)
CalEEMod Default - Load Factors, HP for 6 off-highway trucks

Off-road Equipment - Client provided, except HP for off-highway trucks (CalEEMod defaults). Other material handling equipment represent water trucks.

Trips and VMT - Onsite trucks modeled as worker trips

On-road Fugitive Dust - Offroad equipment modeled as worker trips is assumed to operate on 100% unpaved area with a speed of 10 mph.

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstructionPhase	NumDays	4,650.00	1,979.00

tblConstructionPhase	PhaseEndDate	12/26/2024	12/31/2024
tblConstructionPhase	PhaseStartDate	5/27/2017	6/1/2017
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	HorsePower	162.00	157.00
tblOffRoadEquipment	HorsePower	167.00	196.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	419.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	4.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	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					
2016	0.0642	0.7142	0.4660	7.8000e-004	1.9878	0.0378	2.0256	0.1980	0.0347	0.2327	0.0000	73.2732	73.2732	0.0216	0.0000	73.7263
2017	0.3189	2.9204	2.0191	3.1300e-003	2.7829	0.1830	2.9659	0.2772	0.1709	0.4481	0.0000	282.8880	282.8880	0.0750	0.0000	284.4624
2018	0.3483	3.0355	2.2880	3.5000e-003	0.0000	0.1950	0.1950	0.0000	0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
2019	0.3069	2.7359	2.2342	3.5000e-003	0.0000	0.1677	0.1677	0.0000	0.1577	0.1577	0.0000	305.5302	305.5302	0.0743	0.0000	307.0913
2020	0.2766	2.5000	2.2019	3.5100e-003	0.0000	0.1458	0.1458	0.0000	0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973
2021	0.2471	2.2629	2.1582	3.5000e-003	0.0000	0.1246	0.1246	0.0000	0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
2022	0.2209	2.0197	2.1226	3.4900e-003	0.0000	0.1047	0.1047	0.0000	0.0986	0.0986	0.0000	299.9946	299.9946	0.0718	0.0000	301.5017
2023	0.2036	1.8606	2.1072	3.4900e-003	0.0000	0.0906	0.0906	0.0000	0.0852	0.0852	0.0000	300.0980	300.0980	0.0713	0.0000	301.5949
2024	0.1920	1.7524	2.1135	3.5200e-003	0.0000	0.0800	0.0800	0.0000	0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643
Total	**2.1783**	**19.8018**	**17.7107**	**0.0284**	**4.7708**	**1.1291**	**5.8999**	**0.4752**	**1.0600**	**1.5351**	**0.0000**	**2,476.4182**	**2,476.4182**	**0.6071**	**0.0000**	**2,489.1673**

2.1 Overall Construction

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					
2016	0.0642	0.7142	0.4660	7.8000e-004	2.4347	0.0378	2.4725	0.2427	0.0347	0.2774	0.0000	73.2731	73.2731	0.0216	0.0000	73.7262
2017	0.3189	2.9204	2.0191	3.1300e-003	3.4086	0.1830	3.5916	0.3398	0.1709	0.5107	0.0000	282.8876	282.8876	0.0750	0.0000	284.4621
2018	0.3483	3.0355	2.2880	3.5000e-003	0.0000	0.1950	0.1950	0.0000	0.1833	0.1833	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
2019	0.3069	2.7359	2.2342	3.5000e-003	0.0000	0.1677	0.1677	0.0000	0.1577	0.1577	0.0000	305.5299	305.5299	0.0743	0.0000	307.0909
2020	0.2766	2.5000	2.2019	3.5100e-003	0.0000	0.1458	0.1458	0.0000	0.1371	0.1371	0.0000	302.1510	302.1510	0.0736	0.0000	303.6969
2021	0.2471	2.2629	2.1582	3.5000e-003	0.0000	0.1246	0.1246	0.0000	0.1172	0.1172	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
2022	0.2209	2.0197	2.1226	3.4900e-003	0.0000	0.1047	0.1047	0.0000	0.0986	0.0986	0.0000	299.9943	299.9943	0.0718	0.0000	301.5013
2023	0.2036	1.8606	2.1072	3.4900e-003	0.0000	0.0906	0.0906	0.0000	0.0852	0.0852	0.0000	300.0976	300.0976	0.0713	0.0000	301.5946
2024	0.1920	1.7524	2.1135	3.5200e-003	0.0000	0.0800	0.0800	0.0000	0.0752	0.0752	0.0000	302.4642	302.4642	0.0714	0.0000	303.9639
Total	**2.1783**	**19.8018**	**17.7107**	**0.0284**	**5.8433**	**1.1291**	**6.9724**	**0.5824**	**1.0600**	**1.6424**	**0.0000**	**2,476.4153**	**2,476.4153**	**0.6071**	**0.0000**	**2,489.1644**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**-22.48**	**0.00**	**-18.18**	**-22.57**	**0.00**	**-6.99**	**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	tons/yr										MT/yr					
Area	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Energy	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	7,880.7783	7,880.7783	0.3138	0.0909	7,915.5473
Mobile	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Waste						0.0000	0.0000		0.0000	0.0000	385.8858	0.0000	385.8858	22.8052	0.0000	864.7950
Water						0.0000	0.0000		0.0000	0.0000	64.6196	1,194.1152	1,258.7348	6.6919	0.1681	1,451.3676
Total	**33.9677**	**37.9133**	**183.9819**	**0.6187**	**38.8288**	**2.5262**	**41.3550**	**10.4037**	**2.4636**	**12.8673**	**617.6942**	**49,466.7340**	**50,084.4281**	**31.6438**	**0.2703**	**50,832.7470**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Energy	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	7,880.7783	7,880.7783	0.3138	0.0909	7,915.5473
Mobile	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Waste						0.0000	0.0000		0.0000	0.0000	385.8858	0.0000	385.8858	22.8052	0.0000	864.7950
Water						0.0000	0.0000		0.0000	0.0000	64.6196	1,194.1152	1,258.7348	6.6907	0.1678	1,451.2645
Total	**33.9677**	**37.9133**	**183.9819**	**0.6187**	**38.8288**	**2.5262**	**41.3550**	**10.4037**	**2.4636**	**12.8673**	**617.6942**	**49,466.7340**	**50,084.4281**	**31.6426**	**0.2701**	**50,832.6439**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**	**0.09**	**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	Utility Installation	Trenching	9/19/2016	5/26/2017	5	180	
2	Building Construction	Building Construction	6/1/2017	12/31/2024	5	1979	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Utility Installation	Excavators	2	8.00	157	0.38
Utility Installation	Other Material Handling Equipment	1	6.00	196	0.40
Utility Installation	Tractors/Loaders/Backhoes	2	8.00	75	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Utility Installation	5	4.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Utility Installation - 2016

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	0.0635	0.7129	0.4530	7.5000e-004		0.0377	0.0377		0.0347	0.0347	0.0000	71.1240	71.1240	0.0215	0.0000	71.5745
Total	**0.0635**	**0.7129**	**0.4530**	**7.5000e-004**		**0.0377**	**0.0377**		**0.0347**	**0.0347**	**0.0000**	**71.1240**	**71.1240**	**0.0215**	**0.0000**	**71.5745**

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	7.4000e-004	1.2600e-003	0.0131	3.0000e-005	1.9878	2.0000e-005	1.9878	0.1980	2.0000e-005	0.1980	0.0000	2.1492	2.1492	1.2000e-004	0.0000	2.1517
Total	**7.4000e-004**	**1.2600e-003**	**0.0131**	**3.0000e-005**	**1.9878**	**2.0000e-005**	**1.9878**	**0.1980**	**2.0000e-005**	**0.1980**	**0.0000**	**2.1492**	**2.1492**	**1.2000e-004**	**0.0000**	**2.1517**

3.2 Utility Installation - 2016

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	0.0635	0.7129	0.4530	7.5000e-004		0.0377	0.0377		0.0347	0.0347	0.0000	71.1239	71.1239	0.0215	0.0000	71.5745
Total	**0.0635**	**0.7129**	**0.4530**	**7.5000e-004**		**0.0377**	**0.0377**		**0.0347**	**0.0347**	**0.0000**	**71.1239**	**71.1239**	**0.0215**	**0.0000**	**71.5745**

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	7.4000e-004	1.2600e-003	0.0131	3.0000e-005	2.4347	2.0000e-005	2.4347	0.2427	2.0000e-005	0.2427	0.0000	2.1492	2.1492	1.2000e-004	0.0000	2.1517
Total	**7.4000e-004**	**1.2600e-003**	**0.0131**	**3.0000e-005**	**2.4347**	**2.0000e-005**	**2.4347**	**0.2427**	**2.0000e-005**	**0.2427**	**0.0000**	**2.1492**	**2.1492**	**1.2000e-004**	**0.0000**	**2.1517**

3.2 Utility Installation - 2017

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	0.0822	0.9120	0.6248	1.0600e-003		0.0476	0.0476		0.0438	0.0438	0.0000	97.9878	97.9878	0.0300	0.0000	98.6183
Total	**0.0822**	**0.9120**	**0.6248**	**1.0600e-003**		**0.0476**	**0.0476**		**0.0438**	**0.0438**	**0.0000**	**97.9878**	**97.9878**	**0.0300**	**0.0000**	**98.6183**

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	9.3000e-004	1.6000e-003	0.0165	4.0000e-005	2.7829	3.0000e-005	2.7830	0.2772	3.0000e-005	0.2772	0.0000	2.8961	2.8961	1.6000e-004	0.0000	2.8994
Total	**9.3000e-004**	**1.6000e-003**	**0.0165**	**4.0000e-005**	**2.7829**	**3.0000e-005**	**2.7830**	**0.2772**	**3.0000e-005**	**0.2772**	**0.0000**	**2.8961**	**2.8961**	**1.6000e-004**	**0.0000**	**2.8994**

3.2 Utility Installation - 2017

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	0.0821	0.9120	0.6248	1.0600e-003		0.0476	0.0476		0.0438	0.0438	0.0000	97.9877	97.9877	0.0300	0.0000	98.6182
Total	**0.0821**	**0.9120**	**0.6248**	**1.0600e-003**		**0.0476**	**0.0476**		**0.0438**	**0.0438**	**0.0000**	**97.9877**	**97.9877**	**0.0300**	**0.0000**	**98.6182**

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	9.3000e-004	1.6000e-003	0.0165	4.0000e-005	3.4086	3.0000e-005	3.4086	0.3398	3.0000e-005	0.3398	0.0000	2.8961	2.8961	1.6000e-004	0.0000	2.8994
Total	**9.3000e-004**	**1.6000e-003**	**0.0165**	**4.0000e-005**	**3.4086**	**3.0000e-005**	**3.4086**	**0.3398**	**3.0000e-005**	**0.3398**	**0.0000**	**2.8961**	**2.8961**	**1.6000e-004**	**0.0000**	**2.8994**

3.3 Building Construction - 2017

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	0.2358	2.0068	1.3778	2.0400e-003		0.1354	0.1354		0.1272	0.1272	0.0000	182.0041	182.0041	0.0448	0.0000	182.9448
Total	**0.2358**	**2.0068**	**1.3778**	**2.0400e-003**		**0.1354**	**0.1354**		**0.1272**	**0.1272**	**0.0000**	**182.0041**	**182.0041**	**0.0448**	**0.0000**	**182.9448**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2017

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	0.2358	2.0068	1.3778	2.0400e-003		0.1354	0.1354		0.1272	0.1272	0.0000	182.0039	182.0039	0.0448	0.0000	182.9446
Total	**0.2358**	**2.0068**	**1.3778**	**2.0400e-003**		**0.1354**	**0.1354**		**0.1272**	**0.1272**	**0.0000**	**182.0039**	**182.0039**	**0.0448**	**0.0000**	**182.9446**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
Total	**0.3483**	**3.0355**	**2.2880**	**3.5000e-003**		**0.1950**	**0.1950**		**0.1833**	**0.1833**	**0.0000**	**308.9844**	**308.9844**	**0.0756**	**0.0000**	**310.5723**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2018

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	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
Total	**0.3483**	**3.0355**	**2.2880**	**3.5000e-003**		**0.1950**	**0.1950**		**0.1833**	**0.1833**	**0.0000**	**308.9841**	**308.9841**	**0.0756**	**0.0000**	**310.5720**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2019

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	0.3069	2.7359	2.2342	3.5000e-003		0.1677	0.1677		0.1577	0.1577	0.0000	305.5302	305.5302	0.0743	0.0000	307.0913
Total	**0.3069**	**2.7359**	**2.2342**	**3.5000e-003**		**0.1677**	**0.1677**		**0.1577**	**0.1577**	**0.0000**	**305.5302**	**305.5302**	**0.0743**	**0.0000**	**307.0913**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2019

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	0.3069	2.7359	2.2342	3.5000e-003		0.1677	0.1677		0.1577	0.1577	0.0000	305.5299	305.5299	0.0743	0.0000	307.0909
Total	**0.3069**	**2.7359**	**2.2342**	**3.5000e-003**		**0.1677**	**0.1677**		**0.1577**	**0.1577**	**0.0000**	**305.5299**	**305.5299**	**0.0743**	**0.0000**	**307.0909**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 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	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973
Total	**0.2766**	**2.5000**	**2.2019**	**3.5100e-003**		**0.1458**	**0.1458**		**0.1371**	**0.1371**	**0.0000**	**302.1514**	**302.1514**	**0.0736**	**0.0000**	**303.6973**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1510	302.1510	0.0736	0.0000	303.6969
Total	**0.2766**	**2.5000**	**2.2019**	**3.5100e-003**		**0.1458**	**0.1458**		**0.1371**	**0.1371**	**0.0000**	**302.1510**	**302.1510**	**0.0736**	**0.0000**	**303.6969**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2021

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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0335**	**301.0335**	**0.0725**	**0.0000**	**302.5565**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9946	299.9946	0.0718	0.0000	301.5017
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9946**	**299.9946**	**0.0718**	**0.0000**	**301.5017**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9943	299.9943	0.0718	0.0000	301.5013
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9943**	**299.9943**	**0.0718**	**0.0000**	**301.5013**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0980	300.0980	0.0713	0.0000	301.5949
Total	**0.2036**	**1.8606**	**2.1072**	**3.4900e-003**		**0.0906**	**0.0906**		**0.0852**	**0.0852**	**0.0000**	**300.0980**	**300.0980**	**0.0713**	**0.0000**	**301.5949**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0976	300.0976	0.0713	0.0000	301.5946
Total	**0.2036**	**1.8606**	**2.1072**	**3.4900e-003**		**0.0906**	**0.0906**		**0.0852**	**0.0852**	**0.0000**	**300.0976**	**300.0976**	**0.0713**	**0.0000**	**301.5946**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2024

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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643
Total	**0.1920**	**1.7524**	**2.1135**	**3.5200e-003**		**0.0800**	**0.0800**		**0.0752**	**0.0752**	**0.0000**	**302.4646**	**302.4646**	**0.0714**	**0.0000**	**303.9643**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Building Construction - 2024

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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4642	302.4642	0.0714	0.0000	303.9639
Total	**0.1920**	**1.7524**	**2.1135**	**3.5200e-003**		**0.0800**	**0.0800**		**0.0752**	**0.0752**	**0.0000**	**302.4642**	**302.4642**	**0.0714**	**0.0000**	**303.9639**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441
Unmitigated	13.2229	36.0164	157.0312	0.5921	38.8288	0.8069	39.6357	10.4037	0.7446	11.1483	0.0000	40,043.9633	40,043.9633	1.3086	0.0000	40,071.4441

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	6,072.8188	6,072.8188	0.2792	0.0578	6,096.5848
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,072.8188	6,072.8188	0.2792	0.0578	6,096.5848
NaturalGas Mitigated	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	1,807.9595	1,807.9595	0.0347	0.0332	1,818.9625
NaturalGas Unmitigated	0.1827	1.5787	0.7934	9.9600e-003		0.1262	0.1262		0.1262	0.1262	0.0000	1,807.9595	1,807.9595	0.0347	0.0332	1,818.9625

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
Condo/Townhouse	1.00842e+007	0.0544	0.4647	0.1977	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1324	538.1324	0.0103	9.8700e-003	541.4074
Condo/Townhouse High Rise	7.70723e+006	0.0416	0.3551	0.1511	2.2700e-003		0.0287	0.0287		0.0287	0.0287	0.0000	411.2869	411.2869	7.8800e-003	7.5400e-003	413.7900
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	4.75455e+006	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	253.7209	253.7209	4.8600e-003	4.6500e-003	255.2650
Health Club	47025	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5094	2.5094	5.0000e-005	5.0000e-005	2.5247
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
Regional Shopping Center	476000	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.4012	25.4012	4.9000e-004	4.7000e-004	25.5558
Single Family Housing	1.01025e+007	0.0545	0.4655	0.1981	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	539.1089	539.1089	0.0103	9.8800e-003	542.3898
Strip Mall	25500	1.4000e-004	1.2500e-003	1.0500e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3608	1.3608	3.0000e-005	2.0000e-005	1.3691
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1827**	**1.5788**	**0.7934**	**9.9700e-003**		**0.1262**	**0.1262**		**0.1262**	**0.1262**	**0.0000**	**1,807.9595**	**1,807.9595**	**0.0347**	**0.0332**	**1,818.9625**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	1.00842e+007	0.0544	0.4647	0.1977	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	538.1324	538.1324	0.0103	9.8700e-003	541.4074
Condo/Townhouse High Rise	7.70723e+006	0.0416	0.3551	0.1511	2.2700e-003		0.0287	0.0287		0.0287	0.0287	0.0000	411.2869	411.2869	7.8800e-003	7.5400e-003	413.7900
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	4.75455e+006	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	253.7209	253.7209	4.8600e-003	4.6500e-003	255.2650
Health Club	47025	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5094	2.5094	5.0000e-005	5.0000e-005	2.5247
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
Regional Shopping Center	476000	2.5700e-003	0.0233	0.0196	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.4012	25.4012	4.9000e-004	4.7000e-004	25.5558
Single Family Housing	1.01025e+007	0.0545	0.4655	0.1981	2.9700e-003		0.0376	0.0376		0.0376	0.0376	0.0000	539.1089	539.1089	0.0103	9.8800e-003	542.3898
Strip Mall	25500	1.4000e-004	1.2500e-003	1.0500e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.3608	1.3608	3.0000e-005	2.0000e-005	1.3691
Unenclosed Parking with Elevator	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
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
Total		**0.1827**	**1.5788**	**0.7934**	**9.9700e-003**		**0.1262**	**0.1262**		**0.1262**	**0.1262**	**0.0000**	**1,807.9595**	**1,807.9595**	**0.0347**	**0.0332**	**1,818.9625**

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
Condo/Townhouse	3.07852e+006	880.9694	0.0405	8.3800e-003	884.4170
Condo/Townhouse High Rise	2.35287e+006	673.3123	0.0310	6.4000e-003	675.9473
Elementary School	420114	120.2226	5.5300e-003	1.1400e-003	120.6931
General Office Building	6.32055e+006	1,808.7321	0.0831	0.0172	1,815.8107
Health Club	30125	8.6208	4.0000e-004	8.0000e-005	8.6545
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.2476e+006	1,215.5225	0.0559	0.0116	1,220.2795
Single Family Housing	2.47292e+006	707.6679	0.0325	6.7300e-003	710.4374
Strip Mall	227550	65.1173	2.9900e-003	6.2000e-004	65.3721
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,072.8188**	**0.2792**	**0.0578**	**6,096.5848**

5.3 Energy by Land Use - Electricity

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
Condo/Townhouse	3.07852e+006	880.9694	0.0405	8.3800e-003	884.4170
Condo/Townhouse High Rise	2.35287e+006	673.3123	0.0310	6.4000e-003	675.9473
Elementary School	420114	120.2226	5.5300e-003	1.1400e-003	120.6931
General Office Building	6.32055e+006	1,808.7321	0.0831	0.0172	1,815.8107
Health Club	30125	8.6208	4.0000e-004	8.0000e-005	8.6545
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.2476e+006	1,215.5225	0.0559	0.0116	1,220.2795
Single Family Housing	2.47292e+006	707.6679	0.0325	6.7300e-003	710.4374
Strip Mall	227550	65.1173	2.9900e-003	6.2000e-004	65.3721
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,072.8188**	**0.2792**	**0.0578**	**6,096.5848**

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	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929
Unmitigated	20.5620	0.3181	26.1573	0.0166		1.5930	1.5930		1.5928	1.5928	167.1888	347.8772	515.0660	0.5243	0.0114	529.5929

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1556	0.1308	9.8895	0.0157		1.5029	1.5029		1.5027	1.5027	167.1888	321.2795	488.4683	0.4986	0.0114	502.4564
Landscaping	0.4918	0.1873	16.2678	8.6000e-004		0.0901	0.0901		0.0901	0.0901	0.0000	26.5977	26.5977	0.0257	0.0000	27.1365
Total	**20.5620**	**0.3181**	**26.1573**	**0.0166**		**1.5930**	**1.5930**		**1.5928**	**1.5928**	**167.1888**	**347.8772**	**515.0660**	**0.5243**	**0.0114**	**529.5929**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.1949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.1556	0.1308	9.8895	0.0157		1.5029	1.5029		1.5027	1.5027	167.1888	321.2795	488.4683	0.4986	0.0114	502.4564
Landscaping	0.4918	0.1873	16.2678	8.6000e-004		0.0901	0.0901		0.0901	0.0901	0.0000	26.5977	26.5977	0.0257	0.0000	27.1365
Total	**20.5620**	**0.3181**	**26.1573**	**0.0166**		**1.5930**	**1.5930**		**1.5928**	**1.5928**	**167.1888**	**347.8772**	**515.0660**	**0.5243**	**0.0114**	**529.5929**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,258.7348	6.6907	0.1678	1,451.2645
Unmitigated	1,258.7348	6.6919	0.1681	1,451.3676

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.6723	21.2133	9.8000e-004	2.0000e-004	21.2963
Condo/Townhouse	45.6078 / 28.7528	275.8262	1.4982	0.0376	318.9359
Condo/Townhouse High Rise	34.8574 / 21.9753	210.8100	1.1450	0.0287	243.7582
Elementary School	1.81818 / 4.67532	22.2160	0.0602	1.6000e-003	23.9785
General Office Building	77.3142 / 47.3861	463.2700	2.5395	0.0637	536.3326
Health Club	0.147858 / 0.0906226	0.8860	4.8600e-003	1.2000e-004	1.0257
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	20.7403 / 12.7118	124.2768	0.6812	0.0171	143.8766
Single Family Housing	22.0872 / 13.9245	133.5787	0.7255	0.0182	154.4561
Strip Mall	1.11109 / 0.680989	6.6577	0.0365	9.1000e-004	7.7077
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,258.7348**	**6.6919**	**0.1681**	**1,451.3676**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.6723	21.2133	9.8000e-004	2.0000e-004	21.2963
Condo/Townhouse	45.6078 / 28.7528	275.8262	1.4979	0.0375	318.9128
Condo/Townhouse High Rise	34.8574 / 21.9753	210.8100	1.1448	0.0287	243.7405
Elementary School	1.81818 / 4.67532	22.2160	0.0602	1.6000e-003	23.9776
General Office Building	77.3142 / 47.3861	463.2700	2.5390	0.0636	536.2935
Health Club	0.147858 / 0.0906226	0.8860	4.8600e-003	1.2000e-004	1.0256
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	20.7403 / 12.7118	124.2768	0.6811	0.0171	143.8661
Single Family Housing	22.0872 / 13.9245	133.5787	0.7254	0.0182	154.4449
Strip Mall	1.11109 / 0.680989	6.6577	0.0365	9.1000e-004	7.7071
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,258.7348**	**6.6907**	**0.1678**	**1,451.2645**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	385.8858	22.8052	0.0000	864.7950
Unmitigated	385.8858	22.8052	0.0000	864.7950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.48	0.0974	5.7600e-003	0.0000	0.2184
Condo/Townhouse	322	65.3631	3.8629	0.0000	146.4829
Condo/Townhouse High Rise	246.1	49.9561	2.9523	0.0000	111.9548
Elementary School	136.88	27.7854	1.6421	0.0000	62.2689
General Office Building	404.55	82.1200	4.8532	0.0000	184.0362
Health Club	14.25	2.8926	0.1710	0.0000	6.4826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	294	59.6793	3.5270	0.0000	133.7453
Single Family Housing	466.99	94.7948	5.6022	0.0000	212.4411
Strip Mall	15.75	3.1971	0.1889	0.0000	7.1649
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**385.8858**	**22.8052**	**0.0000**	**864.7950**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.48	0.0974	5.7600e-003	0.0000	0.2184
Condo/Townhouse	322	65.3631	3.8629	0.0000	146.4829
Condo/Townhouse High Rise	246.1	49.9561	2.9523	0.0000	111.9548
Elementary School	136.88	27.7854	1.6421	0.0000	62.2689
General Office Building	404.55	82.1200	4.8532	0.0000	184.0362
Health Club	14.25	2.8926	0.1710	0.0000	6.4826
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	294	59.6793	3.5270	0.0000	133.7453
Single Family Housing	466.99	94.7948	5.6022	0.0000	212.4411
Strip Mall	15.75	3.1971	0.1889	0.0000	7.1649
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**385.8858**	**22.8052**	**0.0000**	**864.7950**

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Const Emissions - Utility Inst & Bldg Const - Onsite Truck

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only construction, no need to factor in RPS

Land Use - Client

Construction Phase - Client Provided - All Construction Phases (utility installation dates shifted)

Off-road Equipment -

Off-road Equipment - Client Provided - Equipment type, unit, hrs/day and HP (when equipment fractions were give, 1 unit * number of total hrs was input)
CalEEMod Default - Load Factors, HP for 6 off-highway trucks

Off-road Equipment - Client provided, except HP for off-highway trucks (CalEEMod defaults). Other material handling equipment represent water trucks.

Trips and VMT - Onsite trucks modeled as worker trips

On-road Fugitive Dust - Offroad equipment modeled as worker trips is assumed to operate on 100% unpaved area with a speed of 10 mph.

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstructionPhase	NumDays	4,650.00	1,979.00

tblConstructionPhase	PhaseEndDate	12/26/2024	12/31/2024
tblConstructionPhase	PhaseStartDate	5/27/2017	6/1/2017
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	HorsePower	162.00	157.00
tblOffRoadEquipment	HorsePower	167.00	196.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	419.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	4.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	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					
2016	1.7125	19.0401	12.4451	0.0209	58.2764	1.0066	59.2830	5.8043	0.9261	6.7304	0.0000	2,156.5708	2,156.5708	0.6342	0.0000	2,169.8886
2017	3.1024	26.4057	18.1291	0.0268	58.2764	1.7812	59.1831	5.8043	1.6730	6.6384	0.0000	2,639.8053	2,639.8053	0.6497	0.0000	2,653.4490
2018	2.6687	23.2608	17.5327	0.0268	0.0000	1.4943	1.4943	0.0000	1.4048	1.4048	0.0000	2,609.9390	2,609.9390	0.6387	0.0000	2,623.3517
2019	2.3516	20.9650	17.1204	0.0268	0.0000	1.2850	1.2850	0.0000	1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279	0.0000	2,593.9479
2020	2.1113	19.0839	16.8084	0.0268	0.0000	1.1128	1.1128	0.0000	1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194	0.0000	2,555.4880
2021	1.8931	17.3403	16.5376	0.0268	0.0000	0.9549	0.9549	0.0000	0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126	0.0000	2,555.6462
2022	1.6992	15.5364	16.3276	0.0268	0.0000	0.8057	0.8057	0.0000	0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085	0.0000	2,556.5286
2023	1.5661	14.3126	16.2093	0.0268	0.0000	0.6967	0.6967	0.0000	0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044	0.0000	2,557.3191
2024	1.4653	13.3774	16.1332	0.0268	0.0000	0.6106	0.6106	0.0000	0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009	0.0000	2,557.7349
Total	**18.5701**	**169.3222**	**147.2434**	**0.2354**	**116.5528**	**9.7479**	**125.4261**	**11.6086**	**9.1446**	**19.9143**	**0.0000**	**22,705.8298**	**22,705.8298**	**5.5964**	**0.0000**	**22,823.3541**

2.1 Overall Construction (Maximum Daily Emission)

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					
2016	1.7125	19.0401	12.4451	0.0209	71.3784	1.0066	72.3850	7.1145	0.9261	8.0406	0.0000	2,156.5708	2,156.5708	0.6342	0.0000	2,169.8886
2017	3.1024	26.4057	18.1291	0.0268	71.3784	1.7812	72.2850	7.1145	1.6730	7.9486	0.0000	2,639.8053	2,639.8053	0.6497	0.0000	2,653.4490
2018	2.6687	23.2608	17.5327	0.0268	0.0000	1.4943	1.4943	0.0000	1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387	0.0000	2,623.3517
2019	2.3516	20.9650	17.1204	0.0268	0.0000	1.2850	1.2850	0.0000	1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279	0.0000	2,593.9479
2020	2.1113	19.0839	16.8084	0.0268	0.0000	1.1128	1.1128	0.0000	1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194	0.0000	2,555.4880
2021	1.8931	17.3403	16.5376	0.0268	0.0000	0.9549	0.9549	0.0000	0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126	0.0000	2,555.6462
2022	1.6992	15.5364	16.3276	0.0268	0.0000	0.8057	0.8057	0.0000	0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085	0.0000	2,556.5286
2023	1.5661	14.3126	16.2093	0.0268	0.0000	0.6967	0.6967	0.0000	0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044	0.0000	2,557.3191
2024	1.4653	13.3774	16.1332	0.0268	0.0000	0.6106	0.6106	0.0000	0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009	0.0000	2,557.7349
Total	**18.5701**	**169.3222**	**147.2434**	**0.2354**	**142.7568**	**9.7479**	**151.6301**	**14.2290**	**9.1446**	**22.5347**	**0.0000**	**22,705.8298**	**22,705.8298**	**5.5964**	**0.0000**	**22,823.3540**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**-22.48**	**0.00**	**-20.89**	**-22.57**	**0.00**	**-13.16**	**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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Total	**584.5193**	**233.7937**	**1,922.0956**	**5.2098**	**251.2667**	**126.7729**	**378.0396**	**67.2149**	**126.3578**	**193.5727**	**14,743.5296**	**328,756.4382**	**343,499.9678**	**53.5712**	**1.2009**	**344,997.2382**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Total	**584.5193**	**233.7937**	**1,922.0956**	**5.2098**	**251.2667**	**126.7729**	**378.0396**	**67.2149**	**126.3578**	**193.5727**	**14,743.5296**	**328,756.4382**	**343,499.9678**	**53.5712**	**1.2009**	**344,997.2382**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Utility Installation	Trenching	9/19/2016	5/26/2017	5	180	
2	Building Construction	Building Construction	6/1/2017	12/31/2024	5	1979	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Utility Installation	Excavators	2	8.00	157	0.38
Utility Installation	Other Material Handling Equipment	1	6.00	196	0.40
Utility Installation	Tractors/Loaders/Backhoes	2	8.00	75	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Utility Installation	5	4.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Utility Installation - 2016

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	1.6923	19.0106	12.0797	0.0201		1.0061	1.0061		0.9256	0.9256		2,090.6883	2,090.6883	0.6306		2,103.9314
Total	**1.6923**	**19.0106**	**12.0797**	**0.0201**		**1.0061**	**1.0061**		**0.9256**	**0.9256**		**2,090.6883**	**2,090.6883**	**0.6306**		**2,103.9314**

3.2 Utility Installation - 2016

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	0.0203	0.0295	0.3654	7.8000e-004	58.2764	5.6000e-004	58.2770	5.8043	5.1000e-004	5.8048		65.8825	65.8825	3.5600e-003		65.9572
Total	**0.0203**	**0.0295**	**0.3654**	**7.8000e-004**	**58.2764**	**5.6000e-004**	**58.2770**	**5.8043**	**5.1000e-004**	**5.8048**		**65.8825**	**65.8825**	**3.5600e-003**		**65.9572**

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	1.6923	19.0106	12.0797	0.0201		1.0061	1.0061		0.9256	0.9256	0.0000	2,090.6883	2,090.6883	0.6306		2,103.9314
Total	**1.6923**	**19.0106**	**12.0797**	**0.0201**		**1.0061**	**1.0061**		**0.9256**	**0.9256**	**0.0000**	**2,090.6883**	**2,090.6883**	**0.6306**		**2,103.9314**

3.2 Utility Installation - 2016

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	0.0203	0.0295	0.3654	7.8000e-004	71.3784	5.6000e-004	71.3790	7.1145	5.1000e-004	7.1150		65.8825	65.8825	3.5600e-003		65.9572
Total	**0.0203**	**0.0295**	**0.3654**	**7.8000e-004**	**71.3784**	**5.6000e-004**	**71.3790**	**7.1145**	**5.1000e-004**	**7.1150**		**65.8825**	**65.8825**	**3.5600e-003**		**65.9572**

3.2 Utility Installation - 2017

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	1.5647	17.3716	11.9013	0.0201		0.9061	0.9061		0.8336	0.8336		2,057.3912	2,057.3912	0.6304		2,070.6292
Total	**1.5647**	**17.3716**	**11.9013**	**0.0201**		**0.9061**	**0.9061**		**0.8336**	**0.8336**		**2,057.3912**	**2,057.3912**	**0.6304**		**2,070.6292**

3.2 Utility Installation - 2017

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	0.0181	0.0267	0.3311	7.8000e-004	58.2764	5.3000e-004	58.2770	5.8043	4.9000e-004	5.8048		63.4167	63.4167	3.2900e-003		63.4857
Total	**0.0181**	**0.0267**	**0.3311**	**7.8000e-004**	**58.2764**	**5.3000e-004**	**58.2770**	**5.8043**	**4.9000e-004**	**5.8048**		**63.4167**	**63.4167**	**3.2900e-003**		**63.4857**

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	1.5647	17.3716	11.9013	0.0201		0.9061	0.9061		0.8336	0.8336	0.0000	2,057.3912	2,057.3912	0.6304		2,070.6292
Total	**1.5647**	**17.3716**	**11.9013**	**0.0201**		**0.9061**	**0.9061**		**0.8336**	**0.8336**	**0.0000**	**2,057.3912**	**2,057.3912**	**0.6304**		**2,070.6292**

3.2 Utility Installation - 2017

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	0.0181	0.0267	0.3311	7.8000e-004	71.3784	5.3000e-004	71.3789	7.1145	4.9000e-004	7.1150		63.4167	63.4167	3.2900e-003		63.4857
Total	**0.0181**	**0.0267**	**0.3311**	**7.8000e-004**	**71.3784**	**5.3000e-004**	**71.3789**	**7.1145**	**4.9000e-004**	**7.1150**		**63.4167**	**63.4167**	**3.2900e-003**		**63.4857**

3.3 Building Construction - 2017

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.3 Building Construction - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.3 Building Construction - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

3.3 Building Construction - 2018

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

3.3 Building Construction - 2018

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.3 Building Construction - 2019

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.3 Building Construction - 2019

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

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

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

3.3 Building Construction - 2020

Mitigated Construction Off-Site

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

3.3 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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

3.3 Building Construction - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

3.3 Building Construction - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

3.3 Building Construction - 2022

Unmitigated Construction Off-Site

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

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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

3.3 Building Construction - 2022

Mitigated Construction Off-Site

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

3.3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**		**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

3.3 Building Construction - 2023

Unmitigated Construction Off-Site

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

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	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**	**0.0000**	**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

3.3 Building Construction - 2023

Mitigated Construction Off-Site

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

3.3 Building Construction - 2024

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**		**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

3.3 Building Construction - 2024

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**	**0.0000**	**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

3.3 Building Construction - 2024

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179
Unmitigated	85.4150	213.1799	996.4473	3.8896	251.2667	5.1255	256.3921	67.2149	4.7292	71.9441		289,269.6991	289,269.6991	9.1676		289,462.2179

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
NaturalGas Unmitigated	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461

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					
Condo/Townhouse	27628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21115.7	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13026.2	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	128.836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1304.11	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27678.1	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	69.863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	27.628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21.1157	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13.0262	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	0.128836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1.30411	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27.6781	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	0.069863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Unmitigated	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South - Const Emissions - Utility Inst & Bldg Const - Onsite Truck

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	0.00	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Only construction, no need to factor in RPS

Land Use - Client

Construction Phase - Client Provided - All Construction Phases (utility installation dates shifted)

Off-road Equipment -

Off-road Equipment - Client Provided - Equipment type, unit, hrs/day and HP (when equipment fractions were give, 1 unit * number of total hrs was input)
CalEEMod Default - Load Factors, HP for 6 off-highway trucks

Off-road Equipment - Client provided, except HP for off-highway trucks (CalEEMod defaults). Other material handling equipment represent water trucks.

Trips and VMT - Onsite trucks modeled as worker trips

On-road Fugitive Dust - Offroad equipment modeled as worker trips is assumed to operate on 100% unpaved area with a speed of 10 mph.

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Based on 4.7 AQ Mitigation Measures

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2294405	2684105
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstructionPhase	NumDays	4,650.00	1,979.00

tblConstructionPhase	PhaseEndDate	12/26/2024	12/31/2024
tblConstructionPhase	PhaseStartDate	5/27/2017	6/1/2017
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	528,818.40	0.00
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblOffRoadEquipment	HorsePower	162.00	157.00
tblOffRoadEquipment	HorsePower	167.00	196.00
tblOffRoadEquipment	HorsePower	97.00	75.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	MeanVehicleSpeed	40.00	10.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripNumber	419.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	4.00
tblTripsAndVMT	WorkerTripNumber	1,581.00	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					
2016	1.7132	19.0433	12.4199	0.0209	58.2764	1.0066	59.2830	5.8043	0.9261	6.7304	0.0000	2,152.8602	2,152.8602	0.6342	0.0000	2,166.1780
2017	3.1024	26.4057	18.1291	0.0268	58.2764	1.7812	59.1831	5.8043	1.6730	6.6384	0.0000	2,639.8053	2,639.8053	0.6497	0.0000	2,653.4490
2018	2.6687	23.2608	17.5327	0.0268	0.0000	1.4943	1.4943	0.0000	1.4048	1.4048	0.0000	2,609.9390	2,609.9390	0.6387	0.0000	2,623.3517
2019	2.3516	20.9650	17.1204	0.0268	0.0000	1.2850	1.2850	0.0000	1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279	0.0000	2,593.9479
2020	2.1113	19.0839	16.8084	0.0268	0.0000	1.1128	1.1128	0.0000	1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194	0.0000	2,555.4880
2021	1.8931	17.3403	16.5376	0.0268	0.0000	0.9549	0.9549	0.0000	0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126	0.0000	2,555.6462
2022	1.6992	15.5364	16.3276	0.0268	0.0000	0.8057	0.8057	0.0000	0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085	0.0000	2,556.5286
2023	1.5661	14.3126	16.2093	0.0268	0.0000	0.6967	0.6967	0.0000	0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044	0.0000	2,557.3191
2024	1.4653	13.3774	16.1332	0.0268	0.0000	0.6106	0.6106	0.0000	0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009	0.0000	2,557.7349
Total	**18.5708**	**169.3255**	**147.2181**	**0.2354**	**116.5528**	**9.7479**	**125.4261**	**11.6086**	**9.1446**	**19.9143**	**0.0000**	**22,702.1192**	**22,702.1192**	**5.5964**	**0.0000**	**22,819.6435**

2.1 Overall Construction (Maximum Daily Emission)

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					
2016	1.7132	19.0433	12.4199	0.0209	71.3784	1.0066	72.3850	7.1145	0.9261	8.0406	0.0000	2,152.8602	2,152.8602	0.6342	0.0000	2,166.1780
2017	3.1024	26.4057	18.1291	0.0268	71.3784	1.7812	72.2850	7.1145	1.6730	7.9486	0.0000	2,639.8053	2,639.8053	0.6497	0.0000	2,653.4490
2018	2.6687	23.2608	17.5327	0.0268	0.0000	1.4943	1.4943	0.0000	1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387	0.0000	2,623.3517
2019	2.3516	20.9650	17.1204	0.0268	0.0000	1.2850	1.2850	0.0000	1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279	0.0000	2,593.9479
2020	2.1113	19.0839	16.8084	0.0268	0.0000	1.1128	1.1128	0.0000	1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194	0.0000	2,555.4880
2021	1.8931	17.3403	16.5376	0.0268	0.0000	0.9549	0.9549	0.0000	0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126	0.0000	2,555.6462
2022	1.6992	15.5364	16.3276	0.0268	0.0000	0.8057	0.8057	0.0000	0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085	0.0000	2,556.5286
2023	1.5661	14.3126	16.2093	0.0268	0.0000	0.6967	0.6967	0.0000	0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044	0.0000	2,557.3191
2024	1.4653	13.3774	16.1332	0.0268	0.0000	0.6106	0.6106	0.0000	0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009	0.0000	2,557.7349
Total	**18.5708**	**169.3255**	**147.2181**	**0.2354**	**142.7568**	**9.7479**	**151.6301**	**14.2290**	**9.1446**	**22.5347**	**0.0000**	**22,702.1192**	**22,702.1192**	**5.5964**	**0.0000**	**22,819.6435**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**-22.48**	**0.00**	**-20.89**	**-22.57**	**0.00**	**-13.16**	**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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Total	**588.1308**	**245.3138**	**1,923.1355**	**5.0350**	**251.2667**	**126.7866**	**378.0532**	**67.2149**	**126.3703**	**193.5853**	**14,743.5296**	**316,668.2746**	**331,411.8041**	**53.5837**	**1.2009**	**332,909.3385**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Energy	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
Mobile	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Total	**588.1308**	**245.3138**	**1,923.1355**	**5.0350**	**251.2667**	**126.7866**	**378.0532**	**67.2149**	**126.3703**	**193.5853**	**14,743.5296**	**316,668.2746**	**331,411.8041**	**53.5837**	**1.2009**	**332,909.3385**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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	Utility Installation	Trenching	9/19/2016	5/26/2017	5	180	
2	Building Construction	Building Construction	6/1/2017	12/31/2024	5	1979	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Utility Installation	Excavators	2	8.00	157	0.38
Utility Installation	Other Material Handling Equipment	1	6.00	196	0.40
Utility Installation	Tractors/Loaders/Backhoes	2	8.00	75	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Utility Installation	5	4.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Utility Installation - 2016

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	1.6923	19.0106	12.0797	0.0201		1.0061	1.0061		0.9256	0.9256		2,090.6883	2,090.6883	0.6306		2,103.9314
Total	**1.6923**	**19.0106**	**12.0797**	**0.0201**		**1.0061**	**1.0061**		**0.9256**	**0.9256**		**2,090.6883**	**2,090.6883**	**0.6306**		**2,103.9314**

3.2 Utility Installation - 2016

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	0.0209	0.0328	0.3402	7.3000e-004	58.2764	5.6000e-004	58.2770	5.8043	5.1000e-004	5.8048		62.1720	62.1720	3.5600e-003		62.2466
Total	**0.0209**	**0.0328**	**0.3402**	**7.3000e-004**	**58.2764**	**5.6000e-004**	**58.2770**	**5.8043**	**5.1000e-004**	**5.8048**		**62.1720**	**62.1720**	**3.5600e-003**		**62.2466**

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	1.6923	19.0106	12.0797	0.0201		1.0061	1.0061		0.9256	0.9256	0.0000	2,090.6883	2,090.6883	0.6306		2,103.9314
Total	**1.6923**	**19.0106**	**12.0797**	**0.0201**		**1.0061**	**1.0061**		**0.9256**	**0.9256**	**0.0000**	**2,090.6883**	**2,090.6883**	**0.6306**		**2,103.9314**

3.2 Utility Installation - 2016

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	0.0209	0.0328	0.3402	7.3000e-004	71.3784	5.6000e-004	71.3790	7.1145	5.1000e-004	7.1150		62.1720	62.1720	3.5600e-003		62.2466
Total	**0.0209**	**0.0328**	**0.3402**	**7.3000e-004**	**71.3784**	**5.6000e-004**	**71.3790**	**7.1145**	**5.1000e-004**	**7.1150**		**62.1720**	**62.1720**	**3.5600e-003**		**62.2466**

3.2 Utility Installation - 2017

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	1.5647	17.3716	11.9013	0.0201		0.9061	0.9061		0.8336	0.8336		2,057.3912	2,057.3912	0.6304		2,070.6292
Total	**1.5647**	**17.3716**	**11.9013**	**0.0201**		**0.9061**	**0.9061**		**0.8336**	**0.8336**		**2,057.3912**	**2,057.3912**	**0.6304**		**2,070.6292**

3.2 Utility Installation - 2017

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	0.0186	0.0296	0.3069	7.3000e-004	58.2764	5.3000e-004	58.2770	5.8043	4.9000e-004	5.8048		59.8405	59.8405	3.2900e-003		59.9095
Total	**0.0186**	**0.0296**	**0.3069**	**7.3000e-004**	**58.2764**	**5.3000e-004**	**58.2770**	**5.8043**	**4.9000e-004**	**5.8048**		**59.8405**	**59.8405**	**3.2900e-003**		**59.9095**

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	1.5647	17.3716	11.9013	0.0201		0.9061	0.9061		0.8336	0.8336	0.0000	2,057.3912	2,057.3912	0.6304		2,070.6292
Total	**1.5647**	**17.3716**	**11.9013**	**0.0201**		**0.9061**	**0.9061**		**0.8336**	**0.8336**	**0.0000**	**2,057.3912**	**2,057.3912**	**0.6304**		**2,070.6292**

3.2 Utility Installation - 2017

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	0.0186	0.0296	0.3069	7.3000e-004	71.3784	5.3000e-004	71.3789	7.1145	4.9000e-004	7.1150		59.8405	59.8405	3.2900e-003		59.9095
Total	**0.0186**	**0.0296**	**0.3069**	**7.3000e-004**	**71.3784**	**5.3000e-004**	**71.3789**	**7.1145**	**4.9000e-004**	**7.1150**		**59.8405**	**59.8405**	**3.2900e-003**		**59.9095**

3.3 Building Construction - 2017

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.3 Building Construction - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

3.3 Building Construction - 2017

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

3.3 Building Construction - 2018

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

3.3 Building Construction - 2018

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.3 Building Construction - 2019

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

3.3 Building Construction - 2019

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

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

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

3.3 Building Construction - 2020

Mitigated Construction Off-Site

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

3.3 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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**		**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

3.3 Building Construction - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	**1.8931**	**17.3403**	**16.5376**	**0.0268**		**0.9549**	**0.9549**		**0.8979**	**0.8979**	**0.0000**	**2,542.7817**	**2,542.7817**	**0.6126**		**2,555.6462**

3.3 Building Construction - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581		2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**		**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

3.3 Building Construction - 2022

Unmitigated Construction Off-Site

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

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	1.6992	15.5364	16.3276	0.0268		0.8057	0.8057		0.7581	0.7581	0.0000	2,543.7497	2,543.7497	0.6085		2,556.5286
Total	**1.6992**	**15.5364**	**16.3276**	**0.0268**		**0.8057**	**0.8057**		**0.7581**	**0.7581**	**0.0000**	**2,543.7497**	**2,543.7497**	**0.6085**		**2,556.5286**

3.3 Building Construction - 2022

Mitigated Construction Off-Site

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

3.3 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557		2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**		**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

3.3 Building Construction - 2023

Unmitigated Construction Off-Site

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

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	1.5661	14.3126	16.2093	0.0268		0.6967	0.6967		0.6557	0.6557	0.0000	2,544.6262	2,544.6262	0.6044		2,557.3191
Total	**1.5661**	**14.3126**	**16.2093**	**0.0268**		**0.6967**	**0.6967**		**0.6557**	**0.6557**	**0.0000**	**2,544.6262**	**2,544.6262**	**0.6044**		**2,557.3191**

3.3 Building Construction - 2023

Mitigated Construction Off-Site

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

3.3 Building Construction - 2024

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744		2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**		**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

3.3 Building Construction - 2024

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	1.4653	13.3774	16.1332	0.0268		0.6106	0.6106		0.5744	0.5744	0.0000	2,545.1154	2,545.1154	0.6009		2,557.7349
Total	**1.4653**	**13.3774**	**16.1332**	**0.0268**		**0.6106**	**0.6106**		**0.5744**	**0.5744**	**0.0000**	**2,545.1154**	**2,545.1154**	**0.6009**		**2,557.7349**

3.3 Building Construction - 2024

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182
Unmitigated	89.0265	224.6999	997.4872	3.7148	251.2667	5.1391	256.4058	67.2149	4.7418	71.9567		277,181.5355	277,181.5355	9.1801		277,374.3182

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	8.90	8.90	8.90	29,485	29,485
Condo/Townhouse	4,613.00	5,012.00	4249.00	22,442,689	22,442,689
Condo/Townhouse High Rise	3,525.65	3,830.60	3247.45	17,152,626	17,152,626
Elementary School	967.50	0.00	0.00	2,694,383	2,694,383
General Office Building	4,789.35	1,030.95	426.30	13,454,658	13,454,658
Health Club	82.33	52.18	66.83	189,401	189,401
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,023.20	13,991.60	7067.20	29,318,118	29,318,118
Single Family Housing	3,244.23	3,417.12	2973.03	15,698,149	15,698,149
Strip Mall	664.80	630.60	306.45	1,353,161	1,353,161
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	29,918.96	27,973.95	18,345.16	102,332,671	102,332,671

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	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Elementary School	18.50	10.10	7.90	65.00	30.00	5.00	63	25	12
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Health Club	18.50	10.10	7.90	16.90	64.10	19.00	52	39	9
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	18.50	10.10	7.90	16.30	64.70	19.00	54	35	11
Single Family Housing	19.80	9.60	12.90	40.20	19.20	40.60	86	11	3
Strip Mall	18.50	10.10	7.90	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461
NaturalGas Unmitigated	1.0010	8.6506	4.3475	0.0546		0.6916	0.6916		0.6916	0.6916		10,920.1876	10,920.1876	0.2093	0.2002	10,986.6461

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					
Condo/Townhouse	27628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21115.7	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13026.2	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	128.836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1304.11	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27678.1	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	69.863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	27.628	0.2980	2.5461	1.0835	0.0163		0.2059	0.2059		0.2059	0.2059		3,250.3533	3,250.3533	0.0623	0.0596	3,270.1344
Condo/Townhouse High Rise	21.1157	0.2277	1.9460	0.8281	0.0124		0.1573	0.1573		0.1573	0.1573		2,484.1986	2,484.1986	0.0476	0.0455	2,499.3170
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	13.0262	0.1405	1.2771	1.0727	7.6600e-003		0.0971	0.0971		0.0971	0.0971		1,532.4899	1,532.4899	0.0294	0.0281	1,541.8164
Health Club	0.128836	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004		15.1571	15.1571	2.9000e-004	2.8000e-004	15.2494
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
Regional Shopping Center	1.30411	0.0141	0.1279	0.1074	7.7000e-004		9.7200e-003	9.7200e-003		9.7200e-003	9.7200e-003		153.4247	153.4247	2.9400e-003	2.8100e-003	154.3584
Single Family Housing	27.6781	0.2985	2.5507	1.0854	0.0163		0.2062	0.2062		0.2062	0.2062		3,256.2510	3,256.2510	0.0624	0.0597	3,276.0680
Strip Mall	0.069863	7.5000e-004	6.8500e-003	5.7500e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004		8.2192	8.2192	1.6000e-004	1.5000e-004	8.2692
Unenclosed Parking with Elevator	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
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
Total		**1.0010**	**8.6506**	**4.3475**	**0.0546**		**0.6916**	**0.6916**		**0.6916**	**0.6916**		**10,920.1877**	**10,920.1877**	**0.2093**	**0.2002**	**10,986.6461**

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	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742
Unmitigated	498.1032	11.9632	921.3007	1.2656		120.9559	120.9559		120.9370	120.9370	14,743.5296	28,566.5515	43,310.0810	44.1943	1.0007	44,548.3742

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	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	14.9032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	66.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	412.4447	10.4646	791.1583	1.2587		120.2352	120.2352		120.2163	120.2163	14,743.5296	28,332.0000	43,075.5296	43.9681	1.0007	44,309.0714
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**498.1032**	**11.9632**	**921.3007**	**1.2656**		**120.9559**	**120.9559**		**120.9370**	**120.9370**	**14,743.5296**	**28,566.5515**	**43,310.0810**	**44.1943**	**1.0007**	**44,548.3743**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Entrada South (Operational) - Scenario 2 - 2020 Actual

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	528,818.40	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	501.88	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS by Year 2020

Land Use - Based on Project Description and Client Data.

Construction Phase - No Construction information evaluated (Operational Run only)

Trips and VMT -

Grading - Client Provided Data

Vehicle Trips - Based on Stantec Data by Landuse. Applied 8.85% reduction from TDM measures.

Vechicle Emission Factors - CO2 EF accounts for Pavley, LCFS, and ACC.

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - Based on Client information, no woodstoves and no wood burning fireplaces.

Energy Use - 2013 T24 for electricity and NG. 25% and 30% better for res and non-res as compared to 2008 T24

Water And Wastewater - Total Indoor and Outdoor water use based on Client Data. Distributed between land uses based on default CalEEMod distribution.

Solid Waste - Defaults

Land Use Change - Based on Client Data

Sequestration - Based on client Data

Energy Mitigation - Based on Client data. 2 kW panel per single family home, 2 kW panel per 1600 SF commercial space.

Water Mitigation - Based on Client Data

Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2318202	2318201
tblConstructionPhase	NumDays	300.00	1.00
tblEnergyUse	T24E	269.81	202.36
tblEnergyUse	T24E	269.81	202.36
tblEnergyUse	T24E	5.62	3.93
tblEnergyUse	T24E	2.75	1.93
tblEnergyUse	T24E	4.90	3.43
tblEnergyUse	T24E	596.10	447.08
tblEnergyUse	T24E	4.90	3.43
tblEnergyUse	T24NG	11,455.03	8,591.27
tblEnergyUse	T24NG	11,455.03	8,591.27
tblEnergyUse	T24NG	10.54	7.38

tblEnergyUse	T24NG	14.36	10.05
tblEnergyUse	T24NG	1.21	0.85
tblEnergyUse	T24NG	23,944.02	17,958.02
tblEnergyUse	T24NG	1.21	0.85
tblFireplaces	NumberGas	595.00	560.00
tblFireplaces	NumberGas	454.75	428.00
tblFireplaces	NumberGas	288.15	271.20
tblFireplaces	NumberNoFireplace	70.00	140.00
tblFireplaces	NumberNoFireplace	53.50	107.00
tblFireplaces	NumberNoFireplace	33.90	67.80
tblFireplaces	NumberWood	35.00	0.00
tblFireplaces	NumberWood	26.75	0.00
tblFireplaces	NumberWood	16.95	0.00
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	501.88
tblProjectCharacteristics	OperationalYear	2014	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSequestration	NumberOfNewTrees	0.00	3,911.00

tblSequestration	NumberOfNewTrees	0.00	89.00
tblSolidWaste	SolidWasteGenerationRate	0.48	59.13
tblSolidWaste	SolidWasteGenerationRate	322.00	3,262.22
tblSolidWaste	SolidWasteGenerationRate	246.10	2,492.44
tblSolidWaste	SolidWasteGenerationRate	136.88	230.26
tblSolidWaste	SolidWasteGenerationRate	404.55	4,885.92
tblSolidWaste	SolidWasteGenerationRate	14.25	3.94
tblSolidWaste	SolidWasteGenerationRate	294.00	3,145.72
tblSolidWaste	SolidWasteGenerationRate	466.99	1,579.79
tblSolidWaste	SolidWasteGenerationRate	15.75	169.51
tblVehicleEF	LDA	257.96	247.65
tblVehicleEF	LDA	53.04	51.45
tblVehicleEF	LDT1	318.76	315.02
tblVehicleEF	LDT1	64.29	63.70
tblVehicleEF	LDT2	384.11	378.07
tblVehicleEF	LDT2	77.68	76.70
tblVehicleEF	MDV	510.84	504.24
tblVehicleEF	MDV	103.50	102.54
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	30.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	64.10	0.00

tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CC_TTP	64.40	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	16.90	100.00
tblVehicleTrips	CW_TTP	16.30	100.00
tblVehicleTrips	CW_TTP	16.60	100.00

tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	25.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00

tblVehicleTrips	PB_TP	12.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	63.00	100.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	45.00	100.00
tblVehicleTrips	ST_TR	1.59	1.79
tblVehicleTrips	ST_TR	7.16	7.44
tblVehicleTrips	ST_TR	7.16	7.44
tblVehicleTrips	ST_TR	2.37	1.99
tblVehicleTrips	ST_TR	20.87	1.31
tblVehicleTrips	ST_TR	49.97	50.35
tblVehicleTrips	ST_TR	10.08	7.21
tblVehicleTrips	ST_TR	42.04	64.54
tblVehicleTrips	SU_TR	1.59	1.79
tblVehicleTrips	SU_TR	6.07	6.30
tblVehicleTrips	SU_TR	6.07	6.30
tblVehicleTrips	SU_TR	0.98	0.82
tblVehicleTrips	SU_TR	26.73	1.68
tblVehicleTrips	SU_TR	25.24	25.43
tblVehicleTrips	SU_TR	8.77	6.27

tblVehicleTrips	SU_TR	20.43	31.36
tblVehicleTrips	WD_TR	1.59	1.79
tblVehicleTrips	WD_TR	6.59	6.84
tblVehicleTrips	WD_TR	6.59	6.84
tblVehicleTrips	WD_TR	1.29	1.03
tblVehicleTrips	WD_TR	11.01	9.25
tblVehicleTrips	WD_TR	32.93	2.07
tblVehicleTrips	WD_TR	42.94	43.27
tblVehicleTrips	WD_TR	9.57	6.84
tblVehicleTrips	WD_TR	44.32	68.04
tblWater	IndoorWaterUseRate	45,607,817.94	20,129,663.84
tblWater	IndoorWaterUseRate	34,857,403.71	15,384,814.51
tblWater	IndoorWaterUseRate	1,818,180.00	802,479.79
tblWater	IndoorWaterUseRate	77,314,180.38	34,123,721.14
tblWater	IndoorWaterUseRate	147,857.86	64,945,815.15
tblWater	IndoorWaterUseRate	20,740,306.02	9,154,031.19
tblWater	IndoorWaterUseRate	22,087,214.69	9,748,508.63
tblWater	IndoorWaterUseRate	1,111,087.82	490,394.53
tblWater	OutdoorWaterUseRate	6,672,295.56	30,931,089.44
tblWater	OutdoorWaterUseRate	28,752,754.79	41,239,069.15
tblWater	OutdoorWaterUseRate	21,975,319.73	31,518,431.42
tblWater	OutdoorWaterUseRate	4,675,320.00	6,705,647.73
tblWater	OutdoorWaterUseRate	47,386,110.55	67,964,238.70
tblWater	OutdoorWaterUseRate	90,622.56	129,976.76
tblWater	OutdoorWaterUseRate	12,711,800.46	18,232,090.18
tblWater	OutdoorWaterUseRate	13,924,548.39	19,971,492.06
tblWater	OutdoorWaterUseRate	680,989.31	976,719.12
tblWoodstoves	NumberCatalytic	35.00	0.00
tblWoodstoves	NumberCatalytic	26.75	0.00
tblWoodstoves	NumberCatalytic	16.95	0.00

tblWoodstoves	NumberNoncatalytic	35.00	0.00
tblWoodstoves	NumberNoncatalytic	26.75	0.00
tblWoodstoves	NumberNoncatalytic	16.95	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					
2014	2.3400e-003	0.0249	0.0189	2.0000e-005	1.1000e-004	1.2600e-003	1.3800e-003	3.0000e-005	1.1800e-003	1.2100e-003	0.0000	2.0034	2.0034	5.2000e-004	0.0000	2.0143
Total	**2.3400e-003**	**0.0249**	**0.0189**	**2.0000e-005**	**1.1000e-004**	**1.2600e-003**	**1.3800e-003**	**3.0000e-005**	**1.1800e-003**	**1.2100e-003**	**0.0000**	**2.0034**	**2.0034**	**5.2000e-004**	**0.0000**	**2.0143**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	2.3400e-003	0.0249	0.0189	2.0000e-005	1.1000e-004	1.2600e-003	1.3800e-003	3.0000e-005	1.1800e-003	1.2100e-003	0.0000	2.0034	2.0034	5.2000e-004	0.0000	2.0143
Total	**2.3400e-003**	**0.0249**	**0.0189**	**2.0000e-005**	**1.1000e-004**	**1.2600e-003**	**1.3800e-003**	**3.0000e-005**	**1.1800e-003**	**1.2100e-003**	**0.0000**	**2.0034**	**2.0034**	**5.2000e-004**	**0.0000**	**2.0143**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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	17.1487	0.1888	16.3306	8.6000e-004		0.1108	0.1108		0.1106	0.1106	0.0000	328.9784	328.9784	0.0319	5.5400e-003	331.3662
Energy	0.1446	1.2492	0.6229	7.8900e-003		0.0999	0.0999		0.0999	0.0999	0.0000	6,071.2677	6,071.2677	0.2955	0.0817	6,102.8047
Mobile	15.0482	48.6324	184.4270	0.5729	38.1898	0.7918	38.9816	10.2298	0.7302	10.9600	0.0000	39,609.4283	39,609.4283	1.4930	0.0000	39,640.7819
Waste						0.0000	0.0000		0.0000	0.0000	3,213.1289	0.0000	3,213.1289	189.8905	0.0000	7,200.8290
Water						0.0000	0.0000		0.0000	0.0000	49.1044	1,009.3232	1,058.4276	5.1018	0.1312	1,206.2234
Total	**32.3415**	**50.0703**	**201.3805**	**0.5817**	**38.1898**	**1.0026**	**39.1924**	**10.2298**	**0.9408**	**11.1705**	**3,262.2333**	**47,018.9976**	**50,281.2309**	**196.8127**	**0.2184**	**54,482.0052**

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	17.1487	0.1888	16.3306	8.6000e-004		0.1108	0.1108		0.1106	0.1106	0.0000	328.9784	328.9784	0.0319	5.5400e-003	331.3662
Energy	0.1446	1.2492	0.6229	7.8900e-003		0.0999	0.0999		0.0999	0.0999	0.0000	5,637.7317	5,637.7317	0.2705	0.0765	5,667.1359
Mobile	15.0482	48.6324	184.4270	0.5729	38.1898	0.7918	38.9816	10.2298	0.7302	10.9600	0.0000	39,609.4283	39,609.4283	1.4930	0.0000	39,640.7819

Waste						0.0000	0.0000		0.0000	0.0000	803.2822	0.0000	803.2822	47.4726	0.0000	1,800.2073
Water						0.0000	0.0000		0.0000	0.0000	49.1044	970.5349	1,019.6393	5.0987	0.1305	1,167.1660
Total	**32.3415**	**50.0703**	**201.3805**	**0.5817**	**38.1898**	**1.0026**	**39.1924**	**10.2298**	**0.9408**	**11.1705**	**852.3866**	**46,546.6733**	**47,399.0599**	**54.3667**	**0.2126**	**48,606.6573**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**73.87**	**1.00**	**5.73**	**72.38**	**2.67**	**10.78**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	2,836.8060
Vegetation Land Change	-4,114.3010
Total	**-1,277.4950**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2014	1/1/2014	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

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	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3000e-003	0.0248	0.0181	2.0000e-005		1.2600e-003	1.2600e-003		1.1800e-003	1.1800e-003	0.0000	1.8888	1.8888	5.1000e-004	0.0000	1.8995
Total	**2.3000e-003**	**0.0248**	**0.0181**	**2.0000e-005**		**1.2600e-003**	**1.2600e-003**		**1.1800e-003**	**1.1800e-003**	**0.0000**	**1.8888**	**1.8888**	**5.1000e-004**	**0.0000**	**1.8995**

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	5.0000e-005	8.0000e-005	8.0000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1146	0.1146	1.0000e-005	0.0000	0.1147
Total	**5.0000e-005**	**8.0000e-005**	**8.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1146**	**0.1146**	**1.0000e-005**	**0.0000**	**0.1147**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3000e-003	0.0248	0.0181	2.0000e-005		1.2600e-003	1.2600e-003		1.1800e-003	1.1800e-003	0.0000	1.8888	1.8888	5.1000e-004	0.0000	1.8995
Total	**2.3000e-003**	**0.0248**	**0.0181**	**2.0000e-005**		**1.2600e-003**	**1.2600e-003**		**1.1800e-003**	**1.1800e-003**	**0.0000**	**1.8888**	**1.8888**	**5.1000e-004**	**0.0000**	**1.8995**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	8.0000e-005	8.0000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1146	0.1146	1.0000e-005	0.0000	0.1147
Total	**5.0000e-005**	**8.0000e-005**	**8.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1146**	**0.1146**	**1.0000e-005**	**0.0000**	**0.1147**

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					
Unmitigated	15.0482	48.6324	184.4270	0.5729	38.1898	0.7918	38.9816	10.2298	0.7302	10.9600	0.0000	39,609.4283	39,609.4283	1.4930	0.0000	39,640.7819
Mitigated	15.0482	48.6324	184.4270	0.5729	38.1898	0.7918	38.9816	10.2298	0.7302	10.9600	0.0000	39,609.4283	39,609.4283	1.4930	0.0000	39,640.7819

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	10.02	10.02	10.02	36,925	36,925
Condo/Townhouse	4,788.00	5,208.00	4410.00	18,217,967	18,217,967
Condo/Townhouse High Rise	3,659.40	3,980.40	3370.50	13,923,732	13,923,732
Elementary School	772.50	0.00	0.00	2,032,602	2,032,602
General Office Building	4,023.75	865.65	356.70	11,230,540	11,230,540
Health Club	5.18	3.28	4.20	17,550	17,550
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,115.60	14,098.00	7120.40	43,044,538	43,044,538
Single Family Housing	2,318.76	2,444.19	2125.53	8,774,852	8,774,852
Strip Mall	1,020.60	968.10	470.40	3,442,399	3,442,399

Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	28,713.81	27,577.64	17,867.75	100,721,105	100,721,105

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	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse High Rise	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Elementary School	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
General Office Building	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Health Club	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Single Family Housing	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Strip Mall	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Unenclosed Parking with	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.530094	0.057664	0.178835	0.124843	0.039181	0.006319	0.017052	0.034445	0.002509	0.003148	0.003693	0.000531	0.001685

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive 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					

NaturalGas Unmitigated	0.1446	1.2492	0.6229	7.8900e-003		0.0999	0.0999		0.0999	0.0999	0.0000	1,431.3406	1,431.3406	0.0274	0.0262	1,440.0515
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,206.3911	4,206.3911	0.2431	0.0503	4,227.0844
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,639.9271	4,639.9271	0.2681	0.0555	4,662.7532
NaturalGas Mitigated	0.1446	1.2492	0.6229	7.8900e-003		0.0999	0.0999		0.0999	0.0999	0.0000	1,431.3406	1,431.3406	0.0274	0.0262	1,440.0515

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
Condo/Townhouse	8.07959e+006	0.0436	0.3723	0.1584	2.3800e-003		0.0301	0.0301		0.0301	0.0301	0.0000	431.1576	431.1576	8.2600e-003	7.9000e-003	433.7816
Condo/Townhouse High Rise	6.17511e+006	0.0333	0.2845	0.1211	1.8200e-003		0.0230	0.0230		0.0230	0.0230	0.0000	329.5276	329.5276	6.3200e-003	6.0400e-003	331.5331
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	3.37995e+006	0.0182	0.1657	0.1392	9.9000e-004		0.0126	0.0126		0.0126	0.0126	0.0000	180.3670	180.3670	3.4600e-003	3.3100e-003	181.4647
Health Club	36250	2.0000e-004	1.7800e-003	1.4900e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9344	1.9344	4.0000e-005	4.0000e-005	1.9462
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
Regional Shopping Center	375200	2.0200e-003	0.0184	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003	0.0000	20.0221	20.0221	3.8000e-004	3.7000e-004	20.1440
Single Family Housing	8.07326e+006	0.0435	0.3720	0.1583	2.3700e-003		0.0301	0.0301		0.0301	0.0301	0.0000	430.8202	430.8202	8.2600e-003	7.9000e-003	433.4421
Strip Mall	20100	1.1000e-004	9.9000e-004	8.3000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0726	1.0726	2.0000e-005	2.0000e-005	1.0791
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1446**	**1.2491**	**0.6229**	**7.8900e-003**		**0.0999**	**0.0999**		**0.0999**	**0.0999**	**0.0000**	**1,431.3406**	**1,431.3406**	**0.0274**	**0.0263**	**1,440.0515**

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
Condo/Townhouse	8.07959e+006	0.0436	0.3723	0.1584	2.3800e-003		0.0301	0.0301		0.0301	0.0301	0.0000	431.1576	431.1576	8.2600e-003	7.9000e-003	433.7816
Condo/Townhouse High Rise	6.17511e+006	0.0333	0.2845	0.1211	1.8200e-003		0.0230	0.0230		0.0230	0.0230	0.0000	329.5276	329.5276	6.3200e-003	6.0400e-003	331.5331
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	3.37995e+006	0.0182	0.1657	0.1392	9.9000e-004		0.0126	0.0126		0.0126	0.0126	0.0000	180.3670	180.3670	3.4600e-003	3.3100e-003	181.4647
Health Club	36250	2.0000e-004	1.7800e-003	1.4900e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9344	1.9344	4.0000e-005	4.0000e-005	1.9462
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
Regional Shopping Center	375200	2.0200e-003	0.0184	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003	0.0000	20.0221	20.0221	3.8000e-004	3.7000e-004	20.1440
Single Family Housing	8.07326e+006	0.0435	0.3720	0.1583	2.3700e-003		0.0301	0.0301		0.0301	0.0301	0.0000	430.8202	430.8202	8.2600e-003	7.9000e-003	433.4421
Strip Mall	20100	1.1000e-004	9.9000e-004	8.3000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0726	1.0726	2.0000e-005	2.0000e-005	1.0791
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1446**	**1.2491**	**0.6229**	**7.8900e-003**		**0.0999**	**0.0999**		**0.0999**	**0.0999**	**0.0000**	**1,431.3406**	**1,431.3406**	**0.0274**	**0.0263**	**1,440.0515**

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
Condo/Townhouse	3.0313e+006	690.0725	0.0399	8.2500e-003	693.4673
Condo/Townhouse High Rise	2.31678e+006	527.4125	0.0305	6.3100e-003	530.0071
Elementary School	420114	95.6384	5.5300e-003	1.1400e-003	96.1089
General Office Building	5.5854e+006	1,271.5104	0.0735	0.0152	1,277.7656
Health Club	28075	6.3912	3.7000e-004	8.0000e-005	6.4227
Parking Lot	465360	105.9388	6.1200e-003	1.2700e-003	106.4599
Regional Shopping Center	3.836e+006	873.2613	0.0505	0.0104	877.5573
Single Family Housing	2.4224e+006	551.4574	0.0319	6.5900e-003	554.1703
Strip Mall	205500	46.7819	2.7000e-003	5.6000e-004	47.0120
Unenclosed Parking with	2.07101e+006	471.4628	0.0272	5.6400e-003	473.7821
Total		**4,639.9271**	**0.2681**	**0.0555**	**4,662.7532**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	-173128	-39.4124	-0.0023	-0.0005	-39.6063
Condo/Townhouse	2.85817e+006	650.6601	0.0376	7.7800e-003	653.8610
Condo/Townhouse High Rise	2.14365e+006	488.0002	0.0282	5.8300e-003	490.4009
Elementary School	246986	56.2261	3.2500e-003	6.7000e-004	56.5027
General Office Building	5.41227e+006	1,232.0980	0.0712	0.0147	1,238.1593

Health Club	-145053	-33.0211	-0.0019	-0.0004	-33.1836
Parking Lot	292232	66.5264	3.8400e-003	8.0000e-004	66.8537
Regional Shopping Center	3.66287e+006	833.8490	0.0482	9.9700e-003	837.9511
Single Family Housing	2.24927e+006	512.0450	0.0296	6.1200e-003	514.5640
Strip Mall	32372.2	7.3695	4.3000e-004	9.0000e-005	7.4058
Unenclosed Parking with Elevator	1.89788e+006	432.0504	0.0250	5.1700e-003	434.1759
Total		**4,206.3911**	**0.2431**	**0.0503**	**4,227.0845**

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					
Unmitigated	17.1487	0.1888	16.3306	8.6000e-004		0.1108	0.1108		0.1106	0.1106	0.0000	328.9784	328.9784	0.0319	5.5400e-003	331.3662
Mitigated	17.1487	0.1888	16.3306	8.6000e-004		0.1108	0.1108		0.1106	0.1106	0.0000	328.9784	328.9784	0.0319	5.5400e-003	331.3662

6.2 Area by SubCategory

Unmitigated

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

Architectural Coating	2.5124					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	14.1057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0306	0.0000	1.6700e-003	0.0000		0.0211	0.0211		0.0209	0.0209	0.0000	302.3807	302.3807	5.8000e-003	5.5400e-003	304.2209
Landscaping	0.5000	0.1888	16.3289	8.6000e-004		0.0897	0.0897		0.0897	0.0897	0.0000	26.5977	26.5977	0.0261	0.0000	27.1453
Total	**17.1487**	**0.1888**	**16.3306**	**8.6000e-004**		**0.1108**	**0.1108**		**0.1106**	**0.1106**	**0.0000**	**328.9784**	**328.9784**	**0.0319**	**5.5400e-003**	**331.3662**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.5124					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	14.1057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0306	0.0000	1.6700e-003	0.0000		0.0211	0.0211		0.0209	0.0209	0.0000	302.3807	302.3807	5.8000e-003	5.5400e-003	304.2209
Landscaping	0.5000	0.1888	16.3289	8.6000e-004		0.0897	0.0897		0.0897	0.0897	0.0000	26.5977	26.5977	0.0261	0.0000	27.1453
Total	**17.1487**	**0.1888**	**16.3306**	**8.6000e-004**		**0.1108**	**0.1108**		**0.1106**	**0.1106**	**0.0000**	**328.9784**	**328.9784**	**0.0319**	**5.5400e-003**	**331.3662**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

	Total CO2	CH4	N2O	CO2e

Category	MT/yr			
Unmitigated	1,058.4276	5.1018	0.1312	1,206.2234
Mitigated	1,019.6393	5.0987	0.1305	1,167.1660

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 30.9311	78.2303	4.5200e-003	9.4000e-004	78.6151
Condo/Townhouse	20.1297 / 41.2391	170.3559	0.6654	0.0175	189.7382
Condo/Townhouse High Rise	15.3848 / 31.5184	130.2006	0.5086	0.0133	145.0142
Elementary School	0.80248 / 6.70565	19.5931	0.0273	8.5000e-004	20.4288
General Office Building	34.1237 / 67.9642	283.8698	1.1277	0.0295	316.7024
Health Club	64.9458 / 0.129977	213.4465	2.1274	0.0523	274.3272
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	9.15403 / 18.2321	76.1509	0.3025	7.9200e-003	84.9586
Single Family Housing	9.74851 / 19.9715	82.5009	0.3222	8.4500e-003	91.8875
Strip Mall	0.490395 / 0.976719	4.0795	0.0162	4.2000e-004	4.5514
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,058.4276**	**5.1018**	**0.1312**	**1,206.2234**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 28.7518	72.7184	4.2000e-003	8.7000e-004	73.0762
Condo/Townhouse	20.1297 / 38.3335	163.0072	0.6649	0.0173	182.3431
Condo/Townhouse High Rise	15.3848 / 29.2977	124.5841	0.5081	0.0133	139.3623
Elementary School	0.80248 / 6.23319	18.3982	0.0272	8.3000e-004	19.2275
General Office Building	34.1237 / 63.1757	271.7586	1.1268	0.0293	304.5144
Health Club	64.9458 / 0.120819	213.4234	2.1270	0.0522	274.2711
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	9.15403 / 16.9475	72.9020	0.3023	7.8700e-003	81.6891
Single Family Housing	9.74851 / 18.5644	78.9421	0.3220	8.4000e-003	88.3062
Strip Mall	0.490395 / 0.907902	3.9055	0.0162	4.2000e-004	4.3762
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,019.6393**	**5.0987**	**0.1305**	**1,167.1660**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	803.2822	47.4726	0.0000	1,800.2073
Unmitigated	3,213.1289	189.8905	0.0000	7,200.8290

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	59.13	12.0029	0.7094	0.0000	26.8992
Condo/Townhouse	3262.22	662.2020	39.1350	0.0000	1,484.0373
Condo/Townhouse High Rise	2492.44	505.9426	29.9004	0.0000	1,133.8500
Elementary School	230.256	46.7399	2.7623	0.0000	104.7471
General Office Building	4885.92	991.7976	58.6136	0.0000	2,222.6824
Health Club	3.942	0.8002	0.0473	0.0000	1.7933
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3145.72	638.5519	37.7373	0.0000	1,431.0360
Single Family Housing	1579.79	320.6837	18.9519	0.0000	718.6728
Strip Mall	169.506	34.4082	2.0335	0.0000	77.1110

Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**3,213.1289**	**189.8905**	**0.0000**	**7,200.8290**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	14.7825	3.0007	0.1773	0.0000	6.7248
Condo/Townhouse	815.556	165.5505	9.7838	0.0000	371.0093
Condo/Townhouse High Rise	623.11	126.4857	7.4751	0.0000	283.4625
Elementary School	57.564	11.6850	0.6906	0.0000	26.1868
General Office Building	1221.48	247.9494	14.6534	0.0000	555.6706
Health Club	0.9855	0.2001	0.0118	0.0000	0.4483
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	786.429	159.6380	9.4343	0.0000	357.7590
Single Family Housing	394.948	80.1709	4.7380	0.0000	179.6682
Strip Mall	42.3765	8.6021	0.5084	0.0000	19.2777
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**803.2822**	**47.4726**	**0.0000**	**1,800.2072**

9.0 Operational Offroad

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

	0	0.00	0			Diesel

10.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-1,277.4950	0.0000	0.0000	-1,277.4950

10.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	7.4 / 0	-45.8800	0.0000	0.0000	-45.8800
Grassland	39.1 / 0	-168.5210	0.0000	0.0000	-168.5210
Others	107.5 / 0	0.0000	0.0000	0.0000	0.0000
Scrub	244 / 0	-3,489.2000	0.0000	0.0000	-3,489.2000
Trees	3.7 / 0	-410.7000	0.0000	0.0000	-410.7000
Wetlands	17.1 / 0	0.0000	0.0000	0.0000	0.0000
Total		**-4,114.3010**	**0.0000**	**0.0000**	**-4,114.3010**

10.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	3911	2,768.9880	0.0000	0.0000	2,768.9880
True Fir/Hemlock	89	67.8180	0.0000	0.0000	67.8180
Total		**2,836.8060**	**0.0000**	**0.0000**	**2,836.8060**

Entrada South (Operational) - Scenario 2a - 2020 Actual Unmitigated

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	528,818.40	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	501.88	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS by Year 2020

Land Use - Based on Project Description and Client Data.

Construction Phase - No Construction information evaluated (Operational Run only)

Trips and VMT -

Grading - Client Provided Data

Vehicle Trips - Based on Stantec Data by Landuse. Applied 8.85% reduction from TDM measures.

Vechicle Emission Factors - CO2 EF accounts for Pavley, LCFS, and ACC.

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - Based on Client information, no woodstoves and no wood burning fireplaces.

Energy Use - 2013 T24 for electricity and NG. 25% and 30% better for res and non-res as compared to 2008 T24

Water And Wastewater - Total Indoor and Outdoor water use based on Client Data. Distributed between land uses based on default CalEEMod distribution.

Solid Waste - Defaults

Land Use Change - Based on Client Data

Sequestration - Based on client Data

Energy Mitigation - Based on Client data. 2 kW panel per single family home, 2 kW panel per 1600 SF commercial space.

Water Mitigation - Based on Client Data

Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2318202	2318201
tblConstructionPhase	NumDays	300.00	1.00
tblEnergyUse	T24E	269.81	202.36
tblEnergyUse	T24E	269.81	202.36
tblEnergyUse	T24E	5.62	3.93
tblEnergyUse	T24E	2.75	1.93
tblEnergyUse	T24E	4.90	3.43
tblEnergyUse	T24E	596.10	447.08
tblEnergyUse	T24E	4.90	3.43
tblEnergyUse	T24NG	11,455.03	8,591.27
tblEnergyUse	T24NG	11,455.03	8,591.27
tblEnergyUse	T24NG	10.54	7.38

tblEnergyUse	T24NG	14.36	10.05
tblEnergyUse	T24NG	1.21	0.85
tblEnergyUse	T24NG	23,944.02	17,958.02
tblEnergyUse	T24NG	1.21	0.85
tblFireplaces	NumberGas	595.00	630.00
tblFireplaces	NumberGas	454.75	481.50
tblFireplaces	NumberGas	288.15	305.10
tblFireplaces	NumberWood	35.00	0.00
tblFireplaces	NumberWood	26.75	0.00
tblFireplaces	NumberWood	16.95	0.00
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	501.88
tblProjectCharacteristics	OperationalYear	2014	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSequestration	NumberOfNewTrees	0.00	3,911.00
tblSequestration	NumberOfNewTrees	0.00	89.00
tblSolidWaste	SolidWasteGenerationRate	0.48	59.13
tblSolidWaste	SolidWasteGenerationRate	322.00	3,262.22

tblSolidWaste	SolidWasteGenerationRate	246.10	2,492.44
tblSolidWaste	SolidWasteGenerationRate	136.88	230.26
tblSolidWaste	SolidWasteGenerationRate	404.55	4,885.92
tblSolidWaste	SolidWasteGenerationRate	14.25	3.94
tblSolidWaste	SolidWasteGenerationRate	294.00	3,145.72
tblSolidWaste	SolidWasteGenerationRate	466.99	1,579.79
tblSolidWaste	SolidWasteGenerationRate	15.75	169.51
tblVehicleEF	LDA	257.96	247.65
tblVehicleEF	LDA	53.04	51.45
tblVehicleEF	LDT1	318.76	315.02
tblVehicleEF	LDT1	64.29	63.70
tblVehicleEF	LDT2	384.11	378.07
tblVehicleEF	LDT2	77.68	76.70
tblVehicleEF	MDV	510.84	504.24
tblVehicleEF	MDV	103.50	102.54
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	30.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	64.10	0.00
tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CC_TTP	64.40	0.00
tblVehicleTrips	CNW_TL	7.90	0.00

tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	16.90	100.00
tblVehicleTrips	CW_TTP	16.30	100.00
tblVehicleTrips	CW_TTP	16.60	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00

tblVehicleTrips	DV_TP	25.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	12.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00

tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	63.00	100.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	45.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.59	1.96
tblVehicleTrips	ST_TR	7.16	8.16
tblVehicleTrips	ST_TR	7.16	8.16
tblVehicleTrips	ST_TR	2.37	2.18
tblVehicleTrips	ST_TR	20.87	1.44
tblVehicleTrips	ST_TR	49.97	55.24
tblVehicleTrips	ST_TR	10.08	7.91
tblVehicleTrips	ST_TR	42.04	70.80
tblVehicleTrips	SU_TR	1.59	1.96
tblVehicleTrips	SU_TR	6.07	6.92
tblVehicleTrips	SU_TR	6.07	6.92
tblVehicleTrips	SU_TR	0.98	0.90
tblVehicleTrips	SU_TR	26.73	1.85
tblVehicleTrips	SU_TR	25.24	27.90
tblVehicleTrips	SU_TR	8.77	6.88
tblVehicleTrips	SU_TR	20.43	34.41

tblVehicleTrips	WD_TR	1.59	1.96
tblVehicleTrips	WD_TR	6.59	7.51
tblVehicleTrips	WD_TR	6.59	7.51
tblVehicleTrips	WD_TR	1.29	1.13
tblVehicleTrips	WD_TR	11.01	10.14
tblVehicleTrips	WD_TR	32.93	2.28
tblVehicleTrips	WD_TR	42.94	47.47
tblVehicleTrips	WD_TR	9.57	7.51
tblVehicleTrips	WD_TR	44.32	74.64
tblWater	IndoorWaterUseRate	45,607,817.94	20,129,663.84
tblWater	IndoorWaterUseRate	34,857,403.71	15,384,814.51
tblWater	IndoorWaterUseRate	1,818,180.00	802,479.79
tblWater	IndoorWaterUseRate	77,314,180.38	34,123,721.14
tblWater	IndoorWaterUseRate	147,857.86	64,945,815.15
tblWater	IndoorWaterUseRate	20,740,306.02	9,154,031.19
tblWater	IndoorWaterUseRate	22,087,214.69	9,748,508.63
tblWater	IndoorWaterUseRate	1,111,087.82	490,394.53
tblWater	OutdoorWaterUseRate	6,672,295.56	30,931,089.44
tblWater	OutdoorWaterUseRate	28,752,754.79	41,239,069.15
tblWater	OutdoorWaterUseRate	21,975,319.73	31,518,431.42
tblWater	OutdoorWaterUseRate	4,675,320.00	6,705,647.73
tblWater	OutdoorWaterUseRate	47,386,110.55	67,964,238.70
tblWater	OutdoorWaterUseRate	90,622.56	129,976.76
tblWater	OutdoorWaterUseRate	12,711,800.46	18,232,090.18
tblWater	OutdoorWaterUseRate	13,924,548.39	19,971,492.06
tblWater	OutdoorWaterUseRate	680,989.31	976,719.12
tblWoodstoves	NumberCatalytic	35.00	0.00
tblWoodstoves	NumberCatalytic	26.75	0.00
tblWoodstoves	NumberCatalytic	16.95	0.00
tblWoodstoves	NumberNoncatalytic	35.00	0.00

tblWoodstoves	NumberNoncatalytic	26.75	0.00
tblWoodstoves	NumberNoncatalytic	16.95	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					
2014	2.3400e-003	0.0249	0.0189	2.0000e-005	1.1000e-004	1.2600e-003	1.3800e-003	3.0000e-005	1.1800e-003	1.2100e-003	0.0000	2.0034	2.0034	5.2000e-004	0.0000	2.0143
Total	**2.3400e-003**	**0.0249**	**0.0189**	**2.0000e-005**	**1.1000e-004**	**1.2600e-003**	**1.3800e-003**	**3.0000e-005**	**1.1800e-003**	**1.2100e-003**	**0.0000**	**2.0034**	**2.0034**	**5.2000e-004**	**0.0000**	**2.0143**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	2.3400e-003	0.0249	0.0189	2.0000e-005	1.1000e-004	1.2600e-003	1.3800e-003	3.0000e-005	1.1800e-003	1.2100e-003	0.0000	2.0034	2.0034	5.2000e-004	0.0000	2.0143
Total	**2.3400e-003**	**0.0249**	**0.0189**	**2.0000e-005**	**1.1000e-004**	**1.2600e-003**	**1.3800e-003**	**3.0000e-005**	**1.1800e-003**	**1.2100e-003**	**0.0000**	**2.0034**	**2.0034**	**5.2000e-004**	**0.0000**	**2.0143**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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**

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	17.1525	0.1888	16.3308	8.6000e-004		0.1135	0.1135		0.1132	0.1132	0.0000	366.7760	366.7760	0.0326	6.2400e-003	369.3938
Energy	0.1446	1.2492	0.6229	7.8900e-003		0.0999	0.0999		0.0999	0.0999	0.0000	6,071.2677	6,071.2677	0.2955	0.0817	6,102.8047
Mobile	16.5120	53.3631	202.3673	0.6287	41.9048	0.8689	42.7737	11.2249	0.8013	12.0261	0.0000	43,462.5277	43,462.5277	1.6383	0.0000	43,496.9312
Waste						0.0000	0.0000		0.0000	0.0000	3,213.1297	0.0000	3,213.1297	189.8905	0.0000	7,200.8308
Water						0.0000	0.0000		0.0000	0.0000	49.1044	1,009.3232	1,058.4276	5.1018	0.1312	1,206.2234
Total	**33.8091**	**54.8011**	**219.3210**	**0.6374**	**41.9048**	**1.0822**	**42.9870**	**11.2249**	**1.0144**	**12.2393**	**3,262.2341**	**50,909.8945**	**54,172.1286**	**196.9587**	**0.2191**	**58,376.1840**

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	17.1525	0.1888	16.3308	8.6000e-004		0.1135	0.1135		0.1132	0.1132	0.0000	366.7760	366.7760	0.0326	6.2400e-003	369.3938
Energy	0.1446	1.2492	0.6229	7.8900e-003		0.0999	0.0999		0.0999	0.0999	0.0000	6,071.2677	6,071.2677	0.2955	0.0817	6,102.8047
Mobile	16.5120	53.3631	202.3673	0.6287	41.9048	0.8689	42.7737	11.2249	0.8013	12.0261	0.0000	43,462.5277	43,462.5277	1.6383	0.0000	43,496.9312
Waste						0.0000	0.0000		0.0000	0.0000	803.2824	0.0000	803.2824	47.4726	0.0000	1,800.2077

Water						0.0000	0.0000		0.0000	0.0000	49.1044	1,009.3232	1,058.4276	5.1009	0.1310	1,206.1451
Total	**33.8091**	**54.8011**	**219.3210**	**0.6374**	**41.9048**	**1.0822**	**42.9870**	**11.2249**	**1.0144**	**12.2393**	**852.3868**	**50,909.8945**	**51,762.2813**	**54.5399**	**0.2189**	**52,975.4825**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**73.87**	**0.00**	**4.45**	**72.31**	**0.09**	**9.25**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	2,836.8060
Vegetation Land Change	-4,114.3010
Total	**-1,277.4950**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2014	1/1/2014	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

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	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3000e-003	0.0248	0.0181	2.0000e-005		1.2600e-003	1.2600e-003		1.1800e-003	1.1800e-003	0.0000	1.8888	1.8888	5.1000e-004	0.0000	1.8995
Total	**2.3000e-003**	**0.0248**	**0.0181**	**2.0000e-005**		**1.2600e-003**	**1.2600e-003**		**1.1800e-003**	**1.1800e-003**	**0.0000**	**1.8888**	**1.8888**	**5.1000e-004**	**0.0000**	**1.8995**

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	5.0000e-005	8.0000e-005	8.0000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1146	0.1146	1.0000e-005	0.0000	0.1147
Total	**5.0000e-005**	**8.0000e-005**	**8.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1146**	**0.1146**	**1.0000e-005**	**0.0000**	**0.1147**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3000e-003	0.0248	0.0181	2.0000e-005		1.2600e-003	1.2600e-003		1.1800e-003	1.1800e-003	0.0000	1.8888	1.8888	5.1000e-004	0.0000	1.8995
Total	**2.3000e-003**	**0.0248**	**0.0181**	**2.0000e-005**		**1.2600e-003**	**1.2600e-003**		**1.1800e-003**	**1.1800e-003**	**0.0000**	**1.8888**	**1.8888**	**5.1000e-004**	**0.0000**	**1.8995**

Mitigated Construction Off-Site

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

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	8.0000e-005	8.0000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1146	0.1146	1.0000e-005	0.0000	0.1147
Total	**5.0000e-005**	**8.0000e-005**	**8.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1146**	**0.1146**	**1.0000e-005**	**0.0000**	**0.1147**

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					
Unmitigated	16.5120	53.3631	202.3673	0.6287	41.9048	0.8689	42.7737	11.2249	0.8013	12.0261	0.0000	43,462.5277	43,462.5277	1.6383	0.0000	43,496.9312
Mitigated	16.5120	53.3631	202.3673	0.6287	41.9048	0.8689	42.7737	11.2249	0.8013	12.0261	0.0000	43,462.5277	43,462.5277	1.6383	0.0000	43,496.9312

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	10.98	10.98	10.98	40,432	40,432
Condo/Townhouse	5,257.00	5,712.00	4844.00	20,000,242	20,000,242
Condo/Townhouse High Rise	4,017.85	4,365.60	3702.20	15,285,899	15,285,899
Elementary School	847.50	0.00	0.00	2,229,942	2,229,942
General Office Building	4,410.90	948.30	391.50	12,311,016	12,311,016
Health Club	5.70	3.60	4.63	19,326	19,326
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	13,291.60	15,467.20	7812.00	47,223,304	47,223,304
Single Family Housing	2,545.89	2,681.49	2332.32	9,632,461	9,632,461
Strip Mall	1,119.60	1,062.00	516.15	3,776,377	3,776,377
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	31,507.02	30,251.17	19,613.77	110,519,000	110,519,000

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	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse High Rise	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Elementary School	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
General Office Building	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Health Club	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	100	0	0
Regional Shopping Center	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Single Family Housing	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Strip Mall	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.530094	0.057664	0.178835	0.124843	0.039181	0.006319	0.017052	0.034445	0.002509	0.003148	0.003693	0.000531	0.001685

5.0 Energy Detail

4.4 Fleet Mix

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					
NaturalGas Unmitigated	0.1446	1.2492	0.6229	7.8900e-003		0.0999	0.0999		0.0999	0.0999	0.0000	1,431.3406	1,431.3406	0.0274	0.0262	1,440.0515
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,639.9271	4,639.9271	0.2681	0.0555	4,662.7532

Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,639.9271	4,639.9271	0.2681	0.0555	4,662.7532
NaturalGas Mitigated	0.1446	1.2492	0.6229	7.8900e-003		0.0999	0.0999		0.0999	0.0999	0.0000	1,431.3406	1,431.3406	0.0274	0.0262	1,440.0515

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
Condo/Townhouse	8.07959e+006	0.0436	0.3723	0.1584	2.3800e-003		0.0301	0.0301		0.0301	0.0301	0.0000	431.1576	431.1576	8.2600e-003	7.9000e-003	433.7816
Condo/Townhouse High Rise	6.17511e+006	0.0333	0.2845	0.1211	1.8200e-003		0.0230	0.0230		0.0230	0.0230	0.0000	329.5276	329.5276	6.3200e-003	6.0400e-003	331.5331
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	3.37995e+006	0.0182	0.1657	0.1392	9.9000e-004		0.0126	0.0126		0.0126	0.0126	0.0000	180.3670	180.3670	3.4600e-003	3.3100e-003	181.4647
Health Club	36250	2.0000e-004	1.7800e-003	1.4900e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9344	1.9344	4.0000e-005	4.0000e-005	1.9462
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
Regional Shopping Center	375200	2.0200e-003	0.0184	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003	0.0000	20.0221	20.0221	3.8000e-004	3.7000e-004	20.1440
Single Family Housing	8.07326e+006	0.0435	0.3720	0.1583	2.3700e-003		0.0301	0.0301		0.0301	0.0301	0.0000	430.8202	430.8202	8.2600e-003	7.9000e-003	433.4421
Strip Mall	20100	1.1000e-004	9.9000e-004	8.3000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0726	1.0726	2.0000e-005	2.0000e-005	1.0791
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1446**	**1.2491**	**0.6229**	**7.8900e-003**		**0.0999**	**0.0999**		**0.0999**	**0.0999**	**0.0000**	**1,431.3406**	**1,431.3406**	**0.0274**	**0.0263**	**1,440.0515**

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
Condo/Townhouse	8.07959e+006	0.0436	0.3723	0.1584	2.3800e-003		0.0301	0.0301		0.0301	0.0301	0.0000	431.1576	431.1576	8.2600e-003	7.9000e-003	433.7816
Condo/Townhouse High Rise	6.17511e+006	0.0333	0.2845	0.1211	1.8200e-003		0.0230	0.0230		0.0230	0.0230	0.0000	329.5276	329.5276	6.3200e-003	6.0400e-003	331.5331
Elementary School	682841	3.6800e-003	0.0335	0.0281	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.4390	36.4390	7.0000e-004	6.7000e-004	36.6608
General Office Building	3.37995e+006	0.0182	0.1657	0.1392	9.9000e-004		0.0126	0.0126		0.0126	0.0126	0.0000	180.3670	180.3670	3.4600e-003	3.3100e-003	181.4647
Health Club	36250	2.0000e-004	1.7800e-003	1.4900e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9344	1.9344	4.0000e-005	4.0000e-005	1.9462
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
Regional Shopping Center	375200	2.0200e-003	0.0184	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003	0.0000	20.0221	20.0221	3.8000e-004	3.7000e-004	20.1440
Single Family Housing	8.07326e+006	0.0435	0.3720	0.1583	2.3700e-003		0.0301	0.0301		0.0301	0.0301	0.0000	430.8202	430.8202	8.2600e-003	7.9000e-003	433.4421
Strip Mall	20100	1.1000e-004	9.9000e-004	8.3000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0726	1.0726	2.0000e-005	2.0000e-005	1.0791
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1446**	**1.2491**	**0.6229**	**7.8900e-003**		**0.0999**	**0.0999**		**0.0999**	**0.0999**	**0.0000**	**1,431.3406**	**1,431.3406**	**0.0274**	**0.0263**	**1,440.0515**

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

Condo/Townhouse	3.0313e+006	690.0725	0.0399	8.2500e-003	693.4673
Condo/Townhouse High Rise	2.31678e+006	527.4125	0.0305	6.3100e-003	530.0071
Elementary School	420114	95.6384	5.5300e-003	1.1400e-003	96.1089
General Office Building	5.5854e+006	1,271.5104	0.0735	0.0152	1,277.7656
Health Club	28075	6.3912	3.7000e-004	8.0000e-005	6.4227
Parking Lot	465360	105.9388	6.1200e-003	1.2700e-003	106.4599
Regional Shopping Center	3.836e+006	873.2613	0.0505	0.0104	877.5573
Single Family Housing	2.4224e+006	551.4574	0.0319	6.5900e-003	554.1703
Strip Mall	205500	46.7819	2.7000e-003	5.6000e-004	47.0120
Unenclosed Parking with Elevator	2.07101e+006	471.4628	0.0272	5.6400e-003	473.7821
Total		**4,639.9271**	**0.2681**	**0.0555**	**4,662.7532**

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
Condo/Townhouse	3.0313e+006	690.0725	0.0399	8.2500e-003	693.4673
Condo/Townhouse High Rise	2.31678e+006	527.4125	0.0305	6.3100e-003	530.0071
Elementary School	420114	95.6384	5.5300e-003	1.1400e-003	96.1089
General Office Building	5.5854e+006	1,271.5104	0.0735	0.0152	1,277.7656
Health Club	28075	6.3912	3.7000e-004	8.0000e-005	6.4227

Parking Lot	465360	105.9388	6.1200e-003	1.2700e-003	106.4599
Regional Shopping Center	3.836e+006	873.2613	0.0505	0.0104	877.5573
Single Family Housing	2.4224e+006	551.4574	0.0319	6.5900e-003	554.1703
Strip Mall	205500	46.7819	2.7000e-003	5.6000e-004	47.0120
Unenclosed Parking with Elevator	2.07101e+006	471.4628	0.0272	5.6400e-003	473.7821
Total		**4,639.9271**	**0.2681**	**0.0555**	**4,662.7532**

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					
Unmitigated	17.1525	0.1888	16.3308	8.6000e-004		0.1135	0.1135		0.1132	0.1132	0.0000	366.7760	366.7760	0.0326	6.2400e-003	369.3938
Mitigated	17.1525	0.1888	16.3308	8.6000e-004		0.1135	0.1135		0.1132	0.1132	0.0000	366.7760	366.7760	0.0326	6.2400e-003	369.3938

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.5124					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Consumer Products	14.1057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0344	0.0000	1.8700e-003	0.0000		0.0238	0.0238		0.0235	0.0235	0.0000	340.1783	340.1783	6.5200e-003	6.2400e-003	342.2485
Landscaping	0.5000	0.1888	16.3289	8.6000e-004		0.0897	0.0897		0.0897	0.0897	0.0000	26.5977	26.5977	0.0261	0.0000	27.1453
Total	**17.1525**	**0.1888**	**16.3308**	**8.6000e-004**		**0.1135**	**0.1135**		**0.1132**	**0.1132**	**0.0000**	**366.7760**	**366.7760**	**0.0326**	**6.2400e-003**	**369.3938**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.5124					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	14.1057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0344	0.0000	1.8700e-003	0.0000		0.0238	0.0238		0.0235	0.0235	0.0000	340.1783	340.1783	6.5200e-003	6.2400e-003	342.2485
Landscaping	0.5000	0.1888	16.3289	8.6000e-004		0.0897	0.0897		0.0897	0.0897	0.0000	26.5977	26.5977	0.0261	0.0000	27.1453
Total	**17.1525**	**0.1888**	**16.3308**	**8.6000e-004**		**0.1135**	**0.1135**		**0.1132**	**0.1132**	**0.0000**	**366.7760**	**366.7760**	**0.0326**	**6.2400e-003**	**369.3938**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	1,058.4276	5.1018	0.1312	1,206.2234

Mitigated	1,058.4276	5.1009	0.1310	1,206.1451

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 30.9311	78.2303	4.5200e-003	9.4000e-004	78.6151
Condo/Townhouse	20.1297 / 41.2391	170.3559	0.6654	0.0175	189.7382
Condo/Townhouse High Rise	15.3848 / 31.5184	130.2006	0.5086	0.0133	145.0142
Elementary School	0.80248 / 6.70565	19.5931	0.0273	8.5000e-004	20.4288
General Office Building	34.1237 / 67.9642	283.8698	1.1277	0.0295	316.7024
Health Club	64.9458 / 0.129977	213.4465	2.1274	0.0523	274.3272
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	9.15403 / 18.2321	76.1509	0.3025	7.9200e-003	84.9586
Single Family Housing	9.74851 / 19.9715	82.5009	0.3222	8.4500e-003	91.8875
Strip Mall	0.490395 / 0.976719	4.0795	0.0162	4.2000e-004	4.5514
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,058.4276**	**5.1018**	**0.1312**	**1,206.2234**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 30.9311	78.2303	4.5200e-003	9.4000e-004	78.6151
Condo/Townhouse	20.1297 / 41.2391	170.3559	0.6653	0.0174	189.7280
Condo/Townhouse High Rise	15.3848 / 31.5184	130.2006	0.5085	0.0133	145.0064
Elementary School	0.80248 / 6.70565	19.5931	0.0273	8.5000e-004	20.4284
General Office Building	34.1237 / 67.9642	283.8698	1.1275	0.0295	316.6851
Health Club	64.9458 / 0.129977	213.4465	2.1270	0.0522	274.2944
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	9.15403 / 18.2321	76.1509	0.3025	7.9100e-003	84.9540
Single Family Housing	9.74851 / 19.9715	82.5009	0.3222	8.4400e-003	91.8826
Strip Mall	0.490395 / 0.976719	4.0795	0.0162	4.2000e-004	4.5511
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,058.4276**	**5.1009**	**0.1310**	**1,206.1451**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	803.2824	47.4726	0.0000	1,800.2077
Unmitigated	3,213.1297	189.8905	0.0000	7,200.8308

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	59.13	12.0029	0.7094	0.0000	26.8992
Condo/Townhouse	3262.22	662.2012	39.1350	0.0000	1,484.0355
Condo/Townhouse High Rise	2492.44	505.9428	29.9004	0.0000	1,133.8504
Elementary School	230.26	46.7407	2.7623	0.0000	104.7489
General Office Building	4885.92	991.7976	58.6136	0.0000	2,222.6824
Health Club	3.94	0.7998	0.0473	0.0000	1.7924
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3145.72	638.5527	37.7374	0.0000	1,431.0378
Single Family Housing	1579.79	320.6831	18.9518	0.0000	718.6715
Strip Mall	169.51	34.4090	2.0335	0.0000	77.1128
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000

Total		**3,213.1298**	**189.8905**	**0.0000**	**7,200.8308**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	14.7825	3.0007	0.1773	0.0000	6.7248
Condo/Townhouse	815.555	165.5503	9.7837	0.0000	371.0089
Condo/Townhouse High Rise	623.11	126.4857	7.4751	0.0000	283.4626
Elementary School	57.565	11.6852	0.6906	0.0000	26.1872
General Office Building	1221.48	247.9494	14.6534	0.0000	555.6706
Health Club	0.985	0.2000	0.0118	0.0000	0.4481
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	786.43	159.6382	9.4344	0.0000	357.7595
Single Family Housing	394.947	80.1708	4.7380	0.0000	179.6679
Strip Mall	42.3775	8.6023	0.5084	0.0000	19.2782
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**803.2824**	**47.4726**	**0.0000**	**1,800.2077**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
	0	0.00	0			Diesel

10.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-1,277.4950	0.0000	0.0000	-1,277.4950

10.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	7.4 / 0	-45.8800	0.0000	0.0000	-45.8800
Grassland	39.1 / 0	-168.5210	0.0000	0.0000	-168.5210
Others	107.5 / 0	0.0000	0.0000	0.0000	0.0000
Scrub	244 / 0	-3,489.2000	0.0000	0.0000	-3,489.2000
Trees	3.7 / 0	-410.7000	0.0000	0.0000	-410.7000
Wetlands	17.1 / 0	0.0000	0.0000	0.0000	0.0000
Total		**-4,114.3010**	**0.0000**	**0.0000**	**-4,114.3010**

10.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	3911	2,768.9880	0.0000	0.0000	2,768.9880
True Fir/Hemlock	89	67.8180	0.0000	0.0000	67.8180
Total		**2,836.8060**	**0.0000**	**0.0000**	**2,836.8060**

Entrada South (Operational) - Scenario 3 - CARB 2020 NAT

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	528,818.40	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - No RPS

Land Use - Based on Project Description and Client Data

Construction Phase - No Construction information evaluated (Operational Run only)

Trips and VMT -

Grading - Client Provided Data

Vehicle Trips - Based on Stantec Data by Landuse. Applied 0.02% reduction from TDM measure (telecommuting).

Vechicle Emission Factors - CO2 EF adjusted to remove benefit from Pavley and LCFS.

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - Based on Client information, no woodstoves and no wood burning fireplaces.

Energy Use - 2005 T24 for electricity and NG. Checked historical energy use

Water And Wastewater - Total Indoor and Outdoor water use based on Client Data. Distributed between land uses based on default CalEEMod distribution.

Solid Waste - Defaults

Land Use Change - Based on Client Data

Sequestration - Based on client Data

Energy Mitigation - No Rewable Energy

Water Mitigation - Based on Client Data

Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2318202	2684105
tblConstructionPhase	NumDays	300.00	1.00
tblConstructionPhase	PhaseEndDate	1/1/2015	2/24/2016
tblFireplaces	NumberGas	595.00	630.00
tblFireplaces	NumberGas	454.75	481.50
tblFireplaces	NumberGas	288.15	305.10
tblFireplaces	NumberWood	35.00	0.00
tblFireplaces	NumberWood	26.75	0.00
tblFireplaces	NumberWood	16.95	0.00
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07

tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSequestration	NumberOfNewTrees	0.00	3,911.00
tblSequestration	NumberOfNewTrees	0.00	89.00
tblSolidWaste	SolidWasteGenerationRate	0.48	59.13
tblSolidWaste	SolidWasteGenerationRate	322.00	3,262.22
tblSolidWaste	SolidWasteGenerationRate	246.10	2,492.44
tblSolidWaste	SolidWasteGenerationRate	136.88	230.26
tblSolidWaste	SolidWasteGenerationRate	404.55	4,885.92
tblSolidWaste	SolidWasteGenerationRate	14.25	3.94
tblSolidWaste	SolidWasteGenerationRate	294.00	3,145.72
tblSolidWaste	SolidWasteGenerationRate	466.99	1,579.79
tblSolidWaste	SolidWasteGenerationRate	15.75	169.51
tblTripsAndVMT	VendorTripLength	7.90	6.90
tblTripsAndVMT	WorkerTripLength	19.80	14.70
tblVehicleEF	HHD	528.22	586.91
tblVehicleEF	HHD	1,543.87	1,715.41
tblVehicleEF	HHD	49.88	55.43
tblVehicleEF	LDA	257.96	359.10
tblVehicleEF	LDA	53.04	73.73

tblVehicleEF	LDT1	318.76	412.90
tblVehicleEF	LDT1	64.29	84.62
tblVehicleEF	LDT2	384.11	487.57
tblVehicleEF	LDT2	77.68	100.49
tblVehicleEF	LHD1	7.51	8.35
tblVehicleEF	LHD1	547.43	608.26
tblVehicleEF	LHD1	44.67	49.63
tblVehicleEF	LHD2	8.23	9.14
tblVehicleEF	LHD2	524.55	582.84
tblVehicleEF	LHD2	32.59	36.21
tblVehicleEF	MCY	141.51	157.23
tblVehicleEF	MCY	38.62	42.91
tblVehicleEF	MDV	510.84	618.80
tblVehicleEF	MDV	103.50	127.42
tblVehicleEF	MH	608.18	675.75
tblVehicleEF	MH	29.11	32.35
tblVehicleEF	MHD	572.02	635.57
tblVehicleEF	MHD	920.56	1,022.84
tblVehicleEF	MHD	49.58	55.09
tblVehicleEF	OBUS	534.88	594.31
tblVehicleEF	OBUS	1,042.06	1,157.85
tblVehicleEF	OBUS	32.77	36.42
tblVehicleEF	SBUS	547.00	607.77
tblVehicleEF	SBUS	1,045.89	1,162.10
tblVehicleEF	SBUS	115.65	128.50
tblVehicleEF	UBUS	2,019.15	2,243.50
tblVehicleEF	UBUS	19.75	21.95
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00

tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	30.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	64.10	0.00
tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CC_TTP	64.40	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00

tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	16.90	100.00
tblVehicleTrips	CW_TTP	16.30	100.00
tblVehicleTrips	CW_TTP	16.60	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	25.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00

tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	12.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	63.00	100.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	45.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.59	1.96
tblVehicleTrips	ST_TR	7.16	8.14
tblVehicleTrips	ST_TR	7.16	8.14
tblVehicleTrips	ST_TR	2.37	2.18

tblVehicleTrips	ST_TR	20.87	1.44
tblVehicleTrips	ST_TR	49.97	55.13
tblVehicleTrips	ST_TR	10.08	7.89
tblVehicleTrips	ST_TR	42.04	70.66
tblVehicleTrips	SU_TR	1.59	1.96
tblVehicleTrips	SU_TR	6.07	6.90
tblVehicleTrips	SU_TR	6.07	6.90
tblVehicleTrips	SU_TR	0.98	0.90
tblVehicleTrips	SU_TR	26.73	1.84
tblVehicleTrips	SU_TR	25.24	27.85
tblVehicleTrips	SU_TR	8.77	6.87
tblVehicleTrips	SU_TR	20.43	34.34
tblVehicleTrips	WD_TR	1.59	1.96
tblVehicleTrips	WD_TR	6.59	7.49
tblVehicleTrips	WD_TR	6.59	7.49
tblVehicleTrips	WD_TR	1.29	1.13
tblVehicleTrips	WD_TR	11.01	10.12
tblVehicleTrips	WD_TR	32.93	2.27
tblVehicleTrips	WD_TR	42.94	47.38
tblVehicleTrips	WD_TR	9.57	7.49
tblVehicleTrips	WD_TR	44.32	74.49
tblWater	IndoorWaterUseRate	45,607,817.94	24,155,596.61
tblWater	IndoorWaterUseRate	34,857,403.71	18,461,777.41
tblWater	IndoorWaterUseRate	1,818,180.00	962,975.75
tblWater	IndoorWaterUseRate	77,314,180.38	40,948,465.36
tblWater	IndoorWaterUseRate	147,857.86	77,934,978.18
tblWater	IndoorWaterUseRate	20,740,306.02	10,984,837.43
tblWater	IndoorWaterUseRate	22,087,214.69	11,698,210.36
tblWater	IndoorWaterUseRate	1,111,087.82	588,473.43
tblWater	OutdoorWaterUseRate	6,672,295.56	30,931,089.44

tblWater	OutdoorWaterUseRate	28,752,754.79	41,239,069.15
tblWater	OutdoorWaterUseRate	21,975,319.73	31,518,431.42
tblWater	OutdoorWaterUseRate	4,675,320.00	6,705,647.73
tblWater	OutdoorWaterUseRate	47,386,110.55	67,964,238.70
tblWater	OutdoorWaterUseRate	90,622.56	129,976.76
tblWater	OutdoorWaterUseRate	12,711,800.46	18,232,090.18
tblWater	OutdoorWaterUseRate	13,924,548.39	19,971,492.06
tblWater	OutdoorWaterUseRate	680,989.31	976,719.12
tblWoodstoves	NumberCatalytic	35.00	0.00
tblWoodstoves	NumberCatalytic	26.75	0.00
tblWoodstoves	NumberCatalytic	16.95	0.00
tblWoodstoves	NumberNoncatalytic	35.00	0.00
tblWoodstoves	NumberNoncatalytic	26.75	0.00
tblWoodstoves	NumberNoncatalytic	16.95	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					
2015	0.5978	6.3252	4.8515	5.4800e-003	0.0215	0.3201	0.3415	5.7000e-003	0.2985	0.3042	0.0000	510.2625	510.2625	0.1337	0.0000	513.0711
2016	0.0849	0.8922	0.7026	8.2000e-004	3.2100e-003	0.0447	0.0479	8.5000e-004	0.0417	0.0425	0.0000	75.4675	75.4675	0.0199	0.0000	75.8844
Total	**0.6827**	**7.2173**	**5.5541**	**6.3000e-003**	**0.0247**	**0.3648**	**0.3894**	**6.5500e-003**	**0.3402**	**0.3467**	**0.0000**	**585.7300**	**585.7300**	**0.1536**	**0.0000**	**588.9555**

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					
2015	0.5978	6.3252	4.8515	5.4800e-003	0.0215	0.3201	0.3415	5.7000e-003	0.2985	0.3042	0.0000	510.2620	510.2620	0.1337	0.0000	513.0706
2016	0.0849	0.8922	0.7026	8.2000e-004	3.2100e-003	0.0447	0.0479	8.5000e-004	0.0417	0.0425	0.0000	75.4674	75.4674	0.0199	0.0000	75.8843
Total	**0.6827**	**7.2173**	**5.5541**	**6.3000e-003**	**0.0247**	**0.3648**	**0.3894**	**6.5500e-003**	**0.3402**	**0.3467**	**0.0000**	**585.7294**	**585.7294**	**0.1536**	**0.0000**	**588.9548**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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**

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	17.3645	0.1888	16.3308	8.6000e-004		0.1135	0.1135		0.1132	0.1132	0.0000	366.7760	366.7760	0.0326	6.2400e-003	369.3938
Energy	0.1973	1.7062	0.8629	0.0108		0.1363	0.1363		0.1363	0.1363	0.0000	8,361.6027	8,361.6027	0.3320	0.0968	8,398.5685
Mobile	16.4765	53.2482	201.9314	0.6273	41.8145	0.8670	42.6815	11.2007	0.7995	12.0002	0.0000	55,772.8061	55,772.8061	1.6347	0.0000	55,807.1355
Waste						0.0000	0.0000		0.0000	0.0000	3,213.1297	0.0000	3,213.1297	189.8905	0.0000	7,200.8308
Water						0.0000	0.0000		0.0000	0.0000	58.9253	1,384.1204	1,443.0456	6.1158	0.1561	1,619.8590
Total	**34.0383**	**55.1431**	**219.1252**	**0.6389**	**41.8145**	**1.1168**	**42.9313**	**11.2007**	**1.0491**	**12.2498**	**3,272.0550**	**65,885.3051**	**69,157.3601**	**198.0057**	**0.2591**	**73,395.7876**

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	17.3645	0.1888	16.3308	8.6000e-004		0.1135	0.1135		0.1132	0.1132	0.0000	366.7760	366.7760	0.0326	6.2400e-003	369.3938
Energy	0.1973	1.7062	0.8629	0.0108		0.1363	0.1363		0.1363	0.1363	0.0000	8,361.6027	8,361.6027	0.3320	0.0968	8,398.5685
Mobile	16.4765	53.2482	201.9314	0.6273	41.8145	0.8670	42.6815	11.2007	0.7995	12.0002	0.0000	55,772.8061	55,772.8061	1.6347	0.0000	55,807.1355
Waste						0.0000	0.0000		0.0000	0.0000	1,606.5649	0.0000	1,606.5649	94.9453	0.0000	3,600.4154
Water						0.0000	0.0000		0.0000	0.0000	58.9253	1,384.1204	1,443.0456	6.1147	0.1558	1,619.7650
Total	**34.0383**	**55.1431**	**219.1252**	**0.6389**	**41.8145**	**1.1168**	**42.9313**	**11.2007**	**1.0491**	**12.2498**	**1,665.4901**	**65,885.3051**	**67,550.7953**	**103.0593**	**0.2588**	**69,795.2782**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**49.10**	**0.00**	**2.32**	**47.95**	**0.09**	**4.91**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	2,836.8060
Vegetation Land Change	-4,114.3010
Total	**-1,277.4950**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	2/24/2016	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

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

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

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

Category	tons/yr										MT/yr					
Off-Road	0.5883	6.3114	4.7076	5.2100e-003		0.3198	0.3198		0.2983	0.2983	0.0000	488.6086	488.6086	0.1325	0.0000	491.3901
Total	**0.5883**	**6.3114**	**4.7076**	**5.2100e-003**		**0.3198**	**0.3198**		**0.2983**	**0.2983**	**0.0000**	**488.6086**	**488.6086**	**0.1325**	**0.0000**	**491.3901**

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	9.4900e-003	0.0138	0.1439	2.7000e-004	0.0215	2.2000e-004	0.0217	5.7000e-003	2.0000e-004	5.9000e-003	0.0000	21.6540	21.6540	1.2900e-003	0.0000	21.6810
Total	**9.4900e-003**	**0.0138**	**0.1439**	**2.7000e-004**	**0.0215**	**2.2000e-004**	**0.0217**	**5.7000e-003**	**2.0000e-004**	**5.9000e-003**	**0.0000**	**21.6540**	**21.6540**	**1.2900e-003**	**0.0000**	**21.6810**

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	0.5883	6.3114	4.7076	5.2100e-003		0.3198	0.3198		0.2983	0.2983	0.0000	488.6080	488.6080	0.1325	0.0000	491.3895
Total	**0.5883**	**6.3114**	**4.7076**	**5.2100e-003**		**0.3198**	**0.3198**		**0.2983**	**0.2983**	**0.0000**	**488.6080**	**488.6080**	**0.1325**	**0.0000**	**491.3895**

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	9.4900e-003	0.0138	0.1439	2.7000e-004	0.0215	2.2000e-004	0.0217	5.7000e-003	2.0000e-004	5.9000e-003	0.0000	21.6540	21.6540	1.2900e-003	0.0000	21.6810
Total	**9.4900e-003**	**0.0138**	**0.1439**	**2.7000e-004**	**0.0215**	**2.2000e-004**	**0.0217**	**5.7000e-003**	**2.0000e-004**	**5.9000e-003**	**0.0000**	**21.6540**	**21.6540**	**1.2900e-003**	**0.0000**	**21.6810**

3.2 Demolition - 2016

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	0.0836	0.8903	0.6831	7.8000e-004		0.0447	0.0447		0.0417	0.0417	0.0000	72.3399	72.3399	0.0197	0.0000	72.7530
Total	**0.0836**	**0.8903**	**0.6831**	**7.8000e-004**		**0.0447**	**0.0447**		**0.0417**	**0.0417**	**0.0000**	**72.3399**	**72.3399**	**0.0197**	**0.0000**	**72.7530**

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	1.2800e-003	1.8700e-003	0.0195	4.0000e-005	3.2100e-003	3.0000e-005	3.2400e-003	8.5000e-004	3.0000e-005	8.8000e-004	0.0000	3.1276	3.1276	1.8000e-004	0.0000	3.1314
Total	**1.2800e-003**	**1.8700e-003**	**0.0195**	**4.0000e-005**	**3.2100e-003**	**3.0000e-005**	**3.2400e-003**	**8.5000e-004**	**3.0000e-005**	**8.8000e-004**	**0.0000**	**3.1276**	**3.1276**	**1.8000e-004**	**0.0000**	**3.1314**

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	0.0836	0.8903	0.6831	7.8000e-004		0.0447	0.0447		0.0417	0.0417	0.0000	72.3398	72.3398	0.0197	0.0000	72.7529
Total	**0.0836**	**0.8903**	**0.6831**	**7.8000e-004**		**0.0447**	**0.0447**		**0.0417**	**0.0417**	**0.0000**	**72.3398**	**72.3398**	**0.0197**	**0.0000**	**72.7529**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2800e-003	1.8700e-003	0.0195	4.0000e-005	3.2100e-003	3.0000e-005	3.2400e-003	8.5000e-004	3.0000e-005	8.8000e-004	0.0000	3.1276	3.1276	1.8000e-004	0.0000	3.1314
Total	**1.2800e-003**	**1.8700e-003**	**0.0195**	**4.0000e-005**	**3.2100e-003**	**3.0000e-005**	**3.2400e-003**	**8.5000e-004**	**3.0000e-005**	**8.8000e-004**	**0.0000**	**3.1276**	**3.1276**	**1.8000e-004**	**0.0000**	**3.1314**

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	16.4765	53.2482	201.9314	0.6273	41.8145	0.8670	42.6815	11.2007	0.7995	12.0002	0.0000	55,772.8061	55,772.8061	1.6347	0.0000	55,807.1355
Unmitigated	16.4765	53.2482	201.9314	0.6273	41.8145	0.8670	42.6815	11.2007	0.7995	12.0002	0.0000	55,772.8061	55,772.8061	1.6347	0.0000	55,807.1355

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	10.98	10.98	10.98	40,432	40,432
Condo/Townhouse	5,243.00	5,698.00	4830.00	19,947,040	19,947,040
Condo/Townhouse High Rise	4,007.15	4,354.90	3691.50	15,245,238	15,245,238
Elementary School	847.50	0.00	0.00	2,229,942	2,229,942
General Office Building	4,402.20	948.30	391.50	12,288,125	12,288,125
Health Club	5.68	3.60	4.60	19,247	19,247
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	13,266.40	15,436.40	7798.00	47,133,422	47,133,422
Single Family Housing	2,539.11	2,674.71	2328.93	9,608,536	9,608,536
Strip Mall	1,117.35	1,059.90	515.10	3,768,799	3,768,799

Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	31,439.36	30,186.79	19,570.61	110,280,782	110,280,782

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	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse High Rise	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Elementary School	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
General Office Building	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Health Club	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	100	0	0
Regional Shopping Center	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Single Family Housing	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Strip Mall	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Unenclosed Parking with	0.00	0.00	0.00	0.00	0.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.530094	0.057664	0.178835	0.124843	0.039181	0.006319	0.017052	0.034445	0.002509	0.003148	0.003693	0.000531	0.001685

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

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					

NaturalGas Mitigated	0.1973	1.7062	0.8629	0.0108		0.1363	0.1363		0.1363	0.1363	0.0000	1,952.9960	1,952.9960	0.0374	0.0358	1,964.8816
NaturalGas Unmitigated	0.1973	1.7062	0.8629	0.0108		0.1363	0.1363		0.1363	0.1363	0.0000	1,952.9960	1,952.9960	0.0374	0.0358	1,964.8816
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,408.6067	6,408.6067	0.2946	0.0610	6,433.6869
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,408.6067	6,408.6067	0.2946	0.0610	6,433.6869

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
Condo/Townhouse	1.06878e+007	0.0576	0.4925	0.2096	3.1400e-003		0.0398	0.0398		0.0398	0.0398	0.0000	570.3400	570.3400	0.0109	0.0105	573.8110
Condo/Townhouse High Rise	8.16851e+006	0.0441	0.3764	0.1602	2.4000e-003		0.0304	0.0304		0.0304	0.0304	0.0000	435.9027	435.9027	8.3500e-003	7.9900e-003	438.5556
Elementary School	739275	3.9900e-003	0.0362	0.0304	2.2000e-004		2.7500e-003	2.7500e-003		2.7500e-003	2.7500e-003	0.0000	39.4505	39.4505	7.6000e-004	7.2000e-004	39.6906
General Office Building	5.4114e+006	0.0292	0.2653	0.2228	1.5900e-003		0.0202	0.0202		0.0202	0.0202	0.0000	288.7729	288.7729	5.5300e-003	5.2900e-003	290.5303
Health Club	49500	2.7000e-004	2.4300e-003	2.0400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.6415	2.6415	5.0000e-005	5.0000e-005	2.6576
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
Regional Shopping Center	509600	2.7500e-003	0.0250	0.0210	1.5000e-004		1.9000e-003	1.9000e-003		1.9000e-003	1.9000e-003	0.0000	27.1942	27.1942	5.2000e-004	5.0000e-004	27.3597
Single Family Housing	1.10044e+007	0.0593	0.5071	0.2158	3.2400e-003		0.0410	0.0410		0.0410	0.0410	0.0000	587.2373	587.2373	0.0113	0.0108	590.8111
Strip Mall	27300	1.5000e-004	1.3400e-003	1.1200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4568	1.4568	3.0000e-005	3.0000e-005	1.4657
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1974**	**1.7062**	**0.8629**	**0.0108**		**0.1363**	**0.1363**		**0.1363**	**0.1363**	**0.0000**	**1,952.9960**	**1,952.9960**	**0.0374**	**0.0358**	**1,964.8816**

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
Condo/Townhouse	1.06878e+007	0.0576	0.4925	0.2096	3.1400e-003		0.0398	0.0398		0.0398	0.0398	0.0000	570.3400	570.3400	0.0109	0.0105	573.8110
Condo/Townhouse High Rise	8.16851e+006	0.0441	0.3764	0.1602	2.4000e-003		0.0304	0.0304		0.0304	0.0304	0.0000	435.9027	435.9027	8.3500e-003	7.9900e-003	438.5556
Elementary School	739275	3.9900e-003	0.0362	0.0304	2.2000e-004		2.7500e-003	2.7500e-003		2.7500e-003	2.7500e-003	0.0000	39.4505	39.4505	7.6000e-004	7.2000e-004	39.6906
General Office Building	5.4114e+006	0.0292	0.2653	0.2228	1.5900e-003		0.0202	0.0202		0.0202	0.0202	0.0000	288.7729	288.7729	5.5300e-003	5.2900e-003	290.5303
Health Club	49500	2.7000e-004	2.4300e-003	2.0400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.6415	2.6415	5.0000e-005	5.0000e-005	2.6576
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
Regional Shopping Center	509600	2.7500e-003	0.0250	0.0210	1.5000e-004		1.9000e-003	1.9000e-003		1.9000e-003	1.9000e-003	0.0000	27.1942	27.1942	5.2000e-004	5.0000e-004	27.3597
Single Family Housing	1.10044e+007	0.0593	0.5071	0.2158	3.2400e-003		0.0410	0.0410		0.0410	0.0410	0.0000	587.2373	587.2373	0.0113	0.0108	590.8111
Strip Mall	27300	1.5000e-004	1.3400e-003	1.1200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4568	1.4568	3.0000e-005	3.0000e-005	1.4657
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1974**	**1.7062**	**0.8629**	**0.0108**		**0.1363**	**0.1363**		**0.1363**	**0.1363**	**0.0000**	**1,952.9960**	**1,952.9960**	**0.0374**	**0.0358**	**1,964.8816**

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
Condo/Townhouse	3.12485e+006	894.2283	0.0411	8.5000e-003	897.7279
Condo/Townhouse High Rise	2.38828e+006	683.4459	0.0314	6.5000e-003	686.1206
Elementary School	443941	127.0412	5.8400e-003	1.2100e-003	127.5384
General Office Building	6.6294e+006	1,897.1148	0.0872	0.0180	1,904.5392
Health Club	31350	8.9713	4.1000e-004	9.0000e-005	9.0064
Parking Lot	465360	133.1707	6.1200e-003	1.2700e-003	133.6919
Regional Shopping Center	4.4688e+006	1,278.8226	0.0588	0.0122	1,283.8273
Single Family Housing	2.53226e+006	724.6496	0.0333	6.8900e-003	727.4855
Strip Mall	239400	68.5084	3.1500e-003	6.5000e-004	68.7765
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,408.6067**	**0.2946**	**0.0610**	**6,433.6869**

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
Condo/Townhouse	3.12485e+006	894.2283	0.0411	8.5000e-003	897.7279
Condo/Townhouse High Rise	2.38828e+006	683.4459	0.0314	6.5000e-003	686.1206
Elementary School	443941	127.0412	5.8400e-003	1.2100e-003	127.5384
General Office Building	6.6294e+006	1,897.1148	0.0872	0.0180	1,904.5392

Health Club	31350	8.9713	4.1000e-004	9.0000e-005	9.0064
Parking Lot	465360	133.1707	6.1200e-003	1.2700e-003	133.6919
Regional Shopping Center	4.4688e+006	1,278.8226	0.0588	0.0122	1,283.8273
Single Family Housing	2.53226e+006	724.6496	0.0333	6.8900e-003	727.4855
Strip Mall	239400	68.5084	3.1500e-003	6.5000e-004	68.7765
Unenclosed Parking with Elevator	2.07101e+006	592.6539	0.0272	5.6400e-003	594.9733
Total		**6,408.6067**	**0.2946**	**0.0610**	**6,433.6869**

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	17.3645	0.1888	16.3308	8.6000e-004		0.1135	0.1135		0.1132	0.1132	0.0000	366.7760	366.7760	0.0326	6.2400e-003	369.3938
Unmitigated	17.3645	0.1888	16.3308	8.6000e-004		0.1135	0.1135		0.1132	0.1132	0.0000	366.7760	366.7760	0.0326	6.2400e-003	369.3938

6.2 Area by SubCategory

Unmitigated

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

Architectural Coating	2.7244					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	14.1057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0344	0.0000	1.8700e-003	0.0000		0.0238	0.0238		0.0235	0.0235	0.0000	340.1783	340.1783	6.5200e-003	6.2400e-003	342.2485
Landscaping	0.5000	0.1888	16.3289	8.6000e-004		0.0897	0.0897		0.0897	0.0897	0.0000	26.5977	26.5977	0.0261	0.0000	27.1453
Total	**17.3645**	**0.1888**	**16.3308**	**8.6000e-004**		**0.1135**	**0.1135**		**0.1132**	**0.1132**	**0.0000**	**366.7760**	**366.7760**	**0.0326**	**6.2400e-003**	**369.3938**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7244					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	14.1057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0344	0.0000	1.8700e-003	0.0000		0.0238	0.0238		0.0235	0.0235	0.0000	340.1783	340.1783	6.5200e-003	6.2400e-003	342.2485
Landscaping	0.5000	0.1888	16.3289	8.6000e-004		0.0897	0.0897		0.0897	0.0897	0.0000	26.5977	26.5977	0.0261	0.0000	27.1453
Total	**17.3645**	**0.1888**	**16.3308**	**8.6000e-004**		**0.1135**	**0.1135**		**0.1132**	**0.1132**	**0.0000**	**366.7760**	**366.7760**	**0.0326**	**6.2400e-003**	**369.3938**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			

Unmitigated	1,443.0456	6.1158	0.1561	1,619.8590
Mitigated	1,443.0456	6.1147	0.1558	1,619.7650

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 30.9311	98.3397	4.5200e-003	9.4000e-004	98.7245
Condo/Townhouse	24.1556 / 41.2391	228.7835	0.7973	0.0207	251.9396
Condo/Townhouse High Rise	18.4618 / 31.5184	174.8560	0.6094	0.0158	192.5539
Elementary School	0.962976 / 6.70565	25.2131	0.0325	9.8000e-004	26.1992
General Office Building	40.9485 / 67.9642	381.6520	1.3513	0.0350	420.8821
Health Club	77.935 / 0.129977	315.5381	2.5529	0.0627	388.5946
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	10.9848 / 18.2321	102.3820	0.3625	9.3900e-003	112.9058
Single Family Housing	11.6982 / 19.9715	110.7966	0.3861	0.0100	122.0108
Strip Mall	0.588473 / 0.976719	5.4848	0.0194	5.0000e-004	6.0485
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,443.0457**	**6.1158**	**0.1561**	**1,619.8590**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 30.9311	98.3397	4.5200e-003	9.4000e-004	98.7245
Condo/Townhouse	24.1556 / 41.2391	228.7835	0.7971	0.0207	251.9274
Condo/Townhouse High Rise	18.4618 / 31.5184	174.8560	0.6092	0.0158	192.5445
Elementary School	0.962976 / 6.70565	25.2131	0.0325	9.8000e-004	26.1987
General Office Building	40.9485 / 67.9642	381.6520	1.3510	0.0350	420.8613
Health Club	77.935 / 0.129977	315.5381	2.5524	0.0626	388.5552
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	10.9848 / 18.2321	102.3820	0.3624	9.3800e-003	112.9003
Single Family Housing	11.6982 / 19.9715	110.7966	0.3860	0.0100	122.0049
Strip Mall	0.588473 / 0.976719	5.4848	0.0194	5.0000e-004	6.0482
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1,443.0457**	**6.1147**	**0.1558**	**1,619.7650**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1,606.5649	94.9453	0.0000	3,600.4154
Unmitigated	3,213.1297	189.8905	0.0000	7,200.8308

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	59.13	12.0029	0.7094	0.0000	26.8992
Condo/Townhouse	3262.22	662.2012	39.1350	0.0000	1,484.0355
Condo/Townhouse High Rise	2492.44	505.9428	29.9004	0.0000	1,133.8504
Elementary School	230.26	46.7407	2.7623	0.0000	104.7489
General Office Building	4885.92	991.7976	58.6136	0.0000	2,222.6824
Health Club	3.94	0.7998	0.0473	0.0000	1.7924
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3145.72	638.5527	37.7374	0.0000	1,431.0378
Single Family Housing	1579.79	320.6831	18.9518	0.0000	718.6715
Strip Mall	169.51	34.4090	2.0335	0.0000	77.1128
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000

Total		**3,213.1298**	**189.8905**	**0.0000**	**7,200.8308**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	29.565	6.0014	0.3547	0.0000	13.4496
Condo/Townhouse	1631.11	331.1006	19.5675	0.0000	742.0178
Condo/Townhouse High Rise	1246.22	252.9714	14.9502	0.0000	566.9252
Elementary School	115.13	23.3704	1.3812	0.0000	52.3745
General Office Building	2442.96	495.8988	29.3068	0.0000	1,111.3412
Health Club	1.97	0.3999	0.0236	0.0000	0.8962
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1572.86	319.2764	18.8687	0.0000	715.5189
Single Family Housing	789.895	160.3416	9.4759	0.0000	359.3357
Strip Mall	84.755	17.2045	1.0168	0.0000	38.5564
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**1,606.5649**	**94.9453**	**0.0000**	**3,600.4154**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
	0	0.00	0			Diesel

10.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-1,277.4950	0.0000	0.0000	-1,277.4950

10.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	7.4 / 0	-45.8800	0.0000	0.0000	-45.8800
Grassland	39.1 / 0	-168.5210	0.0000	0.0000	-168.5210
Others	107.5 / 0	0.0000	0.0000	0.0000	0.0000
Scrub	244 / 0	-3,489.2000	0.0000	0.0000	-3,489.2000
Trees	3.7 / 0	-410.7000	0.0000	0.0000	-410.7000
Wetlands	17.1 / 0	0.0000	0.0000	0.0000	0.0000
Total		**-4,114.3010**	**0.0000**	**0.0000**	**-4,114.3010**

10.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	3911	2,768.9880	0.0000	0.0000	2,768.9880
True Fir/Hemlock	89	67.8180	0.0000	0.0000	67.8180
Total		**2,836.8060**	**0.0000**	**0.0000**	**2,836.8060**

Entrada South (Operational) - Scenario 6 - Project 2024

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	528,818.40	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	501.88	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS by Year 2020

Land Use - Based on Project Description and Client Data.

Construction Phase - No Construction information evaluated (Operational Run only)

Trips and VMT -

Grading - Client Provided Data

Vehicle Trips - Based on Stantec Data by Landuse. Applied 8.85% reduction from TDM measures.

Vechicle Emission Factors - CO2 EF accounts for Pavley, LCFS, and ACC.

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - Based on Client information, no woodstoves and no wood burning fireplaces.

Energy Use - 2013 T24 for electricity and NG. 25% and 30% better for res and non-res as compared to 2008 T24

Water And Wastewater - Total Indoor and Outdoor water use based on Client Data. Distributed between land uses based on default CalEEMod distribution.

Solid Waste - Defaults

Land Use Change - Based on Client Data

Sequestration - Based on client Data

Energy Mitigation - Based on Client data. 2 kW panel per single family home, 2 kW panel per 1600 SF commercial space.

Water Mitigation - Based on Client Data

Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2318202	2318201
tblConstructionPhase	NumDays	300.00	1.00
tblEnergyUse	T24E	269.81	202.36
tblEnergyUse	T24E	269.81	202.36
tblEnergyUse	T24E	5.62	3.93
tblEnergyUse	T24E	2.75	1.93
tblEnergyUse	T24E	4.90	3.43
tblEnergyUse	T24E	596.10	447.08
tblEnergyUse	T24E	4.90	3.43
tblEnergyUse	T24NG	11,455.03	8,591.27
tblEnergyUse	T24NG	11,455.03	8,591.27
tblEnergyUse	T24NG	10.54	7.38

tblEnergyUse	T24NG	14.36	10.05
tblEnergyUse	T24NG	1.21	0.85
tblEnergyUse	T24NG	23,944.02	17,958.02
tblEnergyUse	T24NG	1.21	0.85
tblFireplaces	NumberGas	595.00	560.00
tblFireplaces	NumberGas	454.75	428.00
tblFireplaces	NumberGas	288.15	271.20
tblFireplaces	NumberNoFireplace	70.00	140.00
tblFireplaces	NumberNoFireplace	53.50	107.00
tblFireplaces	NumberNoFireplace	33.90	67.80
tblFireplaces	NumberWood	35.00	0.00
tblFireplaces	NumberWood	26.75	0.00
tblFireplaces	NumberWood	16.95	0.00
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	501.88
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSequestration	NumberOfNewTrees	0.00	3,911.00

tblSequestration	NumberOfNewTrees	0.00	89.00
tblSolidWaste	SolidWasteGenerationRate	0.48	59.13
tblSolidWaste	SolidWasteGenerationRate	322.00	3,262.22
tblSolidWaste	SolidWasteGenerationRate	246.10	2,492.44
tblSolidWaste	SolidWasteGenerationRate	136.88	230.26
tblSolidWaste	SolidWasteGenerationRate	404.55	4,885.92
tblSolidWaste	SolidWasteGenerationRate	14.25	3.94
tblSolidWaste	SolidWasteGenerationRate	294.00	3,145.72
tblSolidWaste	SolidWasteGenerationRate	466.99	1,579.79
tblSolidWaste	SolidWasteGenerationRate	15.75	169.51
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	30.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	64.10	0.00
tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CC_TTP	64.40	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00

tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	16.90	100.00
tblVehicleTrips	CW_TTP	16.30	100.00
tblVehicleTrips	CW_TTP	16.60	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	25.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00

tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	12.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00

tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	63.00	100.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	45.00	100.00
tblVehicleTrips	ST_TR	1.59	1.79
tblVehicleTrips	ST_TR	7.16	7.44
tblVehicleTrips	ST_TR	7.16	7.44
tblVehicleTrips	ST_TR	2.37	1.99
tblVehicleTrips	ST_TR	20.87	1.31
tblVehicleTrips	ST_TR	49.97	50.35
tblVehicleTrips	ST_TR	10.08	7.21
tblVehicleTrips	ST_TR	42.04	64.54
tblVehicleTrips	SU_TR	1.59	1.79
tblVehicleTrips	SU_TR	6.07	6.30
tblVehicleTrips	SU_TR	6.07	6.30
tblVehicleTrips	SU_TR	0.98	0.82
tblVehicleTrips	SU_TR	26.73	1.68
tblVehicleTrips	SU_TR	25.24	25.43
tblVehicleTrips	SU_TR	8.77	6.27
tblVehicleTrips	SU_TR	20.43	31.36
tblVehicleTrips	WD_TR	1.59	1.79
tblVehicleTrips	WD_TR	6.59	6.84
tblVehicleTrips	WD_TR	6.59	6.84
tblVehicleTrips	WD_TR	1.29	1.03
tblVehicleTrips	WD_TR	11.01	9.25
tblVehicleTrips	WD_TR	32.93	2.07
tblVehicleTrips	WD_TR	42.94	43.27

tblVehicleTrips	WD_TR	9.57	6.84
tblVehicleTrips	WD_TR	44.32	68.04
tblWater	IndoorWaterUseRate	45,607,817.94	20,129,663.84
tblWater	IndoorWaterUseRate	34,857,403.71	15,384,814.51
tblWater	IndoorWaterUseRate	1,818,180.00	802,479.79
tblWater	IndoorWaterUseRate	77,314,180.38	34,123,721.14
tblWater	IndoorWaterUseRate	147,857.86	64,945,815.15
tblWater	IndoorWaterUseRate	20,740,306.02	9,154,031.19
tblWater	IndoorWaterUseRate	22,087,214.69	9,748,508.63
tblWater	IndoorWaterUseRate	1,111,087.82	490,394.53
tblWater	OutdoorWaterUseRate	6,672,295.56	30,931,089.44
tblWater	OutdoorWaterUseRate	28,752,754.79	41,239,069.15
tblWater	OutdoorWaterUseRate	21,975,319.73	31,518,431.42
tblWater	OutdoorWaterUseRate	4,675,320.00	6,705,647.73
tblWater	OutdoorWaterUseRate	47,386,110.55	67,964,238.70
tblWater	OutdoorWaterUseRate	90,622.56	129,976.76
tblWater	OutdoorWaterUseRate	12,711,800.46	18,232,090.18
tblWater	OutdoorWaterUseRate	13,924,548.39	19,971,492.06
tblWater	OutdoorWaterUseRate	680,989.31	976,719.12
tblWoodstoves	NumberCatalytic	35.00	0.00
tblWoodstoves	NumberCatalytic	26.75	0.00
tblWoodstoves	NumberCatalytic	16.95	0.00
tblWoodstoves	NumberNoncatalytic	35.00	0.00
tblWoodstoves	NumberNoncatalytic	26.75	0.00
tblWoodstoves	NumberNoncatalytic	16.95	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					
2014	4.6907	49.6788	37.9565	0.0428	0.2258	2.5294	2.7552	0.0599	2.3614	2.4213	0.0000	4,427.5298	4,427.5298	1.1410	0.0000	4,451.4906
Total	**4.6907**	**49.6788**	**37.9565**	**0.0428**	**0.2258**	**2.5294**	**2.7552**	**0.0599**	**2.3614**	**2.4213**	**0.0000**	**4,427.5298**	**4,427.5298**	**1.1410**	**0.0000**	**4,451.4906**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	4.6907	49.6788	37.9565	0.0428	0.2258	2.5294	2.7552	0.0599	2.3614	2.4213	0.0000	4,427.5298	4,427.5298	1.1410	0.0000	4,451.4906
Total	**4.6907**	**49.6788**	**37.9565**	**0.0428**	**0.2258**	**2.5294**	**2.7552**	**0.0599**	**2.3614**	**2.4213**	**0.0000**	**4,427.5298**	**4,427.5298**	**1.1410**	**0.0000**	**4,451.4906**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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**

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	97.4370	1.4988	130.2758	6.8800e-003		2.4095	2.4095		2.3917	2.3917	0.0000	26,899.9632	26,899.9632	0.7373	0.4889	27,066.9959
Energy	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002
Mobile	83.2492	210.9868	984.3511	3.8679	250.0478	5.0910	255.1389	66.8889	4.6974	71.5863		287,651.4432	287,651.4432	9.1052		287,842.6531
Total	**181.4787**	**219.3302**	**1,118.0398**	**3.9180**	**250.0478**	**8.0480**	**258.0959**	**66.8889**	**7.6366**	**74.5255**	**0.0000**	**323,196.7923**	**323,196.7923**	**10.0083**	**0.6474**	**323,607.6491**

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	97.4370	1.4988	130.2758	6.8800e-003		2.4095	2.4095		2.3917	2.3917	0.0000	26,899.9632	26,899.9632	0.7373	0.4889	27,066.9959
Energy	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002
Mobile	83.2492	210.9868	984.3511	3.8679	250.0478	5.0910	255.1389	66.8889	4.6974	71.5863		287,651.4432	287,651.4432	9.1052		287,842.6531
Total	**181.4787**	**219.3302**	**1,118.0398**	**3.9180**	**250.0478**	**8.0480**	**258.0959**	**66.8889**	**7.6366**	**74.5255**	**0.0000**	**323,196.7923**	**323,196.7923**	**10.0083**	**0.6474**	**323,607.6491**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2014	1/1/2014	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

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	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5962	49.5429	36.2873	0.0399		2.5270	2.5270		2.3593	2.3593		4,164.0858	4,164.0858	1.1253		4,187.7164

Total	**4.5962**	**49.5429**	**36.2873**	**0.0399**		**2.5270**	**2.5270**		**2.3593**	**2.3593**		**4,164.0858**	**4,164.0858**	**1.1253**		**4,187.7164**

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	0.0946	0.1359	1.6692	2.9200e-003	0.2258	2.3700e-003	0.2282	0.0599	2.1700e-003	0.0620		263.4440	263.4440	0.0157		263.7741
Total	**0.0946**	**0.1359**	**1.6692**	**2.9200e-003**	**0.2258**	**2.3700e-003**	**0.2282**	**0.0599**	**2.1700e-003**	**0.0620**		**263.4440**	**263.4440**	**0.0157**		**263.7741**

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	4.5962	49.5429	36.2873	0.0399		2.5270	2.5270		2.3593	2.3593	0.0000	4,164.0858	4,164.0858	1.1253		4,187.7164
Total	**4.5962**	**49.5429**	**36.2873**	**0.0399**		**2.5270**	**2.5270**		**2.3593**	**2.3593**	**0.0000**	**4,164.0858**	**4,164.0858**	**1.1253**		**4,187.7164**

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	0.0946	0.1359	1.6692	2.9200e-003	0.2258	2.3700e-003	0.2282	0.0599	2.1700e-003	0.0620		263.4440	263.4440	0.0157		263.7741
Total	**0.0946**	**0.1359**	**1.6692**	**2.9200e-003**	**0.2258**	**2.3700e-003**	**0.2282**	**0.0599**	**2.1700e-003**	**0.0620**		**263.4440**	**263.4440**	**0.0157**		**263.7741**

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					
Unmitigated	83.2492	210.9868	984.3511	3.8679	250.0478	5.0910	255.1389	66.8889	4.6974	71.5863		287,651.4432	287,651.4432	9.1052		287,842.6531
Mitigated	83.2492	210.9868	984.3511	3.8679	250.0478	5.0910	255.1389	66.8889	4.6974	71.5863		287,651.4432	287,651.4432	9.1052		287,842.6531

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	10.02	10.02	10.02	36,925	36,925
Condo/Townhouse	4,788.00	5,208.00	4410.00	18,217,967	18,217,967
Condo/Townhouse High Rise	3,659.40	3,980.40	3370.50	13,923,732	13,923,732

Elementary School	772.50	0.00	0.00	2,032,602	2,032,602
General Office Building	4,023.75	865.65	356.70	11,230,540	11,230,540
Health Club	5.18	3.28	4.20	17,550	17,550
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,115.60	14,098.00	7120.40	43,044,538	43,044,538
Single Family Housing	2,318.76	2,444.19	2125.53	8,774,852	8,774,852
Strip Mall	1,020.60	968.10	470.40	3,442,399	3,442,399
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	28,713.81	27,577.64	17,867.75	100,721,105	100,721,105

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	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse High Rise	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Elementary School	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
General Office Building	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Health Club	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Single Family Housing	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Strip Mall	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002
NaturalGas Unmitigated	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002

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
Condo/Townhouse	22135.9	0.2387	2.0400	0.8681	0.0130		0.1649	0.1649		0.1649	0.1649		2,604.2189	2,604.2189	0.0499	0.0477	2,620.0677
Condo/Townhouse High Rise	16918.1	0.1825	1.5591	0.6635	9.9500e-003		0.1261	0.1261		0.1261	0.1261		1,990.3673	1,990.3673	0.0382	0.0365	2,002.4803
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	9260.14	0.0999	0.9079	0.7626	5.4500e-003		0.0690	0.0690		0.0690	0.0690		1,089.4279	1,089.4279	0.0209	0.0200	1,096.0580
Health Club	99.3151	1.0700e-003	9.7400e-003	8.1800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6841	11.6841	2.2000e-004	2.1000e-004	11.7552
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
Regional Shopping Center	1027.95	0.0111	0.1008	0.0847	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003		120.9347	120.9347	2.3200e-003	2.2200e-003	121.6707
Single Family Housing	22118.5	0.2385	2.0384	0.8674	0.0130		0.1648	0.1648		0.1648	0.1648		2,602.1804	2,602.1804	0.0499	0.0477	2,618.0168
Strip Mall	55.0685	5.9000e-004	5.4000e-003	4.5400e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		6.4787	6.4787	1.2000e-004	1.2000e-004	6.5181

Unenclosed Parking with Elevator	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
Total		**0.7925**	**6.8447**	**3.4130**	**0.0432**		**0.5475**	**0.5475**		**0.5475**	**0.5475**		**8,645.3859**	**8,645.3859**	**0.1657**	**0.1585**	**8,698.0002**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	22.1359	0.2387	2.0400	0.8681	0.0130		0.1649	0.1649		0.1649	0.1649		2,604.2189	2,604.2189	0.0499	0.0477	2,620.0677
Condo/Townhouse High Rise	16.9181	0.1825	1.5591	0.6635	9.9500e-003		0.1261	0.1261		0.1261	0.1261		1,990.3673	1,990.3673	0.0382	0.0365	2,002.4803
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	9.26014	0.0999	0.9079	0.7626	5.4500e-003		0.0690	0.0690		0.0690	0.0690		1,089.4279	1,089.4279	0.0209	0.0200	1,096.0580
Health Club	0.0993151	1.0700e-003	9.7400e-003	8.1800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6841	11.6841	2.2000e-004	2.1000e-004	11.7552
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
Regional Shopping Center	1.02795	0.0111	0.1008	0.0847	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003		120.9347	120.9347	2.3200e-003	2.2200e-003	121.6707
Single Family Housing	22.1185	0.2385	2.0384	0.8674	0.0130		0.1648	0.1648		0.1648	0.1648		2,602.1804	2,602.1804	0.0499	0.0477	2,618.0168
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
Strip Mall	0.0550685	5.9000e-004	5.4000e-003	4.5400e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		6.4787	6.4787	1.2000e-004	1.2000e-004	6.5181
Unenclosed Parking with Elevator	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
Total		**0.7925**	**6.8447**	**3.4130**	**0.0432**		**0.5475**	**0.5475**		**0.5475**	**0.5475**		**8,645.3859**	**8,645.3859**	**0.1657**	**0.1585**	**8,698.0002**

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					
Unmitigated	97.4370	1.4988	130.2758	6.8800e-003		2.4095	2.4095		2.3917	2.3917	0.0000	26,899.9632	26,899.9632	0.7373	0.4889	27,066.9959
Mitigated	97.4370	1.4988	130.2758	6.8800e-003		2.4095	2.4095		2.3917	2.3917	0.0000	26,899.9632	26,899.9632	0.7373	0.4889	27,066.9959

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	13.7667					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	77.2917					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.4443	1.1000e-004	0.1333	0.0000		1.6888	1.6888		1.6710	1.6710	0.0000	26,665.4118	26,665.4118	0.5111	0.4889	26,827.6930
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**97.4370**	**1.4988**	**130.2758**	**6.8800e-003**		**2.4095**	**2.4095**		**2.3917**	**2.3917**	**0.0000**	**26,899.9632**	**26,899.9632**	**0.7374**	**0.4889**	**27,066.9959**

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	13.7667					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	77.2917					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.4443	1.1000e-004	0.1333	0.0000		1.6888	1.6888		1.6710	1.6710	0.0000	26,665.4118	26,665.4118	0.5111	0.4889	26,827.6930
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**97.4370**	**1.4988**	**130.2758**	**6.8800e-003**		**2.4095**	**2.4095**		**2.3917**	**2.3917**	**0.0000**	**26,899.9632**	**26,899.9632**	**0.7374**	**0.4889**	**27,066.9959**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
	0	0.00	0			Diesel

10.0 Vegetation

Entrada South (Operational) - Scenario 6 - Project 2024

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	528,818.40	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	501.88	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS by Year 2020

Land Use - Based on Project Description and Client Data.

Construction Phase - No Construction information evaluated (Operational Run only)

Trips and VMT -

Grading - Client Provided Data

Vehicle Trips - Based on Stantec Data by Landuse. Applied 8.85% reduction from TDM measures.

Vechicle Emission Factors - CO2 EF accounts for Pavley, LCFS, and ACC.

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - Based on Client information, no woodstoves and no wood burning fireplaces.

Energy Use - 2013 T24 for electricity and NG. 25% and 30% better for res and non-res as compared to 2008 T24

Water And Wastewater - Total Indoor and Outdoor water use based on Client Data. Distributed between land uses based on default CalEEMod distribution.

Solid Waste - Defaults

Land Use Change - Based on Client Data

Sequestration - Based on client Data

Energy Mitigation - Based on Client data. 2 kW panel per single family home, 2 kW panel per 1600 SF commercial space.

Water Mitigation - Based on Client Data

Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2318202	2318201
tblConstructionPhase	NumDays	300.00	1.00
tblEnergyUse	T24E	269.81	202.36
tblEnergyUse	T24E	269.81	202.36
tblEnergyUse	T24E	5.62	3.93
tblEnergyUse	T24E	2.75	1.93
tblEnergyUse	T24E	4.90	3.43
tblEnergyUse	T24E	596.10	447.08
tblEnergyUse	T24E	4.90	3.43
tblEnergyUse	T24NG	11,455.03	8,591.27
tblEnergyUse	T24NG	11,455.03	8,591.27
tblEnergyUse	T24NG	10.54	7.38

tblEnergyUse	T24NG	14.36	10.05
tblEnergyUse	T24NG	1.21	0.85
tblEnergyUse	T24NG	23,944.02	17,958.02
tblEnergyUse	T24NG	1.21	0.85
tblFireplaces	NumberGas	595.00	560.00
tblFireplaces	NumberGas	454.75	428.00
tblFireplaces	NumberGas	288.15	271.20
tblFireplaces	NumberNoFireplace	70.00	140.00
tblFireplaces	NumberNoFireplace	53.50	107.00
tblFireplaces	NumberNoFireplace	33.90	67.80
tblFireplaces	NumberWood	35.00	0.00
tblFireplaces	NumberWood	26.75	0.00
tblFireplaces	NumberWood	16.95	0.00
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	501.88
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSequestration	NumberOfNewTrees	0.00	3,911.00

tblSequestration	NumberOfNewTrees	0.00	89.00
tblSolidWaste	SolidWasteGenerationRate	0.48	59.13
tblSolidWaste	SolidWasteGenerationRate	322.00	3,262.22
tblSolidWaste	SolidWasteGenerationRate	246.10	2,492.44
tblSolidWaste	SolidWasteGenerationRate	136.88	230.26
tblSolidWaste	SolidWasteGenerationRate	404.55	4,885.92
tblSolidWaste	SolidWasteGenerationRate	14.25	3.94
tblSolidWaste	SolidWasteGenerationRate	294.00	3,145.72
tblSolidWaste	SolidWasteGenerationRate	466.99	1,579.79
tblSolidWaste	SolidWasteGenerationRate	15.75	169.51
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	30.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	64.10	0.00
tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CC_TTP	64.40	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00

tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	16.90	100.00
tblVehicleTrips	CW_TTP	16.30	100.00
tblVehicleTrips	CW_TTP	16.60	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	25.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00

tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	12.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00

tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	63.00	100.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	45.00	100.00
tblVehicleTrips	ST_TR	1.59	1.79
tblVehicleTrips	ST_TR	7.16	7.44
tblVehicleTrips	ST_TR	7.16	7.44
tblVehicleTrips	ST_TR	2.37	1.99
tblVehicleTrips	ST_TR	20.87	1.31
tblVehicleTrips	ST_TR	49.97	50.35
tblVehicleTrips	ST_TR	10.08	7.21
tblVehicleTrips	ST_TR	42.04	64.54
tblVehicleTrips	SU_TR	1.59	1.79
tblVehicleTrips	SU_TR	6.07	6.30
tblVehicleTrips	SU_TR	6.07	6.30
tblVehicleTrips	SU_TR	0.98	0.82
tblVehicleTrips	SU_TR	26.73	1.68
tblVehicleTrips	SU_TR	25.24	25.43
tblVehicleTrips	SU_TR	8.77	6.27
tblVehicleTrips	SU_TR	20.43	31.36
tblVehicleTrips	WD_TR	1.59	1.79
tblVehicleTrips	WD_TR	6.59	6.84
tblVehicleTrips	WD_TR	6.59	6.84
tblVehicleTrips	WD_TR	1.29	1.03
tblVehicleTrips	WD_TR	11.01	9.25
tblVehicleTrips	WD_TR	32.93	2.07
tblVehicleTrips	WD_TR	42.94	43.27

tblVehicleTrips	WD_TR	9.57	6.84
tblVehicleTrips	WD_TR	44.32	68.04
tblWater	IndoorWaterUseRate	45,607,817.94	20,129,663.84
tblWater	IndoorWaterUseRate	34,857,403.71	15,384,814.51
tblWater	IndoorWaterUseRate	1,818,180.00	802,479.79
tblWater	IndoorWaterUseRate	77,314,180.38	34,123,721.14
tblWater	IndoorWaterUseRate	147,857.86	64,945,815.15
tblWater	IndoorWaterUseRate	20,740,306.02	9,154,031.19
tblWater	IndoorWaterUseRate	22,087,214.69	9,748,508.63
tblWater	IndoorWaterUseRate	1,111,087.82	490,394.53
tblWater	OutdoorWaterUseRate	6,672,295.56	30,931,089.44
tblWater	OutdoorWaterUseRate	28,752,754.79	41,239,069.15
tblWater	OutdoorWaterUseRate	21,975,319.73	31,518,431.42
tblWater	OutdoorWaterUseRate	4,675,320.00	6,705,647.73
tblWater	OutdoorWaterUseRate	47,386,110.55	67,964,238.70
tblWater	OutdoorWaterUseRate	90,622.56	129,976.76
tblWater	OutdoorWaterUseRate	12,711,800.46	18,232,090.18
tblWater	OutdoorWaterUseRate	13,924,548.39	19,971,492.06
tblWater	OutdoorWaterUseRate	680,989.31	976,719.12
tblWoodstoves	NumberCatalytic	35.00	0.00
tblWoodstoves	NumberCatalytic	26.75	0.00
tblWoodstoves	NumberCatalytic	16.95	0.00
tblWoodstoves	NumberNoncatalytic	35.00	0.00
tblWoodstoves	NumberNoncatalytic	26.75	0.00
tblWoodstoves	NumberNoncatalytic	16.95	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					
2014	4.6940	49.6937	37.8526	0.0427	0.2258	2.5294	2.7552	0.0599	2.3614	2.4213	0.0000	4,412.7235	4,412.7235	1.1410	0.0000	4,436.6842
Total	**4.6940**	**49.6937**	**37.8526**	**0.0427**	**0.2258**	**2.5294**	**2.7552**	**0.0599**	**2.3614**	**2.4213**	**0.0000**	**4,412.7235**	**4,412.7235**	**1.1410**	**0.0000**	**4,436.6842**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	4.6940	49.6937	37.8526	0.0427	0.2258	2.5294	2.7552	0.0599	2.3614	2.4213	0.0000	4,412.7235	4,412.7235	1.1410	0.0000	4,436.6842
Total	**4.6940**	**49.6937**	**37.8526**	**0.0427**	**0.2258**	**2.5294**	**2.7552**	**0.0599**	**2.3614**	**2.4213**	**0.0000**	**4,412.7235**	**4,412.7235**	**1.1410**	**0.0000**	**4,436.6842**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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**

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	97.4370	1.4988	130.2758	6.8800e-003		2.4095	2.4095		2.3917	2.3917	0.0000	26,899.9632	26,899.9632	0.7373	0.4889	27,066.9959
Energy	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002
Mobile	86.6973	222.4406	983.0547	3.6940	250.0478	5.1042	255.1520	66.8889	4.7095	71.5984		275,632.1280	275,632.1280	9.1173		275,823.5921
Total	**184.9268**	**230.7840**	**1,116.7435**	**3.7442**	**250.0478**	**8.0612**	**258.1090**	**66.8889**	**7.6487**	**74.5376**	**0.0000**	**311,177.4771**	**311,177.4771**	**10.0204**	**0.6474**	**311,588.5882**

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	97.4370	1.4988	130.2758	6.8800e-003		2.4095	2.4095		2.3917	2.3917	0.0000	26,899.9632	26,899.9632	0.7373	0.4889	27,066.9959
Energy	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002
Mobile	86.6973	222.4406	983.0547	3.6940	250.0478	5.1042	255.1520	66.8889	4.7095	71.5984		275,632.1280	275,632.1280	9.1173		275,823.5921
Total	**184.9268**	**230.7840**	**1,116.7435**	**3.7442**	**250.0478**	**8.0612**	**258.1090**	**66.8889**	**7.6487**	**74.5376**	**0.0000**	**311,177.4771**	**311,177.4771**	**10.0204**	**0.6474**	**311,588.5882**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2014	1/1/2014	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

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	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5962	49.5429	36.2873	0.0399		2.5270	2.5270		2.3593	2.3593		4,164.0858	4,164.0858	1.1253		4,187.7164

Total	**4.5962**	**49.5429**	**36.2873**	**0.0399**		**2.5270**	**2.5270**		**2.3593**	**2.3593**		**4,164.0858**	**4,164.0858**	**1.1253**		**4,187.7164**

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	0.0979	0.1507	1.5653	2.7500e-003	0.2258	2.3700e-003	0.2282	0.0599	2.1700e-003	0.0620		248.6377	248.6377	0.0157		248.9678
Total	**0.0979**	**0.1507**	**1.5653**	**2.7500e-003**	**0.2258**	**2.3700e-003**	**0.2282**	**0.0599**	**2.1700e-003**	**0.0620**		**248.6377**	**248.6377**	**0.0157**		**248.9678**

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	4.5962	49.5429	36.2873	0.0399		2.5270	2.5270		2.3593	2.3593	0.0000	4,164.0858	4,164.0858	1.1253		4,187.7164
Total	**4.5962**	**49.5429**	**36.2873**	**0.0399**		**2.5270**	**2.5270**		**2.3593**	**2.3593**	**0.0000**	**4,164.0858**	**4,164.0858**	**1.1253**		**4,187.7164**

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	0.0979	0.1507	1.5653	2.7500e-003	0.2258	2.3700e-003	0.2282	0.0599	2.1700e-003	0.0620		248.6377	248.6377	0.0157		248.9678
Total	**0.0979**	**0.1507**	**1.5653**	**2.7500e-003**	**0.2258**	**2.3700e-003**	**0.2282**	**0.0599**	**2.1700e-003**	**0.0620**		**248.6377**	**248.6377**	**0.0157**		**248.9678**

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					
Unmitigated	86.6973	222.4406	983.0547	3.6940	250.0478	5.1042	255.1520	66.8889	4.7095	71.5984		275,632.1280	275,632.1280	9.1173		275,823.5921
Mitigated	86.6973	222.4406	983.0547	3.6940	250.0478	5.1042	255.1520	66.8889	4.7095	71.5984		275,632.1280	275,632.1280	9.1173		275,823.5921

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	10.02	10.02	10.02	36,925	36,925
Condo/Townhouse	4,788.00	5,208.00	4410.00	18,217,967	18,217,967
Condo/Townhouse High Rise	3,659.40	3,980.40	3370.50	13,923,732	13,923,732

Elementary School	772.50	0.00	0.00	2,032,602	2,032,602
General Office Building	4,023.75	865.65	356.70	11,230,540	11,230,540
Health Club	5.18	3.28	4.20	17,550	17,550
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	12,115.60	14,098.00	7120.40	43,044,538	43,044,538
Single Family Housing	2,318.76	2,444.19	2125.53	8,774,852	8,774,852
Strip Mall	1,020.60	968.10	470.40	3,442,399	3,442,399
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	28,713.81	27,577.64	17,867.75	100,721,105	100,721,105

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	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse High Rise	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Elementary School	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
General Office Building	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Health Club	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Single Family Housing	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Strip Mall	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002
NaturalGas Unmitigated	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002

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
Condo/Townhouse	22135.9	0.2387	2.0400	0.8681	0.0130		0.1649	0.1649		0.1649	0.1649		2,604.2189	2,604.2189	0.0499	0.0477	2,620.0677
Condo/Townhouse High Rise	16918.1	0.1825	1.5591	0.6635	9.9500e-003		0.1261	0.1261		0.1261	0.1261		1,990.3673	1,990.3673	0.0382	0.0365	2,002.4803
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	9260.14	0.0999	0.9079	0.7626	5.4500e-003		0.0690	0.0690		0.0690	0.0690		1,089.4279	1,089.4279	0.0209	0.0200	1,096.0580
Health Club	99.3151	1.0700e-003	9.7400e-003	8.1800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6841	11.6841	2.2000e-004	2.1000e-004	11.7552
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
Regional Shopping Center	1027.95	0.0111	0.1008	0.0847	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003		120.9347	120.9347	2.3200e-003	2.2200e-003	121.6707
Single Family Housing	22118.5	0.2385	2.0384	0.8674	0.0130		0.1648	0.1648		0.1648	0.1648		2,602.1804	2,602.1804	0.0499	0.0477	2,618.0168
Strip Mall	55.0685	5.9000e-004	5.4000e-003	4.5400e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		6.4787	6.4787	1.2000e-004	1.2000e-004	6.5181

Unenclosed Parking with Elevator	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
Total		**0.7925**	**6.8447**	**3.4130**	**0.0432**		**0.5475**	**0.5475**		**0.5475**	**0.5475**		**8,645.3859**	**8,645.3859**	**0.1657**	**0.1585**	**8,698.0002**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	22.1359	0.2387	2.0400	0.8681	0.0130		0.1649	0.1649		0.1649	0.1649		2,604.2189	2,604.2189	0.0499	0.0477	2,620.0677
Condo/Townhouse High Rise	16.9181	0.1825	1.5591	0.6635	9.9500e-003		0.1261	0.1261		0.1261	0.1261		1,990.3673	1,990.3673	0.0382	0.0365	2,002.4803
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	9.26014	0.0999	0.9079	0.7626	5.4500e-003		0.0690	0.0690		0.0690	0.0690		1,089.4279	1,089.4279	0.0209	0.0200	1,096.0580
Health Club	0.0993151	1.0700e-003	9.7400e-003	8.1800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6841	11.6841	2.2000e-004	2.1000e-004	11.7552
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
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
Regional Shopping Center	1.02795	0.0111	0.1008	0.0847	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003		120.9347	120.9347	2.3200e-003	2.2200e-003	121.6707
Single Family Housing	22.1185	0.2385	2.0384	0.8674	0.0130		0.1648	0.1648		0.1648	0.1648		2,602.1804	2,602.1804	0.0499	0.0477	2,618.0168
Strip Mall	0.0550685	5.9000e-004	5.4000e-003	4.5400e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		6.4787	6.4787	1.2000e-004	1.2000e-004	6.5181
Unenclosed Parking with Elevator	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
Total		**0.7925**	**6.8447**	**3.4130**	**0.0432**		**0.5475**	**0.5475**		**0.5475**	**0.5475**		**8,645.3859**	**8,645.3859**	**0.1657**	**0.1585**	**8,698.0002**

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					
Unmitigated	97.4370	1.4988	130.2758	6.8800e-003		2.4095	2.4095		2.3917	2.3917	0.0000	26,899.9632	26,899.9632	0.7373	0.4889	27,066.9959
Mitigated	97.4370	1.4988	130.2758	6.8800e-003		2.4095	2.4095		2.3917	2.3917	0.0000	26,899.9632	26,899.9632	0.7373	0.4889	27,066.9959

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	13.7667					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	77.2917					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.4443	1.1000e-004	0.1333	0.0000		1.6888	1.6888		1.6710	1.6710	0.0000	26,665.4118	26,665.4118	0.5111	0.4889	26,827.6930
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**97.4370**	**1.4988**	**130.2758**	**6.8800e-003**		**2.4095**	**2.4095**		**2.3917**	**2.3917**	**0.0000**	**26,899.9632**	**26,899.9632**	**0.7374**	**0.4889**	**27,066.9959**

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	13.7667					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	77.2917					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.4443	1.1000e-004	0.1333	0.0000		1.6888	1.6888		1.6710	1.6710	0.0000	26,665.4118	26,665.4118	0.5111	0.4889	26,827.6930
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**97.4370**	**1.4988**	**130.2758**	**6.8800e-003**		**2.4095**	**2.4095**		**2.3917**	**2.3917**	**0.0000**	**26,899.9632**	**26,899.9632**	**0.7374**	**0.4889**	**27,066.9959**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
	0	0.00	0			Diesel

10.0 Vegetation

Entrada South (Operational) - Scenario 6a - Project 2024 Unmitigated

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	528,818.40	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	501.88	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS by Year 2020

Land Use - Based on Project Description and Client Data.

Construction Phase - No Construction information evaluated (Operational Run only)

Trips and VMT -

Grading - Client Provided Data

Vehicle Trips - Based on Stantec Data by Landuse. Applied 8.85% reduction from TDM measures.

Vechicle Emission Factors - CO2 EF accounts for Pavley, LCFS, and ACC.

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - Based on Client information, no woodstoves and no wood burning fireplaces.

Area Coating -

Energy Use - 2013 T24 for electricity and NG. 25% and 30% better for res and non-res as compared to 2008 T24

Water And Wastewater - Total Indoor and Outdoor water use based on Client Data. Distributed between land uses based on default CalEEMod distribution.

Solid Waste - Defaults

Land Use Change - Based on Client Data

Sequestration - Based on client Data

Energy Mitigation - Based on Client data. 2 kW panel per single family home, 2 kW panel per 1600 SF commercial space.

Water Mitigation - Based on Client Data

Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	1.00
tblEnergyUse	T24E	269.81	202.36
tblEnergyUse	T24E	269.81	202.36
tblEnergyUse	T24E	5.62	3.93
tblEnergyUse	T24E	2.75	1.93
tblEnergyUse	T24E	4.90	3.43
tblEnergyUse	T24E	596.10	447.08
tblEnergyUse	T24E	4.90	3.43
tblEnergyUse	T24NG	11,455.03	8,591.27
tblEnergyUse	T24NG	11,455.03	8,591.27
tblEnergyUse	T24NG	10.54	7.38

tblEnergyUse	T24NG	14.36	10.05
tblEnergyUse	T24NG	1.21	0.85
tblEnergyUse	T24NG	23,944.02	17,958.02
tblEnergyUse	T24NG	1.21	0.85
tblFireplaces	NumberGas	595.00	630.00
tblFireplaces	NumberGas	454.75	481.50
tblFireplaces	NumberGas	288.15	305.10
tblFireplaces	NumberWood	35.00	0.00
tblFireplaces	NumberWood	26.75	0.00
tblFireplaces	NumberWood	16.95	0.00
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	501.88
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSequestration	NumberOfNewTrees	0.00	3,911.00
tblSequestration	NumberOfNewTrees	0.00	89.00
tblSolidWaste	SolidWasteGenerationRate	0.48	59.13
tblSolidWaste	SolidWasteGenerationRate	322.00	3,262.22

tblSolidWaste	SolidWasteGenerationRate	246.10	2,492.44
tblSolidWaste	SolidWasteGenerationRate	136.88	230.26
tblSolidWaste	SolidWasteGenerationRate	404.55	4,885.92
tblSolidWaste	SolidWasteGenerationRate	14.25	3.94
tblSolidWaste	SolidWasteGenerationRate	294.00	3,145.72
tblSolidWaste	SolidWasteGenerationRate	466.99	1,579.79
tblSolidWaste	SolidWasteGenerationRate	15.75	169.51
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	30.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	64.10	0.00
tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CC_TTP	64.40	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00

tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	16.90	100.00
tblVehicleTrips	CW_TTP	16.30	100.00
tblVehicleTrips	CW_TTP	16.60	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	25.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TL	12.90	0.00

tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	12.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	63.00	100.00
tblVehicleTrips	PR_TP	77.00	100.00

tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	45.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.59	1.96
tblVehicleTrips	ST_TR	7.16	8.16
tblVehicleTrips	ST_TR	7.16	8.16
tblVehicleTrips	ST_TR	2.37	2.18
tblVehicleTrips	ST_TR	20.87	1.44
tblVehicleTrips	ST_TR	49.97	55.24
tblVehicleTrips	ST_TR	10.08	7.91
tblVehicleTrips	ST_TR	42.04	70.80
tblVehicleTrips	SU_TR	1.59	1.96
tblVehicleTrips	SU_TR	6.07	6.92
tblVehicleTrips	SU_TR	6.07	6.92
tblVehicleTrips	SU_TR	0.98	0.90
tblVehicleTrips	SU_TR	26.73	1.85
tblVehicleTrips	SU_TR	25.24	27.90
tblVehicleTrips	SU_TR	8.77	6.88
tblVehicleTrips	SU_TR	20.43	34.41
tblVehicleTrips	WD_TR	1.59	1.96
tblVehicleTrips	WD_TR	6.59	7.51
tblVehicleTrips	WD_TR	6.59	7.51
tblVehicleTrips	WD_TR	1.29	1.13
tblVehicleTrips	WD_TR	11.01	10.14
tblVehicleTrips	WD_TR	32.93	2.28
tblVehicleTrips	WD_TR	42.94	47.47
tblVehicleTrips	WD_TR	9.57	7.51

tblVehicleTrips	WD_TR	44.32	74.64
tblWater	IndoorWaterUseRate	45,607,817.94	20,129,663.84
tblWater	IndoorWaterUseRate	34,857,403.71	15,384,814.51
tblWater	IndoorWaterUseRate	1,818,180.00	802,479.79
tblWater	IndoorWaterUseRate	77,314,180.38	34,123,721.14
tblWater	IndoorWaterUseRate	147,857.86	64,945,815.15
tblWater	IndoorWaterUseRate	20,740,306.02	9,154,031.19
tblWater	IndoorWaterUseRate	22,087,214.69	9,748,508.63
tblWater	IndoorWaterUseRate	1,111,087.82	490,394.53
tblWater	OutdoorWaterUseRate	6,672,295.56	30,931,089.44
tblWater	OutdoorWaterUseRate	28,752,754.79	41,239,069.15
tblWater	OutdoorWaterUseRate	21,975,319.73	31,518,431.42
tblWater	OutdoorWaterUseRate	4,675,320.00	6,705,647.73
tblWater	OutdoorWaterUseRate	47,386,110.55	67,964,238.70
tblWater	OutdoorWaterUseRate	90,622.56	129,976.76
tblWater	OutdoorWaterUseRate	12,711,800.46	18,232,090.18
tblWater	OutdoorWaterUseRate	13,924,548.39	19,971,492.06
tblWater	OutdoorWaterUseRate	680,989.31	976,719.12
tblWoodstoves	NumberCatalytic	35.00	0.00
tblWoodstoves	NumberCatalytic	26.75	0.00
tblWoodstoves	NumberCatalytic	16.95	0.00
tblWoodstoves	NumberNoncatalytic	35.00	0.00
tblWoodstoves	NumberNoncatalytic	26.75	0.00
tblWoodstoves	NumberNoncatalytic	16.95	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					
2014	4.6907	49.6788	37.9565	0.0428	0.2258	2.5294	2.7552	0.0599	2.3614	2.4213	0.0000	4,427.5298	4,427.5298	1.1410	0.0000	4,451.4906
Total	**4.6907**	**49.6788**	**37.9565**	**0.0428**	**0.2258**	**2.5294**	**2.7552**	**0.0599**	**2.3614**	**2.4213**	**0.0000**	**4,427.5298**	**4,427.5298**	**1.1410**	**0.0000**	**4,451.4906**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	4.6907	49.6788	37.9565	0.0428	0.2258	2.5294	2.7552	0.0599	2.3614	2.4213	0.0000	4,427.5298	4,427.5298	1.1410	0.0000	4,451.4906
Total	**4.6907**	**49.6788**	**37.9565**	**0.0428**	**0.2258**	**2.5294**	**2.7552**	**0.0599**	**2.3614**	**2.4213**	**0.0000**	**4,427.5298**	**4,427.5298**	**1.1410**	**0.0000**	**4,451.4906**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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**

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	97.7426	1.4988	130.2925	6.8800e-003		2.6206	2.6206		2.6006	2.6006	0.0000	30,233.1397	30,233.1397	0.8012	0.5500	30,420.4575
Energy	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002
Mobile	91.3158	231.4307	1,079.7313	4.2427	274.2766	5.5843	279.8609	73.3702	5.1526	78.5227		315,523.8382	315,523.8382	9.9875		315,733.5757
Total	**189.8508**	**239.7741**	**1,213.4367**	**4.2928**	**274.2766**	**8.7524**	**283.0290**	**73.3702**	**8.3007**	**81.6708**	**0.0000**	**354,402.3638**	**354,402.3638**	**10.9544**	**0.7085**	**354,852.0334**

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	97.7426	1.4988	130.2925	6.8800e-003		2.6206	2.6206		2.6006	2.6006	0.0000	30,233.1397	30,233.1397	0.8012	0.5500	30,420.4575
Energy	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002
Mobile	91.3158	231.4307	1,079.7313	4.2427	274.2766	5.5843	279.8609	73.3702	5.1526	78.5227		315,523.8382	315,523.8382	9.9875		315,733.5757
Total	**189.8508**	**239.7741**	**1,213.4367**	**4.2928**	**274.2766**	**8.7524**	**283.0290**	**73.3702**	**8.3007**	**81.6708**	**0.0000**	**354,402.3638**	**354,402.3638**	**10.9544**	**0.7085**	**354,852.0334**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2014	1/1/2014	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

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	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5962	49.5429	36.2873	0.0399		2.5270	2.5270		2.3593	2.3593		4,164.0858	4,164.0858	1.1253		4,187.7164
Total	**4.5962**	**49.5429**	**36.2873**	**0.0399**		**2.5270**	**2.5270**		**2.3593**	**2.3593**		**4,164.0858**	**4,164.0858**	**1.1253**		**4,187.7164**

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	0.0946	0.1359	1.6692	2.9200e-003	0.2258	2.3700e-003	0.2282	0.0599	2.1700e-003	0.0620		263.4440	263.4440	0.0157		263.7741
Total	**0.0946**	**0.1359**	**1.6692**	**2.9200e-003**	**0.2258**	**2.3700e-003**	**0.2282**	**0.0599**	**2.1700e-003**	**0.0620**		**263.4440**	**263.4440**	**0.0157**		**263.7741**

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	4.5962	49.5429	36.2873	0.0399		2.5270	2.5270		2.3593	2.3593	0.0000	4,164.0858	4,164.0858	1.1253		4,187.7164
Total	**4.5962**	**49.5429**	**36.2873**	**0.0399**		**2.5270**	**2.5270**		**2.3593**	**2.3593**	**0.0000**	**4,164.0858**	**4,164.0858**	**1.1253**		**4,187.7164**

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	0.0946	0.1359	1.6692	2.9200e-003	0.2258	2.3700e-003	0.2282	0.0599	2.1700e-003	0.0620		263.4440	263.4440	0.0157		263.7741
Total	**0.0946**	**0.1359**	**1.6692**	**2.9200e-003**	**0.2258**	**2.3700e-003**	**0.2282**	**0.0599**	**2.1700e-003**	**0.0620**		**263.4440**	**263.4440**	**0.0157**		**263.7741**

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					
Unmitigated	91.3158	231.4307	1,079.7313	4.2427	274.2766	5.5843	279.8609	73.3702	5.1526	78.5227		315,523.8382	315,523.8382	9.9875		315,733.5757
Mitigated	91.3158	231.4307	1,079.7313	4.2427	274.2766	5.5843	279.8609	73.3702	5.1526	78.5227		315,523.8382	315,523.8382	9.9875		315,733.5757

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	10.98	10.98	10.98	40,432	40,432
Condo/Townhouse	5,257.00	5,712.00	4844.00	20,000,242	20,000,242
Condo/Townhouse High Rise	4,017.85	4,365.60	3702.20	15,285,899	15,285,899
Elementary School	847.50	0.00	0.00	2,229,942	2,229,942
General Office Building	4,410.90	948.30	391.50	12,311,016	12,311,016
Health Club	5.70	3.60	4.63	19,326	19,326
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	13,291.60	15,467.20	7812.00	47,223,304	47,223,304

Single Family Housing	2,545.89	2,681.49	2332.32	9,632,461	9,632,461
Strip Mall	1,119.60	1,062.00	516.15	3,776,377	3,776,377
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	31,507.02	30,251.17	19,613.77	110,519,000	110,519,000

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	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse High Rise	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Elementary School	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
General Office Building	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Health Club	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	100	0	0
Regional Shopping Center	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Single Family Housing	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Strip Mall	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Unenclosed Parking with	0.00	0.00	0.00	0.00	0.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002
NaturalGas Unmitigated	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002

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
Condo/Townhouse	22135.9	0.2387	2.0400	0.8681	0.0130		0.1649	0.1649		0.1649	0.1649		2,604.2189	2,604.2189	0.0499	0.0477	2,620.0677
Condo/Townhouse High Rise	16918.1	0.1825	1.5591	0.6635	9.9500e-003		0.1261	0.1261		0.1261	0.1261		1,990.3673	1,990.3673	0.0382	0.0365	2,002.4803
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	9260.14	0.0999	0.9079	0.7626	5.4500e-003		0.0690	0.0690		0.0690	0.0690		1,089.4279	1,089.4279	0.0209	0.0200	1,096.0580
Health Club	99.3151	1.0700e-003	9.7400e-003	8.1800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6841	11.6841	2.2000e-004	2.1000e-004	11.7552
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
Regional Shopping Center	1027.95	0.0111	0.1008	0.0847	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003		120.9347	120.9347	2.3200e-003	2.2200e-003	121.6707
Single Family Housing	22118.5	0.2385	2.0384	0.8674	0.0130		0.1648	0.1648		0.1648	0.1648		2,602.1804	2,602.1804	0.0499	0.0477	2,618.0168
Strip Mall	55.0685	5.9000e-004	5.4000e-003	4.5400e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		6.4787	6.4787	1.2000e-004	1.2000e-004	6.5181
Unenclosed Parking with Elevator	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
Total		**0.7925**	**6.8447**	**3.4130**	**0.0432**		**0.5475**	**0.5475**		**0.5475**	**0.5475**		**8,645.3859**	**8,645.3859**	**0.1657**	**0.1585**	**8,698.0002**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	22.1359	0.2387	2.0400	0.8681	0.0130		0.1649	0.1649		0.1649	0.1649		2,604.2189	2,604.2189	0.0499	0.0477	2,620.0677
Condo/Townhouse High Rise	16.9181	0.1825	1.5591	0.6635	9.9500e-003		0.1261	0.1261		0.1261	0.1261		1,990.3673	1,990.3673	0.0382	0.0365	2,002.4803
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	9.26014	0.0999	0.9079	0.7626	5.4500e-003		0.0690	0.0690		0.0690	0.0690		1,089.4279	1,089.4279	0.0209	0.0200	1,096.0580
Health Club	0.0993151	1.0700e-003	9.7400e-003	8.1800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6841	11.6841	2.2000e-004	2.1000e-004	11.7552
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
Regional Shopping Center	1.02795	0.0111	0.1008	0.0847	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003		120.9347	120.9347	2.3200e-003	2.2200e-003	121.6707
Single Family Housing	22.1185	0.2385	2.0384	0.8674	0.0130		0.1648	0.1648		0.1648	0.1648		2,602.1804	2,602.1804	0.0499	0.0477	2,618.0168
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
Strip Mall	0.0550685	5.9000e-004	5.4000e-003	4.5400e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		6.4787	6.4787	1.2000e-004	1.2000e-004	6.5181
Unenclosed Parking with Elevator	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
Total		**0.7925**	**6.8447**	**3.4130**	**0.0432**		**0.5475**	**0.5475**		**0.5475**	**0.5475**		**8,645.3859**	**8,645.3859**	**0.1657**	**0.1585**	**8,698.0002**

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					
Unmitigated	97.7426	1.4988	130.2925	6.8800e-003		2.6206	2.6206		2.6006	2.6006	0.0000	30,233.1397	30,233.1397	0.8012	0.5500	30,420.4575
Mitigated	97.7426	1.4988	130.2925	6.8800e-003		2.6206	2.6206		2.6006	2.6006	0.0000	30,233.1397	30,233.1397	0.8012	0.5500	30,420.4575

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	13.7667					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	77.2917					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.7499	1.2000e-004	0.1500	0.0000		1.8999	1.8999		1.8799	1.8799	0.0000	29,998.5882	29,998.5882	0.5750	0.5500	30,181.1546
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**97.7426**	**1.4988**	**130.2925**	**6.8800e-003**		**2.6206**	**2.6206**		**2.6006**	**2.6006**	**0.0000**	**30,233.1397**	**30,233.1397**	**0.8012**	**0.5500**	**30,420.4575**

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	13.7667					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	77.2917					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.7499	1.2000e-004	0.1500	0.0000		1.8999	1.8999		1.8799	1.8799	0.0000	29,998.5882	29,998.5882	0.5750	0.5500	30,181.1546
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**97.7426**	**1.4988**	**130.2925**	**6.8800e-003**		**2.6206**	**2.6206**		**2.6006**	**2.6006**	**0.0000**	**30,233.1397**	**30,233.1397**	**0.8012**	**0.5500**	**30,420.4575**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
	0	0.00	0			Diesel

10.0 Vegetation

Entrada South (Operational) - Scenario 6a - Project 2024 Unmitigated

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	435.00	1000sqft	28.07	435,000.00	0
Elementary School	750.00	Student	9.40	62,703.53	0
Parking Lot	12.14	Acre	12.14	528,818.40	0
Unenclosed Parking with Elevator	1,836.00	Space	16.52	734,400.00	0
City Park	5.60	Acre	5.60	0.00	0
Health Club	2.50	1000sqft	2.90	2,500.00	0
Condo/Townhouse	700.00	Dwelling Unit	59.00	700,000.00	2352
Condo/Townhouse High Rise	535.00	Dwelling Unit	18.00	535,000.00	1797
Single Family Housing	339.00	Dwelling Unit	53.40	610,200.00	1139
Regional Shopping Center	280.00	1000sqft	18.07	280,000.00	0
Strip Mall	15.00	1000sqft	0.97	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	501.88	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 33% RPS by Year 2020

Land Use - Based on Project Description and Client Data.

Construction Phase - No Construction information evaluated (Operational Run only)

Trips and VMT -

Grading - Client Provided Data

Vehicle Trips - Based on Stantec Data by Landuse. Applied 8.85% reduction from TDM measures.

Vechicle Emission Factors - CO2 EF accounts for Pavley, LCFS, and ACC.

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - Based on Client information, no woodstoves and no wood burning fireplaces.

Area Coating -

Energy Use - 2013 T24 for electricity and NG. 25% and 30% better for res and non-res as compared to 2008 T24

Water And Wastewater - Total Indoor and Outdoor water use based on Client Data. Distributed between land uses based on default CalEEMod distribution.

Solid Waste - Defaults

Land Use Change - Based on Client Data

Sequestration - Based on client Data

Energy Mitigation - Based on Client data. 2 kW panel per single family home, 2 kW panel per 1600 SF commercial space.

Water Mitigation - Based on Client Data

Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	1.00
tblEnergyUse	T24E	269.81	202.36
tblEnergyUse	T24E	269.81	202.36
tblEnergyUse	T24E	5.62	3.93
tblEnergyUse	T24E	2.75	1.93
tblEnergyUse	T24E	4.90	3.43
tblEnergyUse	T24E	596.10	447.08
tblEnergyUse	T24E	4.90	3.43
tblEnergyUse	T24NG	11,455.03	8,591.27
tblEnergyUse	T24NG	11,455.03	8,591.27
tblEnergyUse	T24NG	10.54	7.38

tblEnergyUse	T24NG	14.36	10.05
tblEnergyUse	T24NG	1.21	0.85
tblEnergyUse	T24NG	23,944.02	17,958.02
tblEnergyUse	T24NG	1.21	0.85
tblFireplaces	NumberGas	595.00	630.00
tblFireplaces	NumberGas	454.75	481.50
tblFireplaces	NumberGas	288.15	305.10
tblFireplaces	NumberWood	35.00	0.00
tblFireplaces	NumberWood	26.75	0.00
tblFireplaces	NumberWood	16.95	0.00
tblLandUse	LandUseSquareFeet	62,702.53	62,703.53
tblLandUse	LandUseSquareFeet	243,936.00	0.00
tblLandUse	LotAcreage	9.99	28.07
tblLandUse	LotAcreage	1.44	9.40
tblLandUse	LotAcreage	0.06	2.90
tblLandUse	LotAcreage	43.75	59.00
tblLandUse	LotAcreage	8.36	18.00
tblLandUse	LotAcreage	110.06	53.40
tblLandUse	LotAcreage	6.43	18.07
tblLandUse	LotAcreage	0.34	0.97
tblLandUse	Population	2,002.00	2,352.00
tblLandUse	Population	1,530.00	1,797.00
tblLandUse	Population	970.00	1,139.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	501.88
tblProjectCharacteristics	OperationalYear	2014	2024
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSequestration	NumberOfNewTrees	0.00	3,911.00
tblSequestration	NumberOfNewTrees	0.00	89.00
tblSolidWaste	SolidWasteGenerationRate	0.48	59.13
tblSolidWaste	SolidWasteGenerationRate	322.00	3,262.22

tblSolidWaste	SolidWasteGenerationRate	246.10	2,492.44
tblSolidWaste	SolidWasteGenerationRate	136.88	230.26
tblSolidWaste	SolidWasteGenerationRate	404.55	4,885.92
tblSolidWaste	SolidWasteGenerationRate	14.25	3.94
tblSolidWaste	SolidWasteGenerationRate	294.00	3,145.72
tblSolidWaste	SolidWasteGenerationRate	466.99	1,579.79
tblSolidWaste	SolidWasteGenerationRate	15.75	169.51
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TL	10.10	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	30.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	64.10	0.00
tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CC_TTP	64.40	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TL	7.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00

tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	10.12
tblVehicleTrips	CW_TL	18.50	0.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	16.90	100.00
tblVehicleTrips	CW_TTP	16.30	100.00
tblVehicleTrips	CW_TTP	16.60	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	25.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TL	12.90	0.00

tblVehicleTrips	HO_TL	12.90	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TL	9.60	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TL	19.80	10.44
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	HW_TTP	40.20	100.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	12.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	63.00	100.00
tblVehicleTrips	PR_TP	77.00	100.00

tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	45.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.59	1.96
tblVehicleTrips	ST_TR	7.16	8.16
tblVehicleTrips	ST_TR	7.16	8.16
tblVehicleTrips	ST_TR	2.37	2.18
tblVehicleTrips	ST_TR	20.87	1.44
tblVehicleTrips	ST_TR	49.97	55.24
tblVehicleTrips	ST_TR	10.08	7.91
tblVehicleTrips	ST_TR	42.04	70.80
tblVehicleTrips	SU_TR	1.59	1.96
tblVehicleTrips	SU_TR	6.07	6.92
tblVehicleTrips	SU_TR	6.07	6.92
tblVehicleTrips	SU_TR	0.98	0.90
tblVehicleTrips	SU_TR	26.73	1.85
tblVehicleTrips	SU_TR	25.24	27.90
tblVehicleTrips	SU_TR	8.77	6.88
tblVehicleTrips	SU_TR	20.43	34.41
tblVehicleTrips	WD_TR	1.59	1.96
tblVehicleTrips	WD_TR	6.59	7.51
tblVehicleTrips	WD_TR	6.59	7.51
tblVehicleTrips	WD_TR	1.29	1.13
tblVehicleTrips	WD_TR	11.01	10.14
tblVehicleTrips	WD_TR	32.93	2.28
tblVehicleTrips	WD_TR	42.94	47.47
tblVehicleTrips	WD_TR	9.57	7.51

tblVehicleTrips	WD_TR	44.32	74.64
tblWater	IndoorWaterUseRate	45,607,817.94	20,129,663.84
tblWater	IndoorWaterUseRate	34,857,403.71	15,384,814.51
tblWater	IndoorWaterUseRate	1,818,180.00	802,479.79
tblWater	IndoorWaterUseRate	77,314,180.38	34,123,721.14
tblWater	IndoorWaterUseRate	147,857.86	64,945,815.15
tblWater	IndoorWaterUseRate	20,740,306.02	9,154,031.19
tblWater	IndoorWaterUseRate	22,087,214.69	9,748,508.63
tblWater	IndoorWaterUseRate	1,111,087.82	490,394.53
tblWater	OutdoorWaterUseRate	6,672,295.56	30,931,089.44
tblWater	OutdoorWaterUseRate	28,752,754.79	41,239,069.15
tblWater	OutdoorWaterUseRate	21,975,319.73	31,518,431.42
tblWater	OutdoorWaterUseRate	4,675,320.00	6,705,647.73
tblWater	OutdoorWaterUseRate	47,386,110.55	67,964,238.70
tblWater	OutdoorWaterUseRate	90,622.56	129,976.76
tblWater	OutdoorWaterUseRate	12,711,800.46	18,232,090.18
tblWater	OutdoorWaterUseRate	13,924,548.39	19,971,492.06
tblWater	OutdoorWaterUseRate	680,989.31	976,719.12
tblWoodstoves	NumberCatalytic	35.00	0.00
tblWoodstoves	NumberCatalytic	26.75	0.00
tblWoodstoves	NumberCatalytic	16.95	0.00
tblWoodstoves	NumberNoncatalytic	35.00	0.00
tblWoodstoves	NumberNoncatalytic	26.75	0.00
tblWoodstoves	NumberNoncatalytic	16.95	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					
2014	4.6940	49.6937	37.8526	0.0427	0.2258	2.5294	2.7552	0.0599	2.3614	2.4213	0.0000	4,412.7235	4,412.7235	1.1410	0.0000	4,436.6842
Total	**4.6940**	**49.6937**	**37.8526**	**0.0427**	**0.2258**	**2.5294**	**2.7552**	**0.0599**	**2.3614**	**2.4213**	**0.0000**	**4,412.7235**	**4,412.7235**	**1.1410**	**0.0000**	**4,436.6842**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	4.6940	49.6937	37.8526	0.0427	0.2258	2.5294	2.7552	0.0599	2.3614	2.4213	0.0000	4,412.7235	4,412.7235	1.1410	0.0000	4,436.6842
Total	**4.6940**	**49.6937**	**37.8526**	**0.0427**	**0.2258**	**2.5294**	**2.7552**	**0.0599**	**2.3614**	**2.4213**	**0.0000**	**4,412.7235**	**4,412.7235**	**1.1410**	**0.0000**	**4,436.6842**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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**

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	97.7426	1.4988	130.2925	6.8800e-003		2.6206	2.6206		2.6006	2.6006	0.0000	30,233.1397	30,233.1397	0.8012	0.5500	30,420.4575
Energy	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002
Mobile	95.0980	243.9943	1,078.3093	4.0520	274.2766	5.5988	279.8753	73.3702	5.1658	78.5360		302,339.8944	302,339.8944	10.0008		302,549.9107
Total	**193.6330**	**252.3377**	**1,212.0148**	**4.1021**	**274.2766**	**8.7669**	**283.0434**	**73.3702**	**8.3139**	**81.6841**	**0.0000**	**341,218.4199**	**341,218.4199**	**10.9677**	**0.7085**	**341,668.3684**

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	97.7426	1.4988	130.2925	6.8800e-003		2.6206	2.6206		2.6006	2.6006	0.0000	30,233.1397	30,233.1397	0.8012	0.5500	30,420.4575
Energy	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002
Mobile	95.0980	243.9943	1,078.3093	4.0520	274.2766	5.5988	279.8753	73.3702	5.1658	78.5360		302,339.8944	302,339.8944	10.0008		302,549.9107
Total	**193.6330**	**252.3377**	**1,212.0148**	**4.1021**	**274.2766**	**8.7669**	**283.0434**	**73.3702**	**8.3139**	**81.6841**	**0.0000**	**341,218.4199**	**341,218.4199**	**10.9677**	**0.7085**	**341,668.3684**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2014	1/1/2014	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

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	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5962	49.5429	36.2873	0.0399		2.5270	2.5270		2.3593	2.3593		4,164.0858	4,164.0858	1.1253		4,187.7164
Total	**4.5962**	**49.5429**	**36.2873**	**0.0399**		**2.5270**	**2.5270**		**2.3593**	**2.3593**		**4,164.0858**	**4,164.0858**	**1.1253**		**4,187.7164**

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	0.0979	0.1507	1.5653	2.7500e-003	0.2258	2.3700e-003	0.2282	0.0599	2.1700e-003	0.0620		248.6377	248.6377	0.0157		248.9678
Total	**0.0979**	**0.1507**	**1.5653**	**2.7500e-003**	**0.2258**	**2.3700e-003**	**0.2282**	**0.0599**	**2.1700e-003**	**0.0620**		**248.6377**	**248.6377**	**0.0157**		**248.9678**

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	4.5962	49.5429	36.2873	0.0399		2.5270	2.5270		2.3593	2.3593	0.0000	4,164.0858	4,164.0858	1.1253		4,187.7164
Total	**4.5962**	**49.5429**	**36.2873**	**0.0399**		**2.5270**	**2.5270**		**2.3593**	**2.3593**	**0.0000**	**4,164.0858**	**4,164.0858**	**1.1253**		**4,187.7164**

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	0.0979	0.1507	1.5653	2.7500e-003	0.2258	2.3700e-003	0.2282	0.0599	2.1700e-003	0.0620		248.6377	248.6377	0.0157		248.9678
Total	**0.0979**	**0.1507**	**1.5653**	**2.7500e-003**	**0.2258**	**2.3700e-003**	**0.2282**	**0.0599**	**2.1700e-003**	**0.0620**		**248.6377**	**248.6377**	**0.0157**		**248.9678**

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					
Unmitigated	95.0980	243.9943	1,078.3093	4.0520	274.2766	5.5988	279.8753	73.3702	5.1658	78.5360		302,339.8944	302,339.8944	10.0008		302,549.9107
Mitigated	95.0980	243.9943	1,078.3093	4.0520	274.2766	5.5988	279.8753	73.3702	5.1658	78.5360		302,339.8944	302,339.8944	10.0008		302,549.9107

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	10.98	10.98	10.98	40,432	40,432
Condo/Townhouse	5,257.00	5,712.00	4844.00	20,000,242	20,000,242
Condo/Townhouse High Rise	4,017.85	4,365.60	3702.20	15,285,899	15,285,899
Elementary School	847.50	0.00	0.00	2,229,942	2,229,942
General Office Building	4,410.90	948.30	391.50	12,311,016	12,311,016
Health Club	5.70	3.60	4.63	19,326	19,326
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	13,291.60	15,467.20	7812.00	47,223,304	47,223,304

Single Family Housing	2,545.89	2,681.49	2332.32	9,632,461	9,632,461
Strip Mall	1,119.60	1,062.00	516.15	3,776,377	3,776,377
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	31,507.02	30,251.17	19,613.77	110,519,000	110,519,000

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	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Condo/Townhouse High Rise	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Elementary School	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
General Office Building	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Health Club	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	100	0	0
Regional Shopping Center	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Single Family Housing	10.44	0.00	0.00	100.00	0.00	0.00	100	0	0
Strip Mall	10.12	0.00	0.00	100.00	0.00	0.00	100	0	0
Unenclosed Parking with	0.00	0.00	0.00	0.00	0.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.520397	0.057988	0.180404	0.127035	0.040743	0.006604	0.017532	0.037311	0.002617	0.003209	0.003763	0.000522	0.001873

5.0 Energy Detail

4.4 Fleet Mix

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	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002
NaturalGas Unmitigated	0.7925	6.8447	3.4130	0.0432		0.5475	0.5475		0.5475	0.5475		8,645.3858	8,645.3858	0.1657	0.1585	8,698.0002

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
Condo/Townhouse	22135.9	0.2387	2.0400	0.8681	0.0130		0.1649	0.1649		0.1649	0.1649		2,604.2189	2,604.2189	0.0499	0.0477	2,620.0677
Condo/Townhouse High Rise	16918.1	0.1825	1.5591	0.6635	9.9500e-003		0.1261	0.1261		0.1261	0.1261		1,990.3673	1,990.3673	0.0382	0.0365	2,002.4803
Elementary School	1870.8	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	9260.14	0.0999	0.9079	0.7626	5.4500e-003		0.0690	0.0690		0.0690	0.0690		1,089.4279	1,089.4279	0.0209	0.0200	1,096.0580
Health Club	99.3151	1.0700e-003	9.7400e-003	8.1800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6841	11.6841	2.2000e-004	2.1000e-004	11.7552
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
Regional Shopping Center	1027.95	0.0111	0.1008	0.0847	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003		120.9347	120.9347	2.3200e-003	2.2200e-003	121.6707
Single Family Housing	22118.5	0.2385	2.0384	0.8674	0.0130		0.1648	0.1648		0.1648	0.1648		2,602.1804	2,602.1804	0.0499	0.0477	2,618.0168
Strip Mall	55.0685	5.9000e-004	5.4000e-003	4.5400e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		6.4787	6.4787	1.2000e-004	1.2000e-004	6.5181
Unenclosed Parking with Elevator	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
Total		**0.7925**	**6.8447**	**3.4130**	**0.0432**		**0.5475**	**0.5475**		**0.5475**	**0.5475**		**8,645.3859**	**8,645.3859**	**0.1657**	**0.1585**	**8,698.0002**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	22.1359	0.2387	2.0400	0.8681	0.0130		0.1649	0.1649		0.1649	0.1649		2,604.2189	2,604.2189	0.0499	0.0477	2,620.0677
Condo/Townhouse High Rise	16.9181	0.1825	1.5591	0.6635	9.9500e-003		0.1261	0.1261		0.1261	0.1261		1,990.3673	1,990.3673	0.0382	0.0365	2,002.4803
Elementary School	1.8708	0.0202	0.1834	0.1541	1.1000e-003		0.0139	0.0139		0.0139	0.0139		220.0939	220.0939	4.2200e-003	4.0400e-003	221.4334
General Office Building	9.26014	0.0999	0.9079	0.7626	5.4500e-003		0.0690	0.0690		0.0690	0.0690		1,089.4279	1,089.4279	0.0209	0.0200	1,096.0580
Health Club	0.0993151	1.0700e-003	9.7400e-003	8.1800e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6841	11.6841	2.2000e-004	2.1000e-004	11.7552
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
Regional Shopping Center	1.02795	0.0111	0.1008	0.0847	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003		120.9347	120.9347	2.3200e-003	2.2200e-003	121.6707
Single Family Housing	22.1185	0.2385	2.0384	0.8674	0.0130		0.1648	0.1648		0.1648	0.1648		2,602.1804	2,602.1804	0.0499	0.0477	2,618.0168
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
Strip Mall	0.0550685	5.9000e-004	5.4000e-003	4.5400e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		6.4787	6.4787	1.2000e-004	1.2000e-004	6.5181
Unenclosed Parking with Elevator	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
Total		**0.7925**	**6.8447**	**3.4130**	**0.0432**		**0.5475**	**0.5475**		**0.5475**	**0.5475**		**8,645.3859**	**8,645.3859**	**0.1657**	**0.1585**	**8,698.0002**

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					
Unmitigated	97.7426	1.4988	130.2925	6.8800e-003		2.6206	2.6206		2.6006	2.6006	0.0000	30,233.1397	30,233.1397	0.8012	0.5500	30,420.4575
Mitigated	97.7426	1.4988	130.2925	6.8800e-003		2.6206	2.6206		2.6006	2.6006	0.0000	30,233.1397	30,233.1397	0.8012	0.5500	30,420.4575

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	13.7667					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	77.2917					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.7499	1.2000e-004	0.1500	0.0000		1.8999	1.8999		1.8799	1.8799	0.0000	29,998.5882	29,998.5882	0.5750	0.5500	30,181.1546
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**97.7426**	**1.4988**	**130.2925**	**6.8800e-003**		**2.6206**	**2.6206**		**2.6006**	**2.6006**	**0.0000**	**30,233.1397**	**30,233.1397**	**0.8012**	**0.5500**	**30,420.4575**

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	13.7667					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	77.2917					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.7499	1.2000e-004	0.1500	0.0000		1.8999	1.8999		1.8799	1.8799	0.0000	29,998.5882	29,998.5882	0.5750	0.5500	30,181.1546
Landscaping	3.9343	1.4986	130.1425	6.8800e-003		0.7207	0.7207		0.7207	0.7207		234.5515	234.5515	0.2263		239.3028
Total	**97.7426**	**1.4988**	**130.2925**	**6.8800e-003**		**2.6206**	**2.6206**		**2.6006**	**2.6006**	**0.0000**	**30,233.1397**	**30,233.1397**	**0.8012**	**0.5500**	**30,420.4575**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
	0	0.00	0			Diesel

10.0 Vegetation

Appendix C

Entrada South Trip Rate Length Discussion

Stantec

Memo

To:	Min Hou	From:	Daryl Zerfass
	Environ		Stantec
File:	2073007070	Date:	April 7, 2014

Reference: Entrada South Trip Rate & Trip Length Discussion

Following is a brief discussion on the trip rate and trip length characteristics for the Entrada South project. The discussion is intended to be used as reference for the project's greenhouse gas (GHG) technical report.

As discussed in Section 1.3.1 of the project's traffic study, future year traffic forecasts are derived using the Santa Clarita Valley Consolidated Traffic Model (SCVCTM), a sophisticated travel demand model. The SCVCTM has the capability of forecasting the complex interaction of vehicle trips between existing and future land uses using industry standard procedures. Inherent to this trip distribution process is a quantification of trips by "trip type".

As the name suggests, "trip type" refers to the kind of trip that is being made based on its purpose. Models such as the SCVCTM commonly utilize five trip types, as follows:

H-W: Home-based work trips
H-S: Home-based shopping trips
H-O: Home-based "other" (i.e., non-work, non-shopping) trips
O-W: Other-based work trips
O-O: Other-based other trips

Each trip type has unique characteristics, which are reflected in the model. For example, home-based work trips are distributed based on factors that generally result in longer trip lengths than the trip lengths that are calculated for home-based shopping trips. All trips that are generated within the model limits, both existing and future trips, are first categorized into one of the five trip types. The model then calculates the distribution of each traffic analysis zone based on the trip type. The final step of the trip distribution process aggregates all the trips together into a single trip table matrix that includes all five trip types.

Through the trip distribution process described above, the appropriate trip length characteristic of the various types of trips is reflected in the traffic forecasting process. The average trip lengths that are estimated using the model thereby account for the differing trip lengths of the various trip types.

The SCVCTM has been utilized in a number of prior transportation planning studies for the Santa Clarita Valley, such as the One Valley One Vision County Area Plan/City General Plan Update. That study effort produced average trip length estimates for various land use and transportation network scenarios. The OVOV plan that was ultimately adopted by the County and the City was estimated to have an average trip length of 11.6 miles. This average trip length represents an aggregate of the five unique trip types as discussed above.

The trip distribution and trip assignment processes utilized by travel demand models such as the SCVCTM estimate primary trips as well as trips commonly referred to as diverted trips and pass-by

Reference: Entrada South Trip Rate & Trip Length Discussion

trips. When utilizing traffic forecasts produced by the SCVCTM, there is not a need to undertake additional steps to estimate the number of diverted trips or pass-by trips since they are reflected in the total trip forecasts produced by the model.

Should you have any questions or need further clarification on the trip type summary provided above, please feel free to contact me to discuss.

STANTEC CONSULTING SERVICES INC.

Daryl Zerfass, PE, PTP
Principal, Transportation Planning and Traffic Engineering
Phone: (949) 923-6058
Daryl.Zerfass@stantec.com

c. Miles Helfrich, Newhall Land
Alex Herrell, Newhall Land

Appendix D

CAPCOA GHG Reduction Strategies for Transportation – Entrada South (VTTM 53295)

Stantec

Memo

To:	Alex Herrell	From:	Daryl Zerfass
	Newhall Land		Stantec
File:	2073007070	Date:	July 14, 2014

Reference: CAPCOA GHG Reduction Strategies for Transportation – Entrada South (VTTM 53295)

An analysis of potential greenhouse gas (GHG) reduction strategies for the Entrada South (VTTM 53295) project has been prepared using mitigation measures documented in the California Air Pollution Control Officers Associates (CAPCOA) resource document "Quantifying Greenhouse Gas Mitigation Measures", August, 2010. The CAPCOA document provides specific mitigation measures proven to reduce vehicle miles traveled (VMT) and transportation generated GHG emissions, with step-by-step guidelines to quantify the VMT/GHG reductions based on the specific features of the subject project. The CAPCOA mitigation measures are presented in a Fact Sheet format.

For the Entrada South (VTTM 53295) project, Stantec and Environ reviewed the Project Design Features (PDFs) associated with the project and identified the CAPCOA mitigation measures (Fact Sheets) specifically applicable to the Entrada South (VTTM 53295) PDFs. For each applicable CAPCOA measure, the quantification methodology outlined in the Fact Sheet was utilized to calculate the amount of VMT and/or GHG reduction attributable to the mitigation measure.

The Entrada South (VTTM 53295) project is a mixed-use development consisting of residential, employment (commercial office and retail), and a neighborhood school. Trip generation reductions attributable to the Land Use/Location aspects of the project were calculated as a separate exercise using the MXD Trip Generation methodology. As such, the CAPCOA mitigation measures within the Land Use/Location category of Fact Sheets were excluded from the analysis presented here to avoid double counting of GHG reductions.

The attached Table 1, Entrada South GHG Reductions – CAPCOA Transportation Strategies, summarizes each applicable PDF along with a corresponding CAPCOA mitigation measure and lists the estimated VMT/GHG reduction applicable to the Entrada South (VTTM 53295) project. For each CAPCOA Fact Sheet utilized for GHG/VMT reduction calculations, the underlying project features and assumptions utilized in the calculations are summarized in Table 2, CAPCOA Fact Sheet Data – Entrada South. Note, however, that some of the CAPCOA strategies listed in Table 1 are grouped with other strategies in the same category and do not have a specific reduction calculation associated with them. Those strategies, specifically TST-2, TST-6, and SDT-9, supplement the primary strategy by improving its effectiveness but without specific assumptions such as those listed in Table 2.

If you have any questions on the enclosed material, please feel free to contact me to discuss.

STANTEC CONSULTING SERVICES INC.

Daryl Zerfass, PE
Principal, Transportation Planning and Traffic Engineering
Phone: (949) 923-6058
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Attachment: Table 1 Entrada South GHG Reductions – CAPCOA Transportation Strategies
Table 2 CAPCOA Fact Sheet Data – Entrada South

Table 1 Entrada South GHG Reductions – CAPCOA Transportation Strategies

Project Design Features	CAPCOA Fact Sheets	Entrada So. GHG or VMT Reduction
Bus pull-ins constructed throughout the Project site. Shuttle service from residential subdivisions/residential core areas to commercial core areas/worksite. On-site or off-site bus stops (e.g., bus turnouts, passenger benches, and shelters). Shuttles to major rail transit centers or multi-modal stations. Contribution to regional transit systems (e.g., right-of way, capital improvements, etc.). Lunch shuttle service from a worksite(s) to food establishments.	TST-2 Implement Transit Access Improvements[1] TST-3 Expand Transit Network TST-6 Provide Local Shuttles[1] [1]Grouped with TST-3	1.7%
Pedestrian facilities, such as sidewalks, and community regional, and local trails, provided throughout the Project site. Roads with adjacent trails for pedestrian and bicycle use provided throughout the Project site connecting the individual Villages and community. Off-site pedestrian facility improvements, such as overpasses and wider sidewalks. Land for the provision of off-site bicycle trails linking the facility to designated bicycle commuting routes. Any two of the following: 1) Construct off-site bicycle facility improvements, such as bicycle trails linking the facility to designated bicycle commuting routes, or on-site improvements, such as bicycle paths; 2) Include bicycle parking facilities, such as bicycle lockers and racks; 3) Include showers for bicycling employees' use. Any two of the following: 1) Construct off-site pedestrian facility improvements, such as overpasses, wider sidewalks; 2) Construct on-site pedestrian facility improvements, such as building access which is physically separated from street and parking lot traffic and walk paths; 3) Include showers for pedestrian employees' use.	SDT-1 Provide Pedestrian Network Improvements SDT-9 Dedicated Land for Bike Trails[2] [2]Grouped with SDT-1	2%
Satellite telecommunications centers in residential subdivisions.	TRT-6 Telecommuting and Alternative Work Schedules	0.2% (2.2% of Res. Commuter VMT)
Synchronized traffic lights on streets impacted by development.	RPT-2 Improve Traffic Flow	1.4%
Preferential parking spaces for carpools and vanpools and 7'2" minimum vertical clearance in parking facilities for vanpool access.	TRT-1 Voluntary Commute Trip Reduction	1.0% (5.4% of Commuter VMT)
Traffic calming measures for on-site roadways and intersections.	SDT-2 Provide Traffic Calming Measures	0.75%
Ride-sharing program with dedicated parking areas.	TRT-3 Provide Ride-Sharing Programs	1.8% (10% of Commuter VMT)
Total Reduction (based on all of the above)		8.85%

Table 2 CAPCOA Fact Sheet Data – Entrada South

CAPCOA Fact Sheet	Project Features/Assumptions
TST-3 Expand Transit Network *(Project Description)*	Existing Transit Coverage = Santa Clarita Transit (SCT) Route 3 (9.0 miles) & Route 7 (10.7 miles) Future Estimated Coverage: Route to Valencia Commerce Center (8.5 miles) Route to Valencia Industrial Center (6.8 miles) Route to Newhall Metrolink Station (6.5 miles) B = Elasticity of Transit Ridership with respect to service coverage (source: CAPCOA) $B_{(Suburban)}$ = 1.01 $B_{(Urban)}$ = 0.72 $B_{(Average)}$ = 0.865 Mode = Existing Transit Mode Share (source: CAPCOA) $Mode_{(Suburban)}$ = 1.3% $Mode_{(Urban)}$ = 4% $Mode_{(Average)}$ = 2.65% D=0.67 (source: CAPCOA) where % VMT Reduction = $Coverage_{(\%\ Increase)}$ * B * Mode * D
SDT-1 Provide Pedestrian Network Improvements *(Project Description)*	Pedestrian accommodations (e.g., internally links all uses and connects to all exiting or planned external streets and pedestrian facilities contiguous within the project site; minimize barriers to pedestrian access and interconnectivity; physical barriers such as walls, landscaping, and slopes that impede pedestrian circulation will be eliminated) are within Project Site and Connecting Off-Site (Urban & Suburban) = 2% VMT Reduction (source: CAPCOA)
TRT-6 Telecommuting and Alternative Work Schedules *(Project Design Feature)*	Telecommuting Employee Participation (1.5 days/week) = 10% (estimate, see notes below) % Reduction in Commute VMT = 2.2% (source: CAPCOA) Commute Trips = 20% of Total Trips (source: CAPCOA) Notes: For NRSP MM 4.10-9.a, telecommuting participation is applied to project residents only. The 2012 American Community Survey provides data on workers who primarily telecommute (2.6% of the workforce). [1] Additional data indicates that 25 million workers (approximately 16% of the workforce) telecommute at least once per month, that 50% of the current U.S. labor force holds a job that is compatible with at least part-time telework, and that 79% of U.S. workers say they would like to work from home at least part of the time (source: GlobalWorkplaceAnalytics.com). [2] Taken together, the above data supports an estimate of 10% participation for workers to telecommute 1.5 days/week.

Continued

[1] Latest Telecommuting Statistics (n.d.) Retrieved from http://www.globalworkplaceanalytics.com/telecommuting-statistics (accessed May 29, 2014).
[2] ibid

Table 2 CAPCOA Fact Sheet Data – Entrada South (Continued)

CAPCOA Fact Sheet	Project Features/Assumptions
RPT-2 Improve Traffic Flow *(Project Design Feature)*	Traffic Signal Coordination for: Magic Mountain Parkway from Commerce Center Drive to The Old Road (1.0 miles) The Old Road from Skyview Lane to Shopping Center Driveway (south of Magic Mountain Parkway) (0.5 miles) Average Running Speed = 25 mph Project VMT = No change (pre/post) Emission Factor $(EF)_{(congested)}$=371 CO_2/mile (source: CAPCOA) $EF_{(free\text{-}flow)}$=262 CO_2/mile (source: CAPCOA) Notes: Traffic Signal Coordination results in synchronized operation of multiple consecutive intersections along a roadway corridor or network to enhance the operation of one or more directional movements in a system. Coordination typically includes the ability for signals to communicate between each other and/or a central Traffic Management Center (TMC) through the use of hard-wire connections or radio frequencies. Special traffic signal timing plans are utilized to maintain progression in one or more directions or to minimize average vehicle delay.
TRT-1 Voluntary Commute Trip Reduction *(Project Design Feature)*	Voluntary Commute Trip Reduction (CTR) program (e.g., carpooling encouragement; ride-matching assistance; preferential carpool parking; flexible work schedules for carpools; half-time transportation coordinator; vanpool assistance; bicycle end-trip facilities) A = % reduction in commute VMT = 5.4% (Suburban Center) (source: CAPCOA) B = % employees eligible = 100% (estimate) Where %VMT Reduction(Office) = A*B Notes: Entrada South will also participate in the overall Newhall Ranch Specific Plan mitigation requirements for traffic demand management (TDM).
SDT-2 Provide Traffic Calming Measures *(Project Description)*	On-site pedestrian/bicycle safety and traffic calming measures in excess of jurisdiction requirements to encourage people to walk or bike instead of using a vehicle and roadways designed to reduce motor vehicle speeds (e.g., marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, and others) % of streets with improvements = 100% % of intersections with improvements = 50% % VMT Reduction = 0.75 (source: CAPCOA) Notes: SDT-2 differs from SDT-1 (Provide Pedestrian Network Improvements) by providing a more attractive walking environment through the reduction and slowing of roadway traffic volumes. In comparison, SDT-1 provides the actual infrastructure needed by pedestrians.

Continued

Table 2 CAPCOA Fact Sheet Data – Entrada South (Continued)

CAPCOA Fact Sheet	Project Features/Assumptions
TRT-3 Provide Ride-Sharing Programs *(Project Design Feature)*	Include a ride-sharing program as well as a permanent transportation management association membership and funding requirement. Funding may be provided by Community Facilities, District, or County Service Area, or other non-revocable funding mechanism. Promote ride-sharing programs through a multi-faceted approach such as: Designating a certain percentage of parking spaces for ride sharing vehicles Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles Providing a web site or message board for coordinating rides Commute = % reduction in commute VMT = 10% (Suburban Center) (source: CAPCOA) Employee = % employees eligible = 100% (estimate) Where %VMT Reduction(Office) = Commute*Employee Notes: TRT-3 differs from TRT-1 (Voluntary Commute Trip Reduction) by focusing on the promotion of funded ride-sharing programs at the workplace. In comparison TRT-1 is based on a voluntary and multifaceted Commute Trip Reduction (CTR) program that includes "carrots" and "sticks" to encourage employees to utilize alternative modes of transportation.

Appendix E

CO Hotspots Analysis

Appendix E. CO Hotspots Analysis
Entrada South
Los Angeles County, California

2024 With Project AM & PM Peak Hour Intersection Volumes[1]															CO Hotspots Analysis[3]	
	Location		North Leg (SB)[2]			East Leg (WB)[2]			South Leg (NB)[2]			West Leg (EB)[2]			Daily Intersection Volume[4]	Maximum Daily Intersection Volume
			SBL	SBT	SBR	WBL	WBT	WBR	NBL	NBT	NBR	EBL	EBT	EBR		
9	The Old Rd & I-5 SB Ramps	AM	180	420	0	430	0	10	40	980	720	0	0	0	27,800	44,700
		PM	640	1010	0	290	0	10	20	890	1610	0	0	0	44,700	
10	I-5 SB Ramps & Magic Mtn	AM	950	10	150	410	2050	0	0	0	0	0	980	970	55,200	55,200
		PM	610	0	50	70	1950	0	0	0	0	0	1240	940	48,600	
11	I-5 NB Ramps & Magic Mtn	AM	0	0	0	0	1330	260	1140	0	470	60	1870	0	51,300	52,500
		PM	0	0	0	0	1220	530	880	0	650	140	1830	0	52,500	
12	I-5 SB Ramps & Valencia	AM	830	0	360	0	1630	1640	0	0	0	0	900	1020	63,800	63,800
		PM	530	0	110	0	2390	1300	0	0	0	0	1140	570	60,400	
13	I-5 NB Ramps & Valencia	AM	0	0	0	180	2620	0	720	0	1240	0	1610	130	65,000	67,900
		PM	0	0	0	170	2930	0	830	0	1190	0	1290	380	67,900	
14	I-5 SB Ramps & McBean	AM	480	0	720	0	300	200	0	0	0	0	660	190	25,500	42,500
		PM	280	0	450	0	1690	500	0	0	0	0	1170	160	42,500	
15	I-5 NB Ramps & McBean	AM	0	0	0	0	460	80	70	0	400	0	750	330	20,900	41,200
		PM	0	0	0	0	1740	280	440	0	460	0	850	350	41,200	
16	I-5 SB/Marriott & Pico/Lyons	AM	340	70	370	50	910	210	0	0	40	0	1580	30	36,000	37,100
		PM	510	90	70	60	1390	330	0	0	20	0	1190	50	37,100	
17	I-5 NB On/Off & Lyons Ave	AM	0	0	0	0	790	570	100	10	130	160	1310	0	30,700	36,800
		PM	0	0	0	0	900	750	330	0	310	210	1180	0	36,800	
25	The Old Rd & Rye Canyon	AM	410	490	0	600	0	1150	0	520	1380	0	0	0	45,500	67,200
		PM	780	530	0	1040	0	2080	0	630	1660	0	0	0	67,200	
26	The Old Rd & Magic Mountain	AM	500	150	620	120	970	1470	590	330	130	630	1640	190	73,400	84,200
		PM	340	390	940	90	800	1300	200	740	150	680	2320	470	84,200	
27	The Old Rd & Valencia	AM	50	160	120	40	1850	110	450	690	210	410	1690	630	64,100	64,100
		PM	290	340	110	320	1470	610	580	600	160	130	1250	370	62,300	
28	The Old Rd & Stevenson Ranch	AM	250	270	260	280	570	180	80	560	80	800	570	170	40,700	54,200
		PM	160	930	220	740	1010	410	190	560	450	140	490	120	54,200	
29	The Old Rd & Pico Canyon	AM	220	150	10	10	1050	260	40	220	40	120	1450	110	36,800	39,800
		PM	550	280	310	40	1020	400	150	230	10	70	680	240	39,800	
30	Ave Stanford & Rye Canyon	AM	30	70	40	10	1450	90	230	50	130	240	1030	530	39,000	58,500
		PM	100	100	310	20	2420	60	320	130	10	60	2110	210	58,500	
33	Rye/Copper & Newhall Ranch	AM	50	1380	940	540	1110	280	70	410	40	790	710	170	64,900	87,500
		PM	60	740	490	550	990	340	380	1330	140	1070	2330	330	87,500	

35	Copper Hill & Decoro	AM	560	1700	0	420	0	270	0	930	190	0	0	0	40,700	41,400
		PM	100	1170	0	150	0	120	0	2530	70	0	0	0	41,400	
36	Tourney & Valencia	AM	40	0	40	0	2750	130	0	0	0	330	2530	0	58,200	58,200
		PM	170	0	350	0	2750	50	0	0	0	120	2350	0	57,900	
37	Tourney & Magic Mountain	AM	0	0	0	390	1480	0	110	0	70	0	2080	260	43,900	43,900
		PM	0	0	0	130	1430	0	210	0	200	0	1990	380	43,400	
44	McBean & Valencia	AM	170	750	1160	230	1700	60	370	870	200	660	1140	110	74,200	95,800
		PM	280	1010	1390	590	1330	290	210	1320	400	1160	1340	260	95,800	
45	McBean & Magic Mtn	AM	210	2090	1010	10	710	340	50	1280	10	660	970	40	73,800	92,500
		PM	330	2050	270	150	1060	330	220	2760	150	450	1330	150	92,500	
48	McBean & Newhall Ranch	AM	380	2300	180	550	1690	80	240	630	290	120	640	590	76,900	97,500
		PM	180	1130	80	380	1270	310	840	1840	580	440	2000	700	97,500	
49	McBean & Decoro	AM	100	1920	320	420	720	60	140	480	210	150	200	10	47,300	47,300
		PM	80	780	70	190	210	60	60	1930	360	100	490	10	43,400	
50	McBean & Copper Hill	AM	40	180	120	1110	1500	40	230	50	370	40	750	590	50,200	50,400
		PM	60	90	70	430	670	50	430	180	930	150	1750	230	50,400	
51	Wiley Cyn & Lyons	AM	130	390	380	230	720	110	160	250	170	120	960	80	37,000	50,500
		PM	420	180	260	160	1280	130	130	520	270	360	1320	20	50,500	
53	Orchard Village & Lyons	AM	490	100	230	110	970	240	30	100	60	230	1170	40	37,700	50,100
		PM	440	170	220	120	1550	610	80	150	80	300	1200	90	50,100	
55	Orchard Village & McBean	AM	30	20	20	690	300	40	480	50	630	40	440	730	34,700	44,900
		PM	40	40	60	770	590	50	580	30	850	30	760	690	44,900	
57	Valencia & Magic Mtn	AM	50	1610	320	720	1540	180	10	800	330	310	590	10	64,700	78,200
		PM	90	1530	450	480	1210	60	80	1380	610	450	1430	50	78,200	
65	Bouquet & Soledad	AM	680	1830	1380	150	760	340	20	560	220	330	900	30	72,000	91,400
		PM	540	1590	570	290	850	720	30	2160	280	820	1280	10	91,400	
66	Bouquet & Newhall Ranch	AM	230	2550	350	630	1460	60	300	730	130	110	810	390	77,500	102,600
		PM	240	1940	200	300	1100	320	860	2160	400	760	1610	370	102,600	
67	Seco & Bouquet	AM	270	0	880	0	2370	280	0	0	0	360	550	0	47,100	48,500
		PM	360	0	770	0	1410	210	0	0	0	400	1700	0	48,500	
80	Wolcott & SR-126	AM	70	20	40	310	840	120	20	150	530	580	1670	10	43,600	53,300
		PM	220	120	520	590	2030	90	20	70	440	50	1160	20	53,300	
81	Commerce Ctr & Henry Mayo	AM	20	550	40	40	10	90	10	1290	90	280	100	230	27,500	34,000
		PM	120	890	40	170	10	280	20	1110	170	230	180	180	34,000	
82	Commerce Ctr & SR-126 EB	AM	0	610	370	0	0	0	0	1380	270	0	0	0	26,300	43,300
		PM	0	1060	1640	0	0	0	0	1070	560	0	0	0	43,300	

83	Commerce Ctr & SR-126 WB	AM	0	640	110	340	0	1300	160	1230	0	0	0	0	37,800	47,000
		PM	0	2390	340	320	0	580	460	610	0	0	0	0	47,000	
105	Westridge & Valencia	AM	500	20	100	20	2030	660	30	10	40	190	2470	20	60,900	60,900
		PM	610	10	110	30	1950	880	10	10	20	60	1780	10	54,800	
106	Commerce Center & Magic Mtn	AM	280	0	70	0	730	640	0	0	0	560	1700	0	39,800	39,800
		PM	400	0	360	0	1200	380	0	0	0	160	1000	0	35,000	
107	Westridge & Magic Mtn	AM	0	0	0	120	670	0	480	0	620	0	1640	110	36,400	37,300
		PM	0	0	0	540	1020	0	570	0	230	0	930	440	37,300	
															Maximum Daily Traffic	102,600
															Threshold	400,000
															Above the threshold?	No

Notes:

[1]Stantec. 2014. Entrada South (VTTM 053295) Traffic Impact Analysis. June.

[2]Vehicles traveling through intersection independently of direction after crossing (L=left, T=traverse and R=right).

[3]At buildout of the Project, the highest average daily trips at an intersection would be approximately 102,600 at the Bouquet & Newhall Ranch intersection, which is below the daily traffic volumes that would be expected to generate CO exceedances as evaluated in the 2003 AQMP (i.e. 400,000 vehicles per day). This daily trip estimate is based on the peak hour conditions of the intersection. There is no reason unique to SCAB meteorology to conclude that the CO concentrations at the Bouquet & Newhall Ranch intersection would exceed the 1-hour CO standard if modeled in detail, based on the studies undertaken for the 2003 AQMP.

[4]As provided by Stantec.

Abbreviations:

AQMP - Air Quality Management Plan

SCAB - South Coast Air Basin

VTTM - Vesting Tentative Tract Map

Appendix F

SCAG RTP/SCS Land Use Analysis for the Newhall Land Westside Areas

Stantec

Memo

To:	Alex Herrell Newhall Land	From:	Daryl Zerfass Stantec
File:	2073008220	Date:	November 22, 2013

Reference: SCAG RTP/SCS Land Use Analysis for the Newhall Land Westside Areas

In April, 2012, the Southern California Association of Governments (SCAG) adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS includes projections of population growth for the SCAG region and estimates that an additional 4 million people will be added to the region by 2035.

The Newhall Ranch Specific Plan represents an area of future growth and is reflected in the County's Area Plan for the Santa Clarita Valley. An analysis has been prepared by Stantec in which the RTP/SCS projections are compared to the planned Newhall Land development projects. The Newhall Land development areas included with this analysis consist of the Newhall Ranch Specific Plan area along with the adjacent Entrada North, Entrada South, Legacy Village and Commerce Center areas (collectively referred to here as the Newhall Land Westside area).

To assess the amount of future growth assumed by the RTP/SCS, population and housing data was obtained from SCAG by Environ in August, 2013, and subsequently provided to Stantec for analysis. The RTP/SCS data was provided in ArcGIS format and was organized by SCAG Tier 2 traffic analysis zone (TAZ) boundaries. The SCAG TAZs were overlaid on the Santa Clarita Valley Consolidated Traffic Model (SCVCTM) TAZ system and housing data was extracted for identical geographical areas. An exhibit showing the relationship of the SCAG TAZs to the SCVCTM TAZs is attached for reference.

SCAG TAZ boundaries are significantly larger than the SCVCTM TAZs, and the SCAG TAZs cover an area larger than the actual Newhall Land Westside area. Therefore, in order to have a geographically consistent comparison between the two data sets, an area much larger than just the Newhall Land Westside area was used as the basis for analysis.

For the RTP/SCS, the data represents the total number of households (HH) within the TAZ boundaries in the year 2035. For comparison purposes, the total amount of planned development for the Newhall Land Westside area (21,771 HH) was combined with all known planned and proposed development projects (617 HH) as previously submitted to the County (i.e., "Cumulative Projects"), together with existing land use for the area (7,790 HH) based on SCVCTM zones. A comparison of the two data sets is provided below, which shows that the RTP/SCS household data is generally consistent with the number of planned residential units depicted by the Newhall Land Westside and County data on an aggregate level.

Tier2 TAZ	RTP/SCS 2035 HH	NL/County HH	Difference
20224100	2,578	2,689	111
20224200	10	0	-10
20226100	20,182	21,975	1,793
20227100	7,006	5,514	-1,492
Total	***29,776***	***30,178***	***402***

Reference: SCAG RTP/SCS Land Use Analysis for the Newhall Land Westside Areas

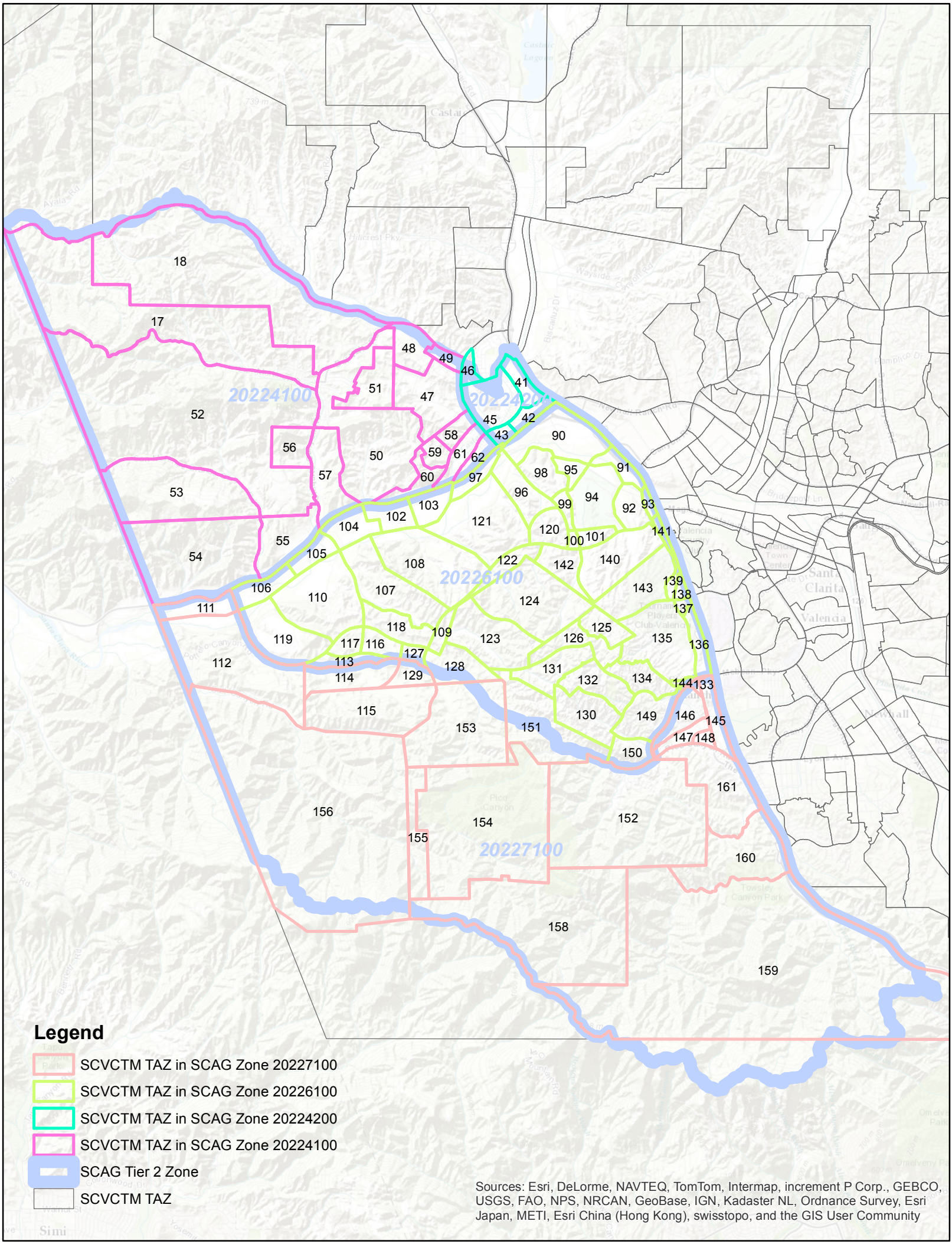
Zone boundary differences are reflected in the zonal comparison provide above. For example, while the SCAG zone 20226100 area shows 1,793 more households with the Newhall Land Westside and County data, the neighboring SCAG zone 20227100 shows 1,492 fewer households with the Newhall Land Westside and County data. North of the SR-126, there is also a slight difference of 101 more households. In total, the difference between the Newhall Land Westside/County data and the RTP/SCS data is 402 households (1.4 percent). Due to the large size of the SCAG TAZs, it is not possible to discern if the indicated differences are due to land uses within or outside of the actual Newhall Land Westside project area boundaries.

If you have any questions on the enclosed material, please feel free to contact me to discuss.

STANTEC CONSULTING SERVICES INC.

Daryl Zerfass, PE
Principal, Transportation Planning and Traffic Engineering
Phone: (949) 923-6058
Daryl.Zerfass@stantec.com

Attachment: Exhibit – SCAG Tier 2 TAZ and SCVCTM TAZ boundaries


20224100
20224200
20226100
20227100
Legend
SCVCTM TAZ in SCAG Zone 20227100
SCVCTM TAZ in SCAG Zone 20226100
SCVCTM TAZ in SCAG Zone 20224200
SCVCTM TAZ in SCAG Zone 20224100
SCAG Tier 2 Zone
SCVCTM TAZ
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community