UNMITIGATED EMISSIONS SUMMARY

Roadway Alignment ALT B, C, and D					
Activity	**ROG**	**NOX**	**PM10**	**PM2.5**	**CO**
Demolition	1.53	17.7	4.9	1.4	10.61
Grubbing/Land Clearing	1.73	19.33	50.85	11.17	12.25
Grading/Excavation	8.54	93.1	54.68	14.66	61.35
Drainage/Utilities/Sub-Grade	4.51	43.23	52.38	12.61	35.86
Paving	1.99	18.92	1.15	1.03	19.05
Max Emissions	**8.54**	**93.1**	**54.68**	**14.66**	**61.35**

Roadway Alignment ALT E					
Activity	**ROG**	**NOX**	**PM10**	**PM2.5**	**CO**
Demolition	1.53	17.7	4.9	1.4	10.61
Grubbing/Land Clearing	1.15	14.13	50.59	10.93	7.15
Grading/Excavation	3.55	38.58	52	12.2	26.05
Drainage/Utilities/Sub-Grade	6.25	64.31	53.39	13.56	45.26
Paving	2.38	23.2	1.52	1.37	18.13
Max Emissions	**6.25**	**64.31**	**53.39**	**13.56**	**45.26**

Mixed Use Max Daily (Site 1)					
Activity	**ROG**	**NOX**	**PM10**	**PM2.5**	**CO**
Demo	4.27	44.98	3.55	2.28	24.33
Site Prep	5.02	52.31	21.01	12.6	23.85
Grading	3.14	33.93	10	5.19	17.6
Building Construction	4	31.16	2.83	2	24.75
Paving	2.21	20.78	1.28	1.1	15.8
Arch. Coat.	27.73	0.32	0.19	0.06	1.23
Max Emissions	**27.729**	**52.31**	**21.01**	**12.6**	**24.75**

Mixed Use Max Daily (Site 2)					
Activity	**ROG**	**NOX**	**PM10**	**PM2.5**	**CO**
Demo	4.3	45.45	3.83	2.34	24.58
Site Prep	5.09	52.35	21.09	12.62	24.38
Grading	3.17	33.94	8.39	5.03	17.87
Building Construction	3.77	29.66	2.57	1.92	23.05
Paving	0.14	0.08	0.17	0.04	1.02
Arch. Coat.	21.39	0.29	0.14	0.05	0.96
Max Emissions	**21.39**	**52.35**	**21.09**	**12.62**	**24.58**

Mixed Use Max Daily (Site 1+ Site 2)					
Activity	**ROG**	**NOX**	**PM10**	**PM2.5**	**CO**
Demo	8.57	90.43	7.38	4.62	48.91
Site Prep	10.11	104.66	42.1	25.22	48.23
Grading	6.31	67.87	18.39	10.22	35.47
Building Construction	7.77	60.82	5.4	3.92	47.8
Paving	2.35	20.86	1.45	1.14	16.82
Arch. Coat.	49.12	0.61	0.33	0.11	2.19
Max Emissions	**49.1**	**104.7**	**42.1**	**25.2**	**48.9**

Mixed Use Max Daily (Site 3)					
Activity	**ROG**	**NOX**	**PM10**	**PM2.5**	**CO**
Demo	4.3	45.45	3.83	2.34	24.58
Site Prep	2.2	26.73	1.5	1.12	14.8
Grading	2.4	26.23	7.6	4.52	11.3
Building Construction	4.04	26.3	2.17	1.7	21.7
Paving	0.1	0.06	0.12	0.03	0.77
Arch. Coat.	35.56	0.29	0.16	0.05	1.06
Max Emissions	**35.6**	**45.5**	**7.6**	**4.5**	**24.6**

Roadway Alignment (Alt B, C, D) + Mixed Use (Site 1 + Site 2)					
	ROG	**NOX**	**PM10**	**PM2.5**	**CO**
Max Emissions	57.7	197.8	96.8	39.9	110.3

Roadway Alignment (Alt E) + Mixed Use (Site 1 + Site 2)					
	ROG	**NOX**	**PM10**	**PM2.5**	**CO**
Max Emissions	55.4	169.0	63.2	37.8	73.5

Site 1

Demolition	ROG	NOX	PM10	PM2.5	CO
On Site	4.1	42.75	3.33	2.21	23.01
Off Site	0.17	2.23	0.22	0.07	1.32
Demo Total	**4.27**	**44.98**	**3.55**	**2.28**	**24.33**

Site Preparation	ROG	NOX	PM10	PM2.5	CO
On Site	4.96	52.28	20.94	12.58	23.45
Off Site	0.06	0.03	0.07	0.02	0.4
SP Total	**5.02**	**52.31**	**21.01**	**12.6**	**23.85**

Grading	ROG	NOX	PM10	PM2.5	CO
On Site	3.07	33.89	9.92	5.17	17.1
Off Site	0.07	0.04	0.08	0.02	0.5
Grad Total	**3.14**	**33.93**	**10**	**5.19**	**17.6**

Building Construction	ROG	NOX	PM10	PM2.5	CO
On Site	3.11	26.55	1.79	1.68	18.18
Off Site	0.89	4.61	1.04	0.32	6.57
Build Total	**4**	**31.16**	**2.83**	**2**	**24.75**

Paving	ROG	NOX	PM10	PM2.5	CO
On Site	2.11	20.72	1.16	1.07	15.03
Off Site	0.1	0.06	0.12	0.03	0.77
Pav Total	**2.21**	**20.78**	**1.28**	**1.1**	**15.8**

Architectural Coating	ROG	NOX	PM10	PM2.5	CO
On Site	275.89	2.19	0.17	0.17	1.87
Adj. Onsite*	27.589	0.243	0.019	0.019	0.208
Off Site	0.14	0.08	0.17	0.04	1.02
Arch Total	**27.73**	**0.32**	**0.19**	**0.06**	**1.23**

Site 1 Max	**27.73**	**52.31**	**21.01**	**12.60**	**24.75**

Site 2

Demolition	ROG	NOX	PM10	PM2.5	CO
On Site	4.1	42.75	3.57	2.25	23.01
Off Site	0.2	2.7	0.26	0.09	1.57
Demo Total	**4.3**	**45.45**	**3.83**	**2.34**	**24.58**

Site Preparation	ROG	NOX	PM10	PM2.5	CO
On Site	4.96	52.28	20.94	12.58	23.46
Off Site	0.13	0.07	0.15	0.04	0.92
SP Total	**5.09**	**52.35**	**21.09**	**12.62**	**24.38**

Grading	ROG	NOX	PM10	PM2.5	CO
On Site	3.07	33.89	8.27	5	17.1
Off Site	0.1	0.05	0.12	0.03	0.77
Grad Total	**3.17**	**33.94**	**8.39**	**5.03**	**17.87**

Building Construction	ROG	NOX	PM10	PM2.5	CO
On Site	3.11	26.55	1.79	1.68	18.18
Off Site	0.66	3.11	0.78	0.24	4.87
Build Total	**3.77**	**29.66**	**2.57**	**1.92**	**23.05**

Paving	ROG	NOX	PM10	PM2.5	CO
On Site	1.82	17.04	1.01	0.94	12.66
Off Site	0.14	0.08	0.17	0.04	1.02
Pav Total	**0.14**	**0.08**	**0.17**	**0.04**	**1.02**

Architectural Coating	ROG	NOX	PM10	PM2.5	CO
On Site	168.53	2.19	0.17	0.17	1.87
Adj. Onsite*	21.288	0.228	0.018	0.018	0.195
Off Site	0.1	0.06	0.12	0.03	0.77
Arch Total	**21.39**	**0.29**	**0.14**	**0.05**	**0.96**

Site 2 Max	**21.39**	**52.35**	**21.09**	**12.62**	**24.58**

Site 3

Demolition	ROG	NOX	PM10	PM2.5	CO
On Site	4.1	42.75	3.57	2.25	23.01
Off Site	0.2	2.7	0.26	0.09	1.57
Demo Total	**4.3**	**45.45**	**3.83**	**2.34**	**24.58**

Site Preparation	ROG	NOX	PM10	PM2.5	CO
On Site	2.1	26.7	1.4	1.1	14.4
Off Site	0.1	0.03	0.1	0.02	0.4
SP Total	**2.2**	**26.73**	**1.5**	**1.12**	**14.8**

Grading	ROG	NOX	PM10	PM2.5	CO
On Site	2.3	26.2	7.5	4.5	10.8
Off Site	0.1	0.03	0.1	0.02	0.5
Grad Total	**2.4**	**26.23**	**7.6**	**4.52**	**11.3**

Building Construction	ROG	NOX	PM10	PM2.5	CO
On Site	3.3	23	1.5	1.4	16.3
Off Site	0.74	3.3	0.67	0.3	5.4
Build Total	**4.04**	**26.3**	**2.17**	**1.7**	**21.7**

Paving	ROG	NOX	PM10	PM2.5	CO
On Site	1.66	16.7	1	0.95	12.2
Off Site	0.1	0.06	0.12	0.03	0.77
Pav Total	**0.1**	**0.06**	**0.12**	**0.03**	**0.77**

Architectural Coating	ROG	NOX	PM10	PM2.5	CO
On Site	225.4	2.19	0.17	0.17	1.87
Adj. Onsite*	35.456	0.228	0.018	0.018	0.195
Off Site	0.1	0.06	0.14	0.03	0.87
Arch Total	**35.56**	**0.29**	**0.16**	**0.05**	**1.06**

Site 3 Max	**35.56**	**45.45**	**7.60**	**4.52**	**24.58**

Notes

* CalEEMod assumes that all project architectural coatings would occur in a single phase with a default duration of 10 days, based on inputed project size. However, typically, with mixed-use projects as one component is built, the exterior painting is also completed. Thus, it more likely that architectural coatings would occur during the projects' building phase, as buildings are completed. To adjust for this, it was assumed that architecural coatings would begin after 2/3 of the total building phase is complete through the duration of the building/paving phase, with some still ocurring once all construction is done (i.e., default CalEEMod Arch. Coating Phase lenght) . Thus, for Site 1, 90 day phase Site 2 95 day phase, and Site 3 89 days of architectural coatings was assumed.

	NOX lb/day		ROG lb/day	
Site	**Summer**	**Winter**	**Summer**	**Winter**
1	6.7	7.5	2.4	2
2	6.5	7.8	2.4	2.2
3	12.9	14	5.1	4.2
MAX DAILY	26.1	29.3	9.9	8.4

Welcome to the Road Construction Emissions Model, Version 8.1.0

User Instructions

This spreadsheet system contains the following individual worksheets:

1 This worksheet of User Instructions
2 Updates
3 Emission Estimates
4 Data Entry
5 Non-default Off-road Equipment
6 EMFAC2014
7 On-road Mitigation EF
8 OFFROAD Convert
9 Off-road Tier 4 EF
10 OFFROAD HP & LF
11 OFFROAD EF
12 x-ref

The Emission Estimates worksheet calculates a project's emissions in pounds per day (and tons) by project phase and tons over the entire construction period.
The worksheet can be used to estimate emissions for both vehicle exhaust and fugitive dust. The methodology used to estimate fugitive dust emissions is a simplified methodology involving estimates of the maximum area (acreage) of land disturbed daily. Detailed fugitive dust emission estimates associated with individual materials handling operations and/or activity/vehicle types cannot be conducted with this version of the model.
The Emission Estimates worksheet cannot be modified directly, it is a protected worksheet. It can only be modified indirectly by entering information for the project in selected areas of the Data Entry worksheet.

The last seven of these worksheets - EMFAC2014, On-road Mitigation EF, OFFROAD Convert, Off-road Tier 4 EF, OFFROAD HP & LP, OFFROAD EF and x-ref - cannot be modified by the user. They are protected worksheets.

Even though all or portions of several worksheets are protected, the individual formulas used in the calculations can be seen by the user.
The Data Entry worksheet includes several areas that can be modified by the user.
User instructions in the Data Entry worksheet are highlighted in red.
On the Data Entry worksheet, the user has two options for entering project data: required data and optional data. Required data is entered in the data input section (yellow cells). That required data is then used by the worksheet to calculate default values for the project.
The user can override the default values (blue cells) calculated for a project and is encouraged to do so if project specific information is available. Due to the difficulty in developing reliable default values for road construction projects, the user is encouraged to enter as much site specific information as is available for the project being analyzed.
The Data Entry Worksheet also includes a button that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data entry portion of the worksheet.
When projects are discontinuous, the user must make adjustments to the spreadsheet manually, since the program cannot be setup to anticipate unexpected project delays.

#VALUE! <- This error message may occur during use of the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bar!

Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.

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Road Construction Emissions Model, Version 8.1.0

Updates Log

Changes from previous version of Road Construction Emissions Model

(Version 7.1.5 to 8.1.0) (updated by SMAQMD 05/09/16 with assistance from Ramboll ENVIRON US Corporation)

1) Project length changed to include calendar years 2014 through 2025.
2) Added a new project type: Type 4: Other Linear Project Type. Note that there are no default vehicle or equipment activities available for the Project Type 4.
3) Emissions estimates were extended to include SOx, CH4, N2O and CO2e.
4) Updated off-road equipment emission factors and default average horsepower by equipment type to be consistent with CalEEMod (version 2013.2.2).
5) On-road vehicle emission factors have been updated to EMFAC2014.
6) Revised pollutant order for consistency throughout the calculator.
7) Added flexibility for users to specify a non-default number of working days per month.
8) Modified soil hauling import and export quantity and haul truck capacity data requests to allow users to specify soil hauling activity by phase.
9) Soil hauling emissions are now estimated separately for each construction phase.
10) Added a new feature to allow users to provide asphalt hauling quantities by phase in the "Data Entry" tab.
11) New component added where the user can specify construction start date and duration by phase.
12) The maximum daily emissions calculation was modified to sum emissions from overlapping construction phases.
13) Water truck activity can be specified and emissions estimated for the paving phase.
14) Mitigation options were added for on-road vehicles and off-road equipment. Emissions calculations include the effects of mitigations if a mitigation option is selected by the user.
15) Model allows user to estimate emissions from non-default off-road equipment for all phases and for all project types. Non-default off-road equipment specification must be included by equipment type for horsepower, number of equipment, load factor, hours of operation and emission factors in the "Non-default Off-road Equipment" tab.
16) New table of total project emissions with units of tons/phase was added in the "Emission Estimates" tab.
17) Removed table of daily emissions in metric units from the "Emission Estimates" tab.
18) Removed unnecessary data from all tabs.

(Version 7.1.4 to 7.1.5) (updated by SMAQMD 12/11/13 with assistance from ENVIRON Corporation)

1) Grubbing and Land Clearing Phase calculation of active months in 2007, 2017, 2019 fixed.
2) Soil Hauling Emissions calculation to select override if it exists for round trips/day.
3) Worker Commute Emissions calculation of starting and hot soak emissions; drainage phase PM_{10} emission rate.
4) Water Truck Emissions calculation to select number of months for Grubbing and Land Clearing Phase; maximum acreage/day after 2025.

(Version 6.3.2 to Version 7.1.0, 7.1.1, 7.1.2, 7.1.3 & 7.1.4) (updated by SMAQMD 8/2/13)

1) EMFAC2011 emission factors added (previous EMFAC versions dropped).
2) OFFROAD2011 emission factors added (and fixed error).
3) OFFROAD2007 for categories not in OFFROAD2011 (and fixed error)
4) Project length changed to include calendar years 2009 through 2025.
5) Average Offroad HP by Equipment Type calculation updated and corrected
6) Load Factor Adjustment deactivated (default load factors already incorporated in ARB's calculation of emission factors)
7) Crawler Tractor equipment added to model
8) Air Compressors ROG & Default Excavators calculation on Data Entry sheet corrected.
9) Default equipment list updated
10) Corrections to Worker Commute Emissions calculations

Road Construction Emissions Model, Version 8.1.0

Daily Emission Estimates for -> Alt E

Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	1.15	7.15	14.13	50.59	0.59	50.00	10.93	0.53	10.40	0.02	1,674.89	0.42	0.02	1,691.18
Grading/Excavation	3.55	26.05	38.58	52.00	2.00	50.00	12.20	1.80	10.40	0.04	4,513.43	1.16	0.05	4,556.91
Drainage/Utilities/Sub-Grade	6.25	45.26	64.31	53.39	3.39	50.00	13.56	3.16	10.40	0.07	7,049.28	1.61	0.07	7,109.54
Paving	2.38	18.13	23.20	1.52	1.52	0.00	1.37	1.37	0.00	0.03	2,892.24	0.73	0.03	2,920.13
Maximum (pounds/day)	6.25	45.26	64.31	53.39	3.39	50.00	13.56	3.16	10.40	0.07	7,049.28	1.61	0.07	7,109.54
Total (tons/construction project)	0.52	3.79	5.48	5.90	0.29	5.61	1.43	0.27	1.17	0.01	626.62	0.15	0.01	632.36

Notes:

Project Start Year ->	2017
Project Length (months) ->	12
Total Project Area (acres) ->	52
Maximum Area Disturbed/Day (acres) ->	5
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	160	40
Grading/Excavation	0	0	0	0	680	40
Drainage/Utilities/Sub-Grade	0	0	0	0	560	40
Paving	0	0	0	0	400	40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Alt E

Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.02	0.09	0.19	0.67	0.01	0.66	0.14	0.01	0.14	0.00	22.11	0.01	0.00	20.25
Grading/Excavation	0.21	1.55	2.29	3.09	0.12	2.97	0.72	0.11	0.62	0.00	268.10	0.07	0.00	245.56
Drainage/Utilities/Sub-Grade	0.25	1.79	2.55	2.11	0.13	1.98	0.54	0.12	0.41	0.00	279.15	0.06	0.00	255.41
Paving	0.05	0.36	0.46	0.03	0.03	0.00	0.03	0.03	0.00	0.00	57.27	0.01	0.00	52.45
Maximum (tons/phase)	0.25	1.79	2.55	3.09	0.13	2.97	0.72	0.12	0.62	0.00	279.15	0.07	0.00	255.41
Total (tons/construction project)	0.52	3.79	5.48	5.90	0.29	5.61	1.43	0.27	1.17	0.01	626.62	0.15	0.01	573.67

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Road Construction Emissions Model **Version 8.1.0**

Data Entry Worksheet

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.
Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

	Months
Grubbing/Lan	1.20
Grading/Exca	5.40
Drainage/Utili	3.60
Paving	1.80

Input Type

Project Name	Alt E	
Construction Start Year	2017	Enter a Year between 2014 and 2025 (inclusive)
Project Type	1	1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway 2) Road Widening : Project to add a new lane to an existing roadway 3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane 4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction
Project Construction Time	12.00	months
Working Days per Month	22.00	days (assume 22 if unknown)
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	2	1) Sand Gravel : Use for quaternary deposits (Delta/West County) 2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the Ione formation (Scott Road, Rancho Murieta) 3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)
Project Length	0.25	miles
Total Project Area	52.00	acres
Maximum Area Disturbed/Day	5.00	acres
Water Trucks Used?	1	1. Yes 2. No

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries

Material Hauling Quantity Input

Material Type	Phase	Haul Truck Capacity (yd^3) (assume 20 if unknown)	Import Volume (yd^3/day)	Export Volume (yd^3/day)
Soil	Grubbing/Land Clearing	20.00	0.00	0.00
	Grading/Excavation	20.00	0.00	0.00
	Drainage/Utilities/Sub-Grade	20.00	0.00	0.00
	Paving	20.00	0.00	0.00
Asphalt	Grubbing/Land Clearing	20.00	0.00	0.00
	Grading/Excavation	20.00	0.00	0.00
	Drainage/Utilities/Sub-Grade	20.00	0.00	0.00
	Paving	20.00	0.00	0.00

Mitigation Options

On-road Fleet Emissions Mitigation	No Mitigation	Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer
Off-road Equipment Emissions Mitigation	No Mitigation	Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAQMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (http://www.airquality.org/ceqa/mitigation.shtml). Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing		1.20		1/1/2017
Grading/Excavation		5.40		2/7/2017
Drainage/Utilities/Sub-Grade		3.60		7/22/2017
Paving		1.80		11/9/2017
Totals (Months)		12		

Program Calculated Activity Frac	
start date	end date
1/1/2017	2/6/2017
2/7/2017	7/21/2017
7/22/2017	11/8/2017
11/9/2017	1/2/2018

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
User Input					
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00
Miles/round trip: Paving		30.00		0	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Grading/Excavation (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Draining/Utilities/Sub-Grade (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Paving (grams/mile)	0.20	0.73	6.48	0.17	0.10	0.02	1,683.10	0.01	0.06	1,700.27
Hauling Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Asphalt Hauling emission default values can be overridden in cells D87 through D90, and F87 through F90.

Asphalt Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
User Input					
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00
Miles/round trip: Paving		30.00		0	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Grading/Excavation (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Draining/Utilities/Sub-Grade (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Paving (grams/mile)	0.20	0.73	6.48	0.17	0.10	0.02	1,683.10	0.01	0.06	1,700.27
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Worker commute default values can be overridden in cells D113 through D118.

Worker Commute Emissions	User Override of Worker Commute Default Values	Default Values		
User Input				
Miles/ one-way trip		20	Calculated	Calculated
One-way trips/day		2	Daily Trips	Daily VMT
No. of employees: Grubbing/Land Clearing		4	8	160.00
No. of employees: Grading/Excavation		17	34	680.00
No. of employees: Drainage/Utilities/Sub-Grade		14	28	560.00
No. of employees: Paving		10	20	400.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	1.51	0.17	0.05	0.02	0.00	403.73	0.01	0.01	406.12
Grading/Excavation (grams/mile)	0.04	1.51	0.17	0.05	0.02	0.00	403.73	0.01	0.01	406.12
Draining/Utilities/Sub-Grade (grams/mile)	0.04	1.51	0.17	0.05	0.02	0.00	403.73	0.01	0.01	406.12
Paving (grams/mile)	0.04	1.50	0.17	0.05	0.02	0.00	403.24	0.01	0.01	405.61
Grubbing/Land Clearing (grams/trip)	1.28	3.62	0.30	0.00	0.00	0.00	89.60	0.02	0.01	93.79
Grading/Excavation (grams/trip)	1.28	3.62	0.30	0.00	0.00	0.00	89.60	0.02	0.01	93.79
Draining/Utilities/Sub-Grade (grams/trip)	1.28	3.62	0.30	0.00	0.00	0.00	89.60	0.02	0.01	93.79
Paving (grams/trip)	1.28	3.60	0.30	0.00	0.00	0.00	89.51	0.02	0.01	93.67
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.04	0.60	0.06	0.02	0.01	0.00	143.99	0.00	0.00	144.91
Tons per const. Period - Grubbing/Land Clearing	0.00	0.01	0.00	0.00	0.00	0.00	1.90	0.00	0.00	1.91
Pounds per day - Grading/Excavation	0.15	2.54	0.28	0.07	0.03	0.01	611.97	0.02	0.01	615.87
Tons per const. Period - Grading/Excavation	0.01	0.15	0.02	0.00	0.00	0.00	36.35	0.00	0.00	36.58
Pounds per day - Drainage/Utilities/Sub-Grade	0.12	2.09	0.23	0.06	0.02	0.01	503.98	0.02	0.01	507.18
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.08	0.01	0.00	0.00	0.00	19.96	0.00	0.00	20.08
Pounds per day - Paving	0.09	1.48	0.16	0.04	0.02	0.00	359.54	0.01	0.01	361.82
Tons per const. Period - Paving	0.00	0.03	0.00	0.00	0.00	0.00	7.12	0.00	0.00	7.16
Total tons per construction project	0.02	0.27	0.03	0.01	0.00	0.00	65.33	0.00	0.00	65.74

Note: Water Truck default values can be overridden in cells D145 through D148, and F145 through F148.

Water Truck Emissions	User Override of Default # Water Trucks	Program Estimate of Number of Water Trucks	User Override of Truck Miles Traveled/Vehicle/Day	Default Values Miles Traveled/Vehicle/Day	Calculated Daily VMT
User Input					
Grubbing/Land Clearing - Exhaust		1		40.00	40.00
Grading/Excavation - Exhaust		1		40.00	40.00
Drainage/Utilities/Subgrade		1		40.00	40.00
Paving		1		40.00	40.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Grading/Excavation (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Draining/Utilities/Sub-Grade (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Paving (grams/mile)	0.20	0.73	6.48	0.17	0.10	0.02	1,683.10	0.01	0.06	1,700.27
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.02	0.07	0.58	0.01	0.01	0.00	148.51	0.00	0.01	150.03
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.01	0.00	0.00	0.00	1.96	0.00	0.00	1.98
Pounds per day - Grading/Excavation	0.02	0.07	0.58	0.01	0.01	0.00	148.51	0.00	0.01	150.03
Tons per const. Period - Grading/Excavation	0.00	0.00	0.03	0.00	0.00	0.00	8.82	0.00	0.00	8.91
Pounds per day - Drainage/Utilities/Sub-Grade	0.02	0.07	0.58	0.01	0.01	0.00	148.51	0.00	0.01	150.03
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.02	0.00	0.00	0.00	5.88	0.00	0.00	5.94
Pounds per day - Paving	0.02	0.06	0.57	0.01	0.01	0.00	148.42	0.00	0.01	149.94
Tons per const. Period - Paving	0.00	0.00	0.01	0.00	0.00	0.00	2.94	0.00	0.00	2.97
Total tons per construction project	0.00	0.01	0.08	0.00	0.00	0.00	19.60	0.00	0.00	19.80

Note: Fugitive dust default values can be overridden in cells D171 through D173.

Fugitive Dust	User Override of Max Acreage Disturbed/Day	Default Maximum Acreage/Day	PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing		5.00	50.00	0.66	10.40	0.14
Fugitive Dust - Grading/Excavation		5.00	50.00	2.97	10.40	0.62
Fugitive Dust - Drainage/Utilities/Subgrade		5.00	50.00	1.98	10.40	0.41

Off-Road Equipment Emissions

Grubbing/Land Clearing Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Crawler Tractors	0.68	2.75	9.09	0.35	0.32	0.01	788.46	0.24	0.01	796.51
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Excavators	0.36	3.44	4.04	0.20	0.18	0.01	544.60	0.17	0.00	550.17
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Signal Boards	0.06	0.30	0.36	0.01	0.01	0.00	49.31	0.01	0.00	49.56
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

			ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Grubbing/Land Clearing	pounds per day	1.10	6.49	13.49	0.56	0.52	0.01	1,382.38	0.41	0.01	1,396.24
	Grubbing/Land Clearing	tons per phase	0.01	0.09	0.18	0.01	0.01	0.00	18.25	0.01	0.00	18.43

Grading/Excavation Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00	3		Model Default Tier	Excavators	0.36	3.44	4.04	0.20	0.18	0.01	544.60	0.17	0.00	550.17
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	2		Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Rubber Tired Loaders	0.47	1.80	6.04	0.21	0.19	0.01	629.79	0.19	0.01	636.23
1.00	2		Model Default Tier	Scrapers	1.30	10.23	16.36	0.66	0.60	0.02	1,527.57	0.47	0.01	1,543.18
	1		Model Default Tier	Signal Boards	0.06	0.30	0.36	0.01	0.01	0.00	49.31	0.01	0.00	49.56
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Tractors/Loaders/Backhoes	0.64	4.84	6.15	0.46	0.43	0.01	643.09	0.20	0.01	649.65
1.00			Model Default Tier	Trenchers	0.54	2.83	4.77	0.37	0.34	0.00	358.57	0.11	0.00	362.23
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment

If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grading/Excavation	pounds per day	3.38	23.44	37.72	1.91	1.76	0.04	3,752.94	1.14	0.03	3,791.01
Grading/Excavation	tons per phase	0.20	1.39	2.24	0.11	0.10	0.00	222.92	0.07	0.00	225.19

Drainage/Utilities/Subgrade

Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Air Compressors	0.44	2.49	2.91	0.23	0.23	0.00	375.26	0.04	0.00	377.10
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Generator Sets	0.57	3.77	4.46	0.30	0.30	0.01	623.04	0.05	0.00	625.69
	1		Model Default Tier	Graders	0.96	4.87	9.70	0.54	0.50	0.01	641.27	0.20	0.01	647.79
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Plate Compactors	0.04	0.21	0.25	0.01	0.01	0.00	34.48	0.00	0.00	34.65
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Pumps	0.60	3.83	4.53	0.31	0.31	0.01	623.04	0.05	0.00	625.77
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Rough Terrain Forklifts	0.19	2.34	2.41	0.13	0.12	0.00	352.15	0.11	0.00	355.75
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Scrapers	2.61	20.45	32.73	1.31	1.21	0.03	3,055.15	0.94	0.03	3,086.35
	1		Model Default Tier	Signal Boards	0.06	0.30	0.36	0.01	0.01	0.00	49.31	0.01	0.00	49.56
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Tractors/Loaders/Backhoes	0.64	4.84	6.15	0.46	0.43	0.01	643.09	0.20	0.01	649.65
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment

If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Drainage/Utilities/Sub-Grade	pounds per day	6.10	43.10	63.51	3.32	3.12	0.06	6,396.79	1.59	0.05	6,452.32
Drainage/Utilities/Sub-Grade	tons per phase	0.24	1.71	2.51	0.13	0.12	0.00	253.31	0.06	0.00	255.51

Paving Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Pavers	0.36	2.86	4.03	0.20	0.18	0.00	465.35	0.14	0.00	470.11
	1		Model Default Tier	Paving Equipment	0.28	2.55	3.21	0.16	0.15	0.00	413.18	0.13	0.00	417.40
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Model Default Tier	Rollers	0.94	6.04	8.75	0.63	0.58	0.01	813.90	0.25	0.01	822.21
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Signal Boards	0.06	0.30	0.36	0.01	0.01	0.00	49.31	0.01	0.00	49.56
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Tractors/Loaders/Backhoes	0.64	4.83	6.11	0.46	0.42	0.01	642.54	0.20	0.01	649.09
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

			ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Paving	pounds per day	2.27	16.58	22.46	1.46	1.35	0.02	2,384.28	0.72	0.02	2,408.38
	Paving	tons per phase	0.04	0.33	0.44	0.03	0.03	0.00	47.21	0.01	0.00	47.69
Total Emissions all Phases (tons per construction period) =>			0.50	3.51	5.38	0.28	0.26	0.01	541.69	0.15	0.00	546.81

Equipment default values for horsepower and hours/day can be overridden in cells D391 through D424 and F391 through F424.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/day	Default Values Hours/day	Horsepower	Load Factor adju
Aerial Lifts		63		8	63.00	0.31
Air Compressors		78		8	78.00	0.48
Bore/Drill Rigs		206		8	206.00	0.50
Cement and Mortar Mixers		9		8	9.00	0.56
Concrete/Industrial Saws		81		8	81.00	0.73
Cranes		226		8	226.00	0.29
Crawler Tractors		208		8	208.00	0.43
Crushing/Proc. Equipment		85		8	85.00	0.78
Excavators		163		8	163.00	0.38
Forklifts		89		8	89.00	0.20
Generator Sets		84		8	84.00	0.74
Graders		175		8	175.00	0.41
Off-Highway Tractors		123		8	123.00	0.44
Off-Highway Trucks		400		8	400.00	0.38
Other Construction Equipment		172		8	172.00	0.42
Other General Industrial Equipment		88		8	88.00	0.34
Other Material Handling Equipment		167		8	167.00	0.40
Pavers		126		8	126.00	0.42
Paving Equipment		131		8	131.00	0.36
Plate Compactors		8		8	8.00	0.43
Pressure Washers		13		8	13.00	0.30
Pumps		84		8	84.00	0.74
Rollers		81		8	81.00	0.38
Rough Terrain Forklifts		100		8	100.00	0.40
Rubber Tired Dozers		255		8	255.00	0.40
Rubber Tired Loaders		200		8	200.00	0.36
Scrapers		362		8	362.00	0.48
Signal Boards		6		8	6.00	0.82
Skid Steer Loaders		65		8	65.00	0.37
Surfacing Equipment		254		8	254.00	0.30
Sweepers/Scrubbers		64		8	64.00	0.46
Tractors/Loaders/Backhoes		98		8	98.00	0.37
Trenchers		81		8	81.00	0.50
Welders		46		8	46.00	0.45

Road Construction Emissions Model, Version 8.1.0

Daily Emission Estimates for -> Alt E

Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	0.48	9.33	1.90	50.10	0.10	50.00	10.48	0.08	10.40	0.02	1,674.89	0.42	0.02	1,691.18
Grading/Excavation	1.31	25.81	3.54	50.22	0.22	50.00	10.57	0.17	10.40	0.04	4,513.43	1.16	0.05	4,556.91
Drainage/Utilities/Sub-Grade	2.02	40.17	5.26	50.30	0.30	50.00	10.64	0.24	10.40	0.07	7,049.28	1.61	0.07	7,109.54
Paving	0.83	19.36	2.60	0.15	0.15	0.00	0.11	0.11	0.00	0.03	2,892.24	0.73	0.03	2,920.13
Maximum (pounds/day)	2.02	40.17	5.26	50.30	0.30	50.00	10.64	0.24	10.40	0.07	7,049.28	1.61	0.07	7,109.54
Total (tons/construction project)	0.18	3.63	0.49	5.64	0.03	5.61	1.19	0.02	1.17	0.01	626.62	0.15	0.01	632.36

Notes:

Project Start Year ->	2017
Project Length (months) ->	12
Total Project Area (acres) ->	52
Maximum Area Disturbed/Day (acres) ->	5
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	160	40
Grading/Excavation	0	0	0	0	680	40
Drainage/Utilities/Sub-Grade	0	0	0	0	560	40
Paving	0	0	0	0	400	40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Alt E

Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.01	0.12	0.03	0.66	0.00	0.66	0.14	0.00	0.14	0.00	22.11	0.01	0.00	20.25
Grading/Excavation	0.08	1.53	0.21	2.98	0.01	2.97	0.63	0.01	0.62	0.00	268.10	0.07	0.00	245.56
Drainage/Utilities/Sub-Grade	0.08	1.59	0.21	1.99	0.01	1.98	0.42	0.01	0.41	0.00	279.15	0.06	0.00	255.41
Paving	0.02	0.38	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.27	0.01	0.00	52.45
Maximum (tons/phase)	0.08	1.59	0.21	2.98	0.01	2.97	0.63	0.01	0.62	0.00	279.15	0.07	0.00	255.41
Total (tons/construction project)	0.18	3.63	0.49	5.64	0.03	5.61	1.19	0.02	1.17	0.01	626.62	0.15	0.01	573.67

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Road Construction Emissions Model
Data Entry Worksheet

Version 8.1.0

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.
Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

	Months
Grubbing/Lan	1.20
Grading/Exca	5.40
Drainage/Utili	3.60
Paving	1.80

Input Type

Project Name	Alt E	
Construction Start Year	2017	Enter a Year between 2014 and 2025 (inclusive)
Project Type	1	1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway 2) Road Widening : Project to add a new lane to an existing roadway 3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane 4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction
Project Construction Time	12.00	months
Working Days per Month	22.00	days (assume 22 if unknown)
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	2	1) Sand Gravel : Use for quaternary deposits (Delta/West County) 2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the Ione formation (Scott Road, Rancho Murieta) 3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)
Project Length	0.25	miles
Total Project Area	52.00	acres
Maximum Area Disturbed/Day	5.00	acres
Water Trucks Used?	1	1. Yes 2. No

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries

Material Hauling Quantity Input

Material Type	Phase	Haul Truck Capacity (yd^3) (assume 20 if unknown)	Import Volume (yd^3/day)	Export Volume (yd^3/day)
Soil	Grubbing/Land Clearing	20.00	0.00	0.00
	Grading/Excavation	20.00	0.00	0.00
	Drainage/Utilities/Sub-Grade	20.00	0.00	0.00
	Paving	20.00	0.00	0.00
Asphalt	Grubbing/Land Clearing	20.00	0.00	0.00
	Grading/Excavation	20.00	0.00	0.00
	Drainage/Utilities/Sub-Grade	20.00	0.00	0.00
	Paving	20.00	0.00	0.00

Mitigation Options

On-road Fleet Emissions Mitigation	No Mitigation	Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer
Off-road Equipment Emissions Mitigation	Tier 4 Equipment	Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAQMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (http://www.airquality.org/ceqa/mitigation.shtml).
Will all off-road equipment be tier 4?	All Tier 4 Equipment	Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing		1.20		1/1/2017
Grading/Excavation		5.40		2/7/2017
Drainage/Utilities/Sub-Grade		3.60		7/22/2017
Paving		1.80		11/9/2017
Totals (Months)		12		

Program Calculated Activity Frac	
start date	end date
1/1/2017	2/6/2017
2/7/2017	7/21/2017
7/22/2017	11/8/2017
11/9/2017	1/2/2018

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
User Input					
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00
Miles/round trip: Paving		30.00		0	0.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Grading/Excavation (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Draining/Utilities/Sub-Grade (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Paving (grams/mile)	0.20	0.73	6.48	0.17	0.10	0.02	1,683.10	0.01	0.06	1,700.27
Hauling Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Asphalt Hauling emission default values can be overridden in cells D87 through D90, and F87 through F90.

Asphalt Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
User Input					
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00
Miles/round trip: Paving		30.00		0	0.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Grading/Excavation (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Draining/Utilities/Sub-Grade (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Paving (grams/mile)	0.20	0.73	6.48	0.17	0.10	0.02	1,683.10	0.01	0.06	1,700.27
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Worker commute default values can be overridden in cells D113 through D118.

Worker Commute Emissions	User Override of Worker Commute Default Values	Default Values		
User Input				
Miles/ one-way trip		20	Calculated	Calculated
One-way trips/day		2	Daily Trips	Daily VMT
No. of employees: Grubbing/Land Clearing		4	8	160.00
No. of employees: Grading/Excavation		17	34	680.00
No. of employees: Drainage/Utilities/Sub-Grade		14	28	560.00
No. of employees: Paving		10	20	400.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.04	1.51	0.17	0.05	0.02	0.00	403.73	0.01	0.01	406.12
Grading/Excavation (grams/mile)	0.04	1.51	0.17	0.05	0.02	0.00	403.73	0.01	0.01	406.12
Draining/Utilities/Sub-Grade (grams/mile)	0.04	1.51	0.17	0.05	0.02	0.00	403.73	0.01	0.01	406.12
Paving (grams/mile)	0.04	1.50	0.17	0.05	0.02	0.00	403.24	0.01	0.01	405.61
Grubbing/Land Clearing (grams/trip)	1.28	3.62	0.30	0.00	0.00	0.00	89.60	0.02	0.01	93.79
Grading/Excavation (grams/trip)	1.28	3.62	0.30	0.00	0.00	0.00	89.60	0.02	0.01	93.79
Draining/Utilities/Sub-Grade (grams/trip)	1.28	3.62	0.30	0.00	0.00	0.00	89.60	0.02	0.01	93.79
Paving (grams/trip)	1.28	3.60	0.30	0.00	0.00	0.00	89.51	0.02	0.01	93.67
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.04	0.60	0.06	0.02	0.01	0.00	143.99	0.00	0.00	144.91
Tons per const. Period - Grubbing/Land Clearing	0.00	0.01	0.00	0.00	0.00	0.00	1.90	0.00	0.00	1.91
Pounds per day - Grading/Excavation	0.15	2.54	0.28	0.07	0.03	0.01	611.97	0.02	0.01	615.87
Tons per const. Period - Grading/Excavation	0.01	0.15	0.02	0.00	0.00	0.00	36.35	0.00	0.00	36.58
Pounds per day - Drainage/Utilities/Sub-Grade	0.12	2.09	0.23	0.06	0.02	0.01	503.98	0.02	0.01	507.18
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.08	0.01	0.00	0.00	0.00	19.96	0.00	0.00	20.08
Pounds per day - Paving	0.09	1.48	0.16	0.04	0.02	0.00	359.54	0.01	0.01	361.82
Tons per const. Period - Paving	0.00	0.03	0.00	0.00	0.00	0.00	7.12	0.00	0.00	7.16
Total tons per construction project	0.02	0.27	0.03	0.01	0.00	0.00	65.33	0.00	0.00	65.74

Note: Water Truck default values can be overridden in cells D145 through D148, and F145 through F148.

Water Truck Emissions	User Override of Default # Water Trucks	Program Estimate of Number of Water Trucks	User Override of Truck Miles Traveled/Vehicle/Day	Default Values Miles Traveled/Vehicle/Day	Calculated Daily VMT
User Input					
Grubbing/Land Clearing - Exhaust		1		40.00	40.00
Grading/Excavation - Exhaust		1		40.00	40.00
Drainage/Utilities/Subgrade		1		40.00	40.00
Paving		1		40.00	40.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Grading/Excavation (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Draining/Utilities/Sub-Grade (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Paving (grams/mile)	0.20	0.73	6.48	0.17	0.10	0.02	1,683.10	0.01	0.06	1,700.27
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.02	0.07	0.58	0.01	0.01	0.00	148.51	0.00	0.01	150.03
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.01	0.00	0.00	0.00	1.96	0.00	0.00	1.98
Pounds per day - Grading/Excavation	0.02	0.07	0.58	0.01	0.01	0.00	148.51	0.00	0.01	150.03
Tons per const. Period - Grading/Excavation	0.00	0.00	0.03	0.00	0.00	0.00	8.82	0.00	0.00	8.91
Pounds per day - Drainage/Utilities/Sub-Grade	0.02	0.07	0.58	0.01	0.01	0.00	148.51	0.00	0.01	150.03
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.02	0.00	0.00	0.00	5.88	0.00	0.00	5.94
Pounds per day - Paving	0.02	0.06	0.57	0.01	0.01	0.00	148.42	0.00	0.01	149.94
Tons per const. Period - Paving	0.00	0.00	0.01	0.00	0.00	0.00	2.94	0.00	0.00	2.97
Total tons per construction project	0.00	0.01	0.08	0.00	0.00	0.00	19.60	0.00	0.00	19.80

Note: Fugitive dust default values can be overridden in cells D171 through D173.

Fugitive Dust	User Override of Max Acreage Disturbed/Day	Default Maximum Acreage/Day	PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing		5.00	50.00	0.66	10.40	0.14
Fugitive Dust - Grading/Excavation		5.00	50.00	2.97	10.40	0.62
Fugitive Dust - Drainage/Utilities/Subgrade		5.00	50.00	1.98	10.40	0.41

Off-Road Equipment Emissions

Grubbing/Land Clearing Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Tier 4	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Crawler Tractors	0.24	4.10	0.47	0.02	0.02	0.01	788.46	0.24	0.01	796.51
			Tier 4	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Excavators	0.16	4.04	0.33	0.02	0.02	0.01	544.60	0.17	0.00	550.17
			Tier 4	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Signal Boards	0.03	0.52	0.46	0.03	0.02	0.00	49.31	0.01	0.00	49.56
			Tier 4	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing	pounds per day	0.43	8.66	1.26	0.07	0.06	0.01	1,382.38	0.41	0.01	1,396.24
Grubbing/Land Clearing	tons per phase	0.01	0.11	0.02	0.00	0.00	0.00	18.25	0.01	0.00	18.43

Grading/Excavation

Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Tier 4	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		Tier 4	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Tier 4	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00	3		Tier 4	Excavators	0.16	4.04	0.33	0.02	0.02	0.01	544.60	0.17	0.00	550.17
			Tier 4	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Tier 4	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	2		Tier 4	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Rubber Tired Loaders	0.19	3.30	0.38	0.02	0.02	0.01	629.79	0.19	0.01	636.23
1.00	2		Tier 4	Scrapers	0.46	7.97	0.92	0.05	0.04	0.02	1,527.57	0.47	0.01	1,543.18
	1		Tier 4	Signal Boards	0.03	0.52	0.46	0.03	0.02	0.00	49.31	0.01	0.00	49.56
			Tier 4	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Tier 4	Tractors/Loaders/Backhoes	0.19	4.73	0.38	0.02	0.02	0.01	643.09	0.20	0.01	649.65
1.00			Tier 4	Trenchers	0.11	2.64	0.21	0.01	0.01	0.00	358.57	0.11	0.00	362.23
			Tier 4	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Grading/Excavation	pounds per day	1.14	23.21	2.69	0.14	0.13	0.04	3,752.94	1.14	0.03	3,791.01
Grading/Excavation	tons per phase	0.07	1.38	0.16	0.01	0.01	0.00	222.92	0.07	0.00	225.19

Drainage/Utilities/Subgrade

Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Tier 4	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Air Compressors	0.10	2.44	0.20	0.01	0.01	0.00	375.26	0.04	0.00	377.10
			Tier 4	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Generator Sets	0.16	4.06	0.33	0.02	0.02	0.01	623.04	0.05	0.00	625.69
	1		Tier 4	Graders	0.19	3.29	0.38	0.02	0.02	0.01	641.27	0.20	0.01	647.79
			Tier 4	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Plate Compactors	0.02	0.36	0.32	0.02	0.02	0.00	34.48	0.00	0.00	34.65
			Tier 4	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Pumps	0.16	4.06	0.33	0.02	0.02	0.01	623.04	0.05	0.00	625.77
			Tier 4	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Rough Terrain Forklifts	0.11	2.61	0.21	0.01	0.01	0.00	352.15	0.11	0.00	355.75
			Tier 4	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Tier 4	Scrapers	0.92	15.94	1.84	0.09	0.08	0.03	3,055.15	0.94	0.03	3,086.35
	1		Tier 4	Signal Boards	0.03	0.52	0.46	0.03	0.02	0.00	49.31	0.01	0.00	49.56
			Tier 4	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Tier 4	Tractors/Loaders/Backhoes	0.19	4.73	0.38	0.02	0.02	0.01	643.09	0.20	0.01	649.65
			Tier 4	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment

If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

			ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Drainage/Utilities/Sub-Grade	pounds per day	1.88	38.01	4.45	0.23	0.21	0.06	6,396.79	1.59	0.05	6,452.32
	Drainage/Utilities/Sub-Grade	tons per phase	0.07	1.51	0.18	0.01	0.01	0.00	253.31	0.06	0.00	255.51

Paving Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Tier 4	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Pavers	0.14	3.45	0.28	0.01	0.01	0.00	465.35	0.14	0.00	470.11
	1		Tier 4	Paving Equipment	0.12	3.08	0.25	0.01	0.01	0.00	413.18	0.13	0.00	417.40
			Tier 4	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Tier 4	Rollers	0.24	6.03	0.49	0.02	0.02	0.01	813.90	0.25	0.01	822.21
			Tier 4	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Signal Boards	0.03	0.52	0.46	0.03	0.02	0.00	49.31	0.01	0.00	49.56
			Tier 4	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Tier 4	Tractors/Loaders/Backhoes	0.19	4.73	0.38	0.02	0.02	0.01	642.54	0.20	0.01	649.09
			Tier 4	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

			ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Paving	pounds per day	0.73	17.81	1.86	0.10	0.09	0.02	2,384.28	0.72	0.02	2,408.38
	Paving	tons per phase	0.01	0.35	0.04	0.00	0.00	0.00	47.21	0.01	0.00	47.69
Total Emissions all Phases (tons per construction period) =>			0.16	3.35	0.39	0.02	0.02	0.01	541.69	0.15	0.00	546.81

Equipment default values for horsepower and hours/day can be overridden in cells D391 through D424 and F391 through F424.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/day	Default Values Hours/day	Horsepower	Load Factor adju
Aerial Lifts		63		8	63.00	0.31
Air Compressors		78		8	78.00	0.48
Bore/Drill Rigs		206		8	206.00	0.50
Cement and Mortar Mixers		9		8	9.00	0.56
Concrete/Industrial Saws		81		8	81.00	0.73
Cranes		226		8	226.00	0.29
Crawler Tractors		208		8	208.00	0.43
Crushing/Proc. Equipment		85		8	85.00	0.78
Excavators		163		8	163.00	0.38
Forklifts		89		8	89.00	0.20
Generator Sets		84		8	84.00	0.74
Graders		175		8	175.00	0.41
Off-Highway Tractors		123		8	123.00	0.44
Off-Highway Trucks		400		8	400.00	0.38
Other Construction Equipment		172		8	172.00	0.42
Other General Industrial Equipment		88		8	88.00	0.34
Other Material Handling Equipment		167		8	167.00	0.40
Pavers		126		8	126.00	0.42
Paving Equipment		131		8	131.00	0.36
Plate Compactors		8		8	8.00	0.43
Pressure Washers		13		8	13.00	0.30
Pumps		84		8	84.00	0.74
Rollers		81		8	81.00	0.38
Rough Terrain Forklifts		100		8	100.00	0.40
Rubber Tired Dozers		255		8	255.00	0.40
Rubber Tired Loaders		200		8	200.00	0.36
Scrapers		362		8	362.00	0.48
Signal Boards		6		8	6.00	0.82
Skid Steer Loaders		65		8	65.00	0.37
Surfacing Equipment		254		8	254.00	0.30
Sweepers/Scrubbers		64		8	64.00	0.46
Tractors/Loaders/Backhoes		98		8	98.00	0.37
Trenchers		81		8	81.00	0.50
Welders		46		8	46.00	0.45

Road Construction Emissions Model, Version 8.1.0

Daily Emission Estimates for -> Alt B, C, D

Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	1.73	12.25	19.33	50.85	0.85	50.00	11.17	0.77	10.40	0.03	2,547.42	0.61	0.03	2,571.17
Grading/Excavation	8.54	61.35	93.10	54.68	4.68	50.00	14.66	4.26	10.40	0.10	10,344.63	2.87	0.10	10,446.36
Drainage/Utilities/Sub-Grade	4.51	35.86	43.23	52.38	2.38	50.00	12.61	2.21	10.40	0.06	6,012.11	1.23	0.06	6,060.21
Paving	1.99	19.05	18.92	1.15	1.15	0.00	1.03	1.03	0.00	0.03	3,127.63	0.76	0.03	3,156.89
Maximum (pounds/day)	8.54	61.35	93.10	54.68	4.68	50.00	14.66	4.26	10.40	0.10	10,344.63	2.87	0.10	10,446.36
Total (tons/construction project)	2.25	16.81	23.62	18.05	1.22	16.83	4.61	1.11	3.50	0.03	2,844.31	0.73	0.03	2,870.83

Notes:

Project Start Year ->	2017
Project Length (months) ->	36
Total Project Area (acres) ->	52
Maximum Area Disturbed/Day (acres) ->	5
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	360	40
Grading/Excavation	0	0	0	0	960	40
Drainage/Utilities/Sub-Grade	0	0	0	0	720	40
Paving	0	0	0	0	560	40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Alt B, C, D

Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.07	0.48	0.77	2.01	0.03	1.98	0.44	0.03	0.41	0.00	100.88	0.02	0.00	92.37
Grading/Excavation	1.52	10.93	16.59	9.74	0.83	8.91	2.61	0.76	1.85	0.02	1,843.41	0.51	0.02	1,688.78
Drainage/Utilities/Sub-Grade	0.54	4.26	5.14	6.22	0.28	5.94	1.50	0.26	1.24	0.01	714.24	0.15	0.01	653.14
Paving	0.12	1.13	1.12	0.07	0.07	0.00	0.06	0.06	0.00	0.00	185.78	0.05	0.00	170.12
Maximum (tons/phase)	1.52	10.93	16.59	9.74	0.83	8.91	2.61	0.76	1.85	0.02	1843.41	0.51	0.02	1,688.78
Total (tons/construction project)	2.25	16.81	23.62	18.05	1.22	16.83	4.61	1.11	3.50	0.03	2844.31	0.73	0.03	2,604.40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Road Construction Emissions Model
Data Entry Worksheet

Version 8.1.0

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.
Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

	Months
Grubbing/Lan	3.60
Grading/Exca	16.20
Drainage/Utili	10.80
Paving	5.40

Input Type

Project Name	Alt B, C, D	
Construction Start Year	2017	Enter a Year between 2014 and 2025 (inclusive)
Project Type	2	1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway 2) Road Widening : Project to add a new lane to an existing roadway 3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane 4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction
Project Construction Time	36.00	months
Working Days per Month	22.00	days (assume 22 if unknown)
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	2	1) Sand Gravel : Use for quaternary deposits (Delta/West County) 2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the Ione formation (Scott Road, Rancho Murieta) 3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)
Project Length	2.00	miles
Total Project Area	52.00	acres
Maximum Area Disturbed/Day	5.00	acres
Water Trucks Used?	1	1. Yes 2. No

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries

Material Hauling Quantity Input

Material Type	Phase	Haul Truck Capacity (yd^3) (assume 20 if unknown)	Import Volume (yd^3/day)	Export Volume (yd^3/day)
Soil	Grubbing/Land Clearing	20.00	0.00	0.00
	Grading/Excavation	20.00	0.00	0.00
	Drainage/Utilities/Sub-Grade	20.00	0.00	0.00
	Paving	20.00	0.00	0.00
Asphalt	Grubbing/Land Clearing	20.00	0.00	0.00
	Grading/Excavation	20.00	0.00	0.00
	Drainage/Utilities/Sub-Grade	20.00	0.00	0.00
	Paving	20.00	0.00	0.00

Mitigation Options

On-road Fleet Emissions Mitigation	No Mitigation	Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer
Off-road Equipment Emissions Mitigation	No Mitigation	Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAQMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (http://www.airquality.org/ceqa/mitigation.shtml). Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing		3.60		1/1/2017
Grading/Excavation		16.20		4/21/2017
Drainage/Utilities/Sub-Grade		10.80		8/27/2018
Paving		5.40		7/22/2019
Totals (Months)	36			

Program Calculated Activity Frac	
start date	end date
1/1/2017	4/20/2017
4/21/2017	8/26/2018
8/27/2018	7/21/2019
7/22/2019	1/2/2020

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
User Input					
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00
Miles/round trip: Paving		30.00		0	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Grading/Excavation (grams/mile)	0.17	0.65	5.99	0.15	0.09	0.02	1,674.27	0.01	0.06	1,691.32
Draining/Utilities/Sub-Grade (grams/mile)	0.14	0.53	5.14	0.13	0.07	0.02	1,653.62	0.01	0.06	1,670.42
Paving (grams/mile)	0.13	0.52	4.96	0.13	0.07	0.02	1,647.08	0.01	0.06	1,663.81
Hauling Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Asphalt Hauling emission default values can be overridden in cells D87 through D90, and F87 through F90.

Asphalt Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
User Input					
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00
Miles/round trip: Paving		30.00		0	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Grading/Excavation (grams/mile)	0.17	0.65	5.99	0.15	0.09	0.02	1,674.27	0.01	0.06	1,691.32
Draining/Utilities/Sub-Grade (grams/mile)	0.14	0.53	5.14	0.13	0.07	0.02	1,653.62	0.01	0.06	1,670.42
Paving (grams/mile)	0.13	0.52	4.96	0.13	0.07	0.02	1,647.08	0.01	0.06	1,663.81
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Worker commute default values can be overridden in cells D113 through D118.

Worker Commute Emissions	User Override of Worker Commute Default Values	Default Values		
User Input				
Miles/ one-way trip		20	Calculated	Calculated
One-way trips/day		2	Daily Trips	Daily VMT
No. of employees: Grubbing/Land Clearing		9	18	360.00
No. of employees: Grading/Excavation		24	48	960.00
No. of employees: Drainage/Utilities/Sub-Grade		18	36	720.00
No. of employees: Paving		14	28	560.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.04	1.51	0.17	0.05	0.02	0.00	403.73	0.01	0.01	406.12
Grading/Excavation (grams/mile)	0.03	1.42	0.16	0.05	0.02	0.00	398.93	0.01	0.01	401.17
Draining/Utilities/Sub-Grade (grams/mile)	0.03	1.24	0.14	0.05	0.02	0.00	386.36	0.01	0.01	388.28
Paving (grams/mile)	0.02	1.19	0.13	0.05	0.02	0.00	381.57	0.01	0.01	383.39
Grubbing/Land Clearing (grams/trip)	1.28	3.62	0.30	0.00	0.00	0.00	89.60	0.02	0.01	93.79
Grading/Excavation (grams/trip)	1.23	3.42	0.28	0.00	0.00	0.00	88.74	0.02	0.01	92.68
Draining/Utilities/Sub-Grade (grams/trip)	1.11	3.00	0.24	0.00	0.00	0.00	86.68	0.02	0.01	90.06
Paving (grams/trip)	1.08	2.86	0.23	0.00	0.00	0.00	85.94	0.01	0.01	89.14
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.08	1.34	0.15	0.04	0.02	0.00	323.98	0.01	0.01	326.05
Tons per const. Period - Grubbing/Land Clearing	0.00	0.05	0.01	0.00	0.00	0.00	12.83	0.00	0.00	12.91
Pounds per day - Grading/Excavation	0.20	3.37	0.36	0.10	0.04	0.01	853.71	0.03	0.02	858.86
Tons per const. Period - Grading/Excavation	0.04	0.60	0.06	0.02	0.01	0.00	152.13	0.00	0.00	153.05
Pounds per day - Drainage/Utilities/Sub-Grade	0.13	2.21	0.23	0.07	0.03	0.01	620.15	0.02	0.01	623.47
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.02	0.26	0.03	0.01	0.00	0.00	73.67	0.00	0.00	74.07
Pounds per day - Paving	0.10	1.64	0.17	0.06	0.02	0.00	476.38	0.01	0.01	478.83
Tons per const. Period - Paving	0.01	0.10	0.01	0.00	0.00	0.00	28.30	0.00	0.00	28.44
Total tons per construction project	0.06	1.01	0.11	0.03	0.01	0.00	266.93	0.01	0.00	268.47

Note: Water Truck default values can be overridden in cells D145 through D148, and F145 through F148.

Water Truck Emissions	User Override of Default # Water Trucks	Program Estimate of Number of Water Trucks	User Override of Truck Miles Traveled/Vehicle/Day	Default Values Miles Traveled/Vehicle/Day	Calculated Daily VMT
User Input					
Grubbing/Land Clearing - Exhaust		1		40.00	40.00
Grading/Excavation - Exhaust		1		40.00	40.00
Drainage/Utilities/Subgrade		1		40.00	40.00
Paving		1		40.00	40.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Grading/Excavation (grams/mile)	0.17	0.65	5.99	0.15	0.09	0.02	1,674.27	0.01	0.06	1,691.32
Draining/Utilities/Sub-Grade (grams/mile)	0.14	0.53	5.14	0.13	0.07	0.02	1,653.62	0.01	0.06	1,670.42
Paving (grams/mile)	0.13	0.52	4.96	0.13	0.07	0.02	1,647.08	0.01	0.06	1,663.81
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.02	0.07	0.58	0.01	0.01	0.00	148.51	0.00	0.01	150.03
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.02	0.00	0.00	0.00	5.88	0.00	0.00	5.94
Pounds per day - Grading/Excavation	0.02	0.06	0.53	0.01	0.01	0.00	147.65	0.00	0.00	149.15
Tons per const. Period - Grading/Excavation	0.00	0.01	0.09	0.00	0.00	0.00	26.31	0.00	0.00	26.58
Pounds per day - Drainage/Utilities/Sub-Grade	0.01	0.05	0.45	0.01	0.01	0.00	145.82	0.00	0.00	147.31
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.01	0.05	0.00	0.00	0.00	17.32	0.00	0.00	17.50
Pounds per day - Paving	0.01	0.05	0.44	0.01	0.01	0.00	145.25	0.00	0.00	146.72
Tons per const. Period - Paving	0.00	0.00	0.03	0.00	0.00	0.00	8.63	0.00	0.00	8.72
Total tons per construction project	0.01	0.02	0.20	0.01	0.00	0.00	58.14	0.00	0.00	58.73

Note: Fugitive dust default values can be overridden in cells D171 through D173.

Fugitive Dust	User Override of Max Acreage Disturbed/Day	Default Maximum Acreage/Day	PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing		5.00	50.00	1.98	10.40	0.41
Fugitive Dust - Grading/Excavation		5.00	50.00	8.91	10.40	1.85
Fugitive Dust - Drainage/Utilities/Subgrade		5.00	50.00	5.94	10.40	1.24

Off-Road Equipment Emissions

Grubbing/Land Clearing Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Crawler Tractors	0.68	2.75	9.09	0.35	0.32	0.01	788.46	0.24	0.01	796.51
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Excavators	0.73	6.88	8.08	0.40	0.37	0.01	1,089.21	0.33	0.01	1,100.33
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4		Model Default Tier	Signal Boards	0.23	1.20	1.44	0.06	0.06	0.00	197.25	0.02	0.00	198.26
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing	pounds per day	1.64	10.84	18.61	0.80	0.74	0.02	2,074.92	0.60	0.02	2,095.10
Grubbing/Land Clearing	tons per phase	0.06	0.43	0.74	0.03	0.03	0.00	82.17	0.02	0.00	82.97

Grading/Excavation Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Crawler Tractors	0.65	2.68	8.73	0.33	0.31	0.01	782.17	0.24	0.01	790.22
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Model Default Tier	Excavators	1.00	10.24	10.89	0.53	0.49	0.02	1,621.35	0.50	0.01	1,638.03
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Graders	1.80	9.57	18.10	1.02	0.94	0.01	1,271.04	0.39	0.01	1,284.08
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Rollers	0.58	3.98	5.48	0.39	0.36	0.01	538.85	0.17	0.00	544.40
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Rubber Tired Loaders	0.45	1.76	5.65	0.19	0.18	0.01	624.84	0.19	0.01	631.28
	2		Model Default Tier	Scrapers	2.44	18.94	30.43	1.21	1.11	0.03	3,032.33	0.94	0.03	3,063.54
	4		Model Default Tier	Signal Boards	0.23	1.20	1.44	0.06	0.06	0.00	197.25	0.02	0.00	198.26
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4		Model Default Tier	Tractors/Loaders/Backhoes	1.18	9.56	11.49	0.84	0.77	0.01	1,275.44	0.39	0.01	1,288.54
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment

If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grading/Excavation	pounds per day	8.33	57.92	92.21	4.57	4.21	0.09	9,343.27	2.84	0.08	9,438.34
Grading/Excavation	tons per phase	1.48	10.32	16.43	0.81	0.75	0.02	1,664.97	0.51	0.01	1,681.91

Drainage/Utilities/Subgrade Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Air Compressors	0.37	2.46	2.53	0.18	0.18	0.00	375.26	0.03	0.00	376.94
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Generator Sets	0.47	3.73	3.91	0.24	0.24	0.01	623.04	0.04	0.00	625.47
	1		Model Default Tier	Graders	0.80	4.65	7.90	0.44	0.41	0.01	622.91	0.20	0.01	629.41
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Plate Compactors	0.04	0.21	0.25	0.01	0.01	0.00	34.48	0.00	0.00	34.65
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Pumps	0.49	3.79	3.96	0.25	0.25	0.01	623.04	0.04	0.00	625.53
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Rough Terrain Forklifts	0.15	2.30	1.91	0.09	0.08	0.00	343.10	0.11	0.00	346.70
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Scrapers	1.08	8.23	13.22	0.52	0.48	0.02	1,488.83	0.47	0.01	1,504.44
	4		Model Default Tier	Signal Boards	0.23	1.20	1.44	0.06	0.06	0.00	197.25	0.02	0.00	198.26
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Model Default Tier	Tractors/Loaders/Backhoes	0.74	7.02	7.42	0.51	0.47	0.01	938.22	0.29	0.01	948.04
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment

If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Drainage/Utilities/Sub-Grade	pounds per day	4.37	33.60	42.55	2.30	2.17	0.05	5,246.14	1.21	0.04	5,289.44
Drainage/Utilities/Sub-Grade	tons per phase	0.52	3.99	5.05	0.27	0.26	0.01	623.24	0.14	0.01	628.39

Paving	Default Number of Vehicles	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Override of Default Number of Vehicles	*Program-estimate*		Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Pavers	0.28	2.81	3.02	0.15	0.14	0.00	451.04	0.14	0.00	455.80
	1		Model Default Tier	Paving Equipment	0.21	2.50	2.24	0.11	0.10	0.00	400.14	0.13	0.00	404.37
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Rollers	0.46	3.86	4.53	0.30	0.27	0.01	525.70	0.17	0.00	531.25
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4		Model Default Tier	Signal Boards	0.23	1.20	1.44	0.06	0.06	0.00	197.25	0.02	0.00	198.26
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Model Default Tier	Tractors/Loaders/Backhoes	0.70	6.98	7.07	0.47	0.43	0.01	931.86	0.29	0.01	941.67
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment	If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab			ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Number of Vehicles	Equipment Tier	Type		pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

			ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Paving	pounds per day	1.88	17.36	18.31	1.08	1.00	0.03	2,506.00	0.75	0.02	2,531.34
	Paving	tons per phase	0.11	1.03	1.09	0.06	0.06	0.00	148.86	0.04	0.00	150.36
Total Emissions all Phases (tons per construction period) =>			2.18	15.77	23.31	1.18	1.10	0.03	2,519.24	0.72	0.02	2,543.63

Equipment default values for horsepower and hours/day can be overridden in cells D391 through D424 and F391 through F424.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/day	Default Values Hours/day	Horsepower	Load Factor adju
Aerial Lifts		63		8	63.00	0.31
Air Compressors		78		8	78.00	0.48
Bore/Drill Rigs		206		8	206.00	0.50
Cement and Mortar Mixers		9		8	9.00	0.56
Concrete/Industrial Saws		81		8	81.00	0.73
Cranes		226		8	226.00	0.29
Crawler Tractors		208		8	208.00	0.43
Crushing/Proc. Equipment		85		8	85.00	0.78
Excavators		163		8	163.00	0.38
Forklifts		89		8	89.00	0.20
Generator Sets		84		8	84.00	0.74
Graders		175		8	175.00	0.41
Off-Highway Tractors		123		8	123.00	0.44
Off-Highway Trucks		400		8	400.00	0.38
Other Construction Equipment		172		8	172.00	0.42
Other General Industrial Equipment		88		8	88.00	0.34
Other Material Handling Equipment		167		8	167.00	0.40
Pavers		126		8	126.00	0.42
Paving Equipment		131		8	131.00	0.36
Plate Compactors		8		8	8.00	0.43
Pressure Washers		13		8	13.00	0.30
Pumps		84		8	84.00	0.74
Rollers		81		8	81.00	0.38
Rough Terrain Forklifts		100		8	100.00	0.40
Rubber Tired Dozers		255		8	255.00	0.40
Rubber Tired Loaders		200		8	200.00	0.36
Scrapers		362		8	362.00	0.48
Signal Boards		6		8	6.00	0.82
Skid Steer Loaders		65		8	65.00	0.37
Surfacing Equipment		254		8	254.00	0.30
Sweepers/Scrubbers		64		8	64.00	0.46
Tractors/Loaders/Backhoes		98		8	98.00	0.37
Trenchers		81		8	81.00	0.50
Welders		46		8	46.00	0.45

Road Construction Emissions Model, Version 8.1.0

Daily Emission Estimates for -> Alt B, C, D

Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	0.77	15.68	3.70	50.21	0.21	50.00	10.57	0.17	10.40	0.03	2,547.42	0.61	0.03	2,571.17
Grading/Excavation	3.08	61.04	8.27	50.49	0.49	50.00	10.80	0.40	10.40	0.10	10,344.63	2.87	0.10	10,446.36
Drainage/Utilities/Sub-Grade	1.73	36.23	5.80	50.36	0.36	50.00	10.69	0.29	10.40	0.06	6,012.11	1.23	0.06	6,060.21
Paving	0.93	21.42	3.89	0.25	0.25	0.00	0.19	0.19	0.00	0.03	3,127.63	0.76	0.03	3,156.89
Maximum (pounds/day)	3.08	61.04	8.27	50.49	0.49	50.00	10.80	0.40	10.40	0.10	10,344.63	2.87	0.10	10,446.36
Total (tons/construction project)	0.84	17.07	2.54	16.98	0.15	16.83	3.62	0.12	3.50	0.03	2,844.31	0.73	0.03	2,870.83

Notes:

Project Start Year ->	2017
Project Length (months) ->	36
Total Project Area (acres) ->	52
Maximum Area Disturbed/Day (acres) ->	5
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	360	40
Grading/Excavation	0	0	0	0	960	40
Drainage/Utilities/Sub-Grade	0	0	0	0	720	40
Paving	0	0	0	0	560	40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Alt B, C, D

Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.03	0.62	0.15	1.99	0.01	1.98	0.42	0.01	0.41	0.00	100.88	0.02	0.00	92.37
Grading/Excavation	0.55	10.88	1.47	9.00	0.09	8.91	1.92	0.07	1.85	0.02	1,843.41	0.51	0.02	1,688.78
Drainage/Utilities/Sub-Grade	0.21	4.30	0.69	5.98	0.04	5.94	1.27	0.03	1.24	0.01	714.24	0.15	0.01	653.14
Paving	0.06	1.27	0.23	0.01	0.01	0.00	0.01	0.01	0.00	0.00	185.78	0.05	0.00	170.12
Maximum (tons/phase)	0.55	10.88	1.47	9.00	0.09	8.91	1.92	0.07	1.85	0.02	1843.41	0.51	0.02	1,688.78
Total (tons/construction project)	0.84	17.07	2.54	16.98	0.15	16.83	3.62	0.12	3.50	0.03	2844.31	0.73	0.03	2,604.40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Road Construction Emissions Model
Data Entry Worksheet

Version 8.1.0

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a
yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.
Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

	Months
Grubbing/Lan	3.60
Grading/Exca	16.20
Drainage/Utili	10.80
Paving	5.40

Input Type

Project Name	Alt B, C, D	
Construction Start Year	2017	Enter a Year between 2014 and 2025 (inclusive)
Project Type	2	1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway 2) Road Widening : Project to add a new lane to an existing roadway 3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane 4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction
Project Construction Time	36.00	months
Working Days per Month	22.00	days (assume 22 if unknown)
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	2	1) Sand Gravel : Use for quaternary deposits (Delta/West County) 2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the Ione formation (Scott Road, Rancho Murieta) 3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)
Project Length	2.00	miles
Total Project Area	52.00	acres
Maximum Area Disturbed/Day	5.00	acres
Water Trucks Used?	1	1. Yes 2. No

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries

Material Hauling Quantity Input

Material Type	Phase	Haul Truck Capacity (yd^3) (assume 20 if unknown)	Import Volume (yd^3/day)	Export Volume (yd^3/day)
Soil	Grubbing/Land Clearing	20.00	0.00	0.00
	Grading/Excavation	20.00	0.00	0.00
	Drainage/Utilities/Sub-Grade	20.00	0.00	0.00
	Paving	20.00	0.00	0.00
Asphalt	Grubbing/Land Clearing	20.00	0.00	0.00
	Grading/Excavation	20.00	0.00	0.00
	Drainage/Utilities/Sub-Grade	20.00	0.00	0.00
	Paving	20.00	0.00	0.00

Mitigation Options

On-road Fleet Emissions Mitigation	No Mitigation	Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer
Off-road Equipment Emissions Mitigation	Tier 4 Equipment	Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAQMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (http://www.airquality.org/ceqa/mitigation.shtml).
Will all off-road equipment be tier 4?	All Tier 4 Equipment	Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing		3.60		1/1/2017
Grading/Excavation		16.20		4/21/2017
Drainage/Utilities/Sub-Grade		10.80		8/27/2018
Paving		5.40		7/22/2019
Totals (Months)		36		

Program Calculated Activity Frac	
start date	end date
1/1/2017	4/20/2017
4/21/2017	8/26/2018
8/27/2018	7/21/2019
7/22/2019	1/2/2020

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
User Input					
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00
Miles/round trip: Paving		30.00		0	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Grading/Excavation (grams/mile)	0.17	0.65	5.99	0.15	0.09	0.02	1,674.27	0.01	0.06	1,691.32
Draining/Utilities/Sub-Grade (grams/mile)	0.14	0.53	5.14	0.13	0.07	0.02	1,653.62	0.01	0.06	1,670.42
Paving (grams/mile)	0.13	0.52	4.96	0.13	0.07	0.02	1,647.08	0.01	0.06	1,663.81
Hauling Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Asphalt Hauling emission default values can be overridden in cells D87 through D90, and F87 through F90.

Asphalt Hauling Emissions	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
User Input					
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00
Miles/round trip: Paving		30.00		0	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Grading/Excavation (grams/mile)	0.17	0.65	5.99	0.15	0.09	0.02	1,674.27	0.01	0.06	1,691.32
Draining/Utilities/Sub-Grade (grams/mile)	0.14	0.53	5.14	0.13	0.07	0.02	1,653.62	0.01	0.06	1,670.42
Paving (grams/mile)	0.13	0.52	4.96	0.13	0.07	0.02	1,647.08	0.01	0.06	1,663.81
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Worker commute default values can be overridden in cells D113 through D118.

Worker Commute Emissions	User Override of Worker Commute Default Values	Default Values		
User Input				
Miles/ one-way trip		20	Calculated	Calculated
One-way trips/day		2	Daily Trips	Daily VMT
No. of employees: Grubbing/Land Clearing		9	18	360.00
No. of employees: Grading/Excavation		24	48	960.00
No. of employees: Drainage/Utilities/Sub-Grade		18	36	720.00
No. of employees: Paving		14	28	560.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.04	1.51	0.17	0.05	0.02	0.00	403.73	0.01	0.01	406.12
Grading/Excavation (grams/mile)	0.03	1.42	0.16	0.05	0.02	0.00	398.93	0.01	0.01	401.17
Draining/Utilities/Sub-Grade (grams/mile)	0.03	1.24	0.14	0.05	0.02	0.00	386.36	0.01	0.01	388.28
Paving (grams/mile)	0.02	1.19	0.13	0.05	0.02	0.00	381.57	0.01	0.01	383.39
Grubbing/Land Clearing (grams/trip)	1.28	3.62	0.30	0.00	0.00	0.00	89.60	0.02	0.01	93.79
Grading/Excavation (grams/trip)	1.23	3.42	0.28	0.00	0.00	0.00	88.74	0.02	0.01	92.68
Draining/Utilities/Sub-Grade (grams/trip)	1.11	3.00	0.24	0.00	0.00	0.00	86.68	0.02	0.01	90.06
Paving (grams/trip)	1.08	2.86	0.23	0.00	0.00	0.00	85.94	0.01	0.01	89.14
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.08	1.34	0.15	0.04	0.02	0.00	323.98	0.01	0.01	326.05
Tons per const. Period - Grubbing/Land Clearing	0.00	0.05	0.01	0.00	0.00	0.00	12.83	0.00	0.00	12.91
Pounds per day - Grading/Excavation	0.20	3.37	0.36	0.10	0.04	0.01	853.71	0.03	0.02	858.86
Tons per const. Period - Grading/Excavation	0.04	0.60	0.06	0.02	0.01	0.00	152.13	0.00	0.00	153.05
Pounds per day - Drainage/Utilities/Sub-Grade	0.13	2.21	0.23	0.07	0.03	0.01	620.15	0.02	0.01	623.47
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.02	0.26	0.03	0.01	0.00	0.00	73.67	0.00	0.00	74.07
Pounds per day - Paving	0.10	1.64	0.17	0.06	0.02	0.00	476.38	0.01	0.01	478.83
Tons per const. Period - Paving	0.01	0.10	0.01	0.00	0.00	0.00	28.30	0.00	0.00	28.44
Total tons per construction project	0.06	1.01	0.11	0.03	0.01	0.00	266.93	0.01	0.00	268.47

Note: Water Truck default values can be overridden in cells D145 through D148, and F145 through F148.

Water Truck Emissions	User Override of Default # Water Trucks	Program Estimate of Number of Water Trucks	User Override of Truck Miles Traveled/Vehicle/Day	Default Values Miles Traveled/Vehicle/Day	Calculated Daily VMT
User Input					
Grubbing/Land Clearing - Exhaust		1		40.00	40.00
Grading/Excavation - Exhaust		1		40.00	40.00
Drainage/Utilities/Subgrade		1		40.00	40.00
Paving		1		40.00	40.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.20	0.74	6.54	0.17	0.10	0.02	1,684.12	0.01	0.06	1,701.31
Grading/Excavation (grams/mile)	0.17	0.65	5.99	0.15	0.09	0.02	1,674.27	0.01	0.06	1,691.32
Draining/Utilities/Sub-Grade (grams/mile)	0.14	0.53	5.14	0.13	0.07	0.02	1,653.62	0.01	0.06	1,670.42
Paving (grams/mile)	0.13	0.52	4.96	0.13	0.07	0.02	1,647.08	0.01	0.06	1,663.81
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.02	0.07	0.58	0.01	0.01	0.00	148.51	0.00	0.01	150.03
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.02	0.00	0.00	0.00	5.88	0.00	0.00	5.94
Pounds per day - Grading/Excavation	0.02	0.06	0.53	0.01	0.01	0.00	147.65	0.00	0.00	149.15
Tons per const. Period - Grading/Excavation	0.00	0.01	0.09	0.00	0.00	0.00	26.31	0.00	0.00	26.58
Pounds per day - Drainage/Utilities/Sub-Grade	0.01	0.05	0.45	0.01	0.01	0.00	145.82	0.00	0.00	147.31
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.01	0.05	0.00	0.00	0.00	17.32	0.00	0.00	17.50
Pounds per day - Paving	0.01	0.05	0.44	0.01	0.01	0.00	145.25	0.00	0.00	146.72
Tons per const. Period - Paving	0.00	0.00	0.03	0.00	0.00	0.00	8.63	0.00	0.00	8.72
Total tons per construction project	0.01	0.02	0.20	0.01	0.00	0.00	58.14	0.00	0.00	58.73

Note: Fugitive dust default values can be overridden in cells D171 through D173.

Fugitive Dust	User Override of Max Acreage Disturbed/Day	Default Maximum Acreage/Day	PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing		5.00	50.00	1.98	10.40	0.41
Fugitive Dust - Grading/Excavation		5.00	50.00	8.91	10.40	1.85
Fugitive Dust - Drainage/Utilities/Subgrade		5.00	50.00	5.94	10.40	1.24

Off-Road Equipment Emissions

Grubbing/Land Clearing Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Tier 4	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Crawler Tractors	0.24	4.10	0.47	0.02	0.02	0.01	788.46	0.24	0.01	796.51
			Tier 4	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Tier 4	Excavators	0.33	8.08	0.66	0.03	0.03	0.01	1,089.21	0.33	0.01	1,100.33
			Tier 4	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4		Tier 4	Signal Boards	0.10	2.08	1.85	0.10	0.10	0.00	197.25	0.02	0.00	198.26
			Tier 4	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing	pounds per day	0.67	14.27	2.98	0.16	0.15	0.02	2,074.92	0.60	0.02	2,095.10
Grubbing/Land Clearing	tons per phase	0.03	0.57	0.12	0.01	0.01	0.00	82.17	0.02	0.00	82.97

Grading/Excavation

Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Tier 4	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		Tier 4	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Crawler Tractors	0.24	4.10	0.47	0.02	0.02	0.01	782.17	0.24	0.01	790.22
			Tier 4	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Tier 4	Excavators	0.49	12.13	0.98	0.05	0.05	0.02	1,621.35	0.50	0.01	1,638.03
			Tier 4	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Tier 4	Graders	0.38	6.58	0.76	0.04	0.03	0.01	1,271.04	0.39	0.01	1,284.08
			Tier 4	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Tier 4	Rollers	0.16	4.02	0.33	0.02	0.01	0.01	538.85	0.17	0.00	544.40
			Tier 4	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Rubber Tired Loaders	0.19	3.30	0.38	0.02	0.02	0.01	624.84	0.19	0.01	631.28
	2		Tier 4	Scrapers	0.92	15.94	1.84	0.09	0.08	0.03	3,032.33	0.94	0.03	3,063.54
	4		Tier 4	Signal Boards	0.10	2.08	1.85	0.10	0.10	0.00	197.25	0.02	0.00	198.26
			Tier 4	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4		Tier 4	Tractors/Loaders/Backhoes	0.38	9.46	0.77	0.04	0.04	0.01	1,275.44	0.39	0.01	1,288.54
			Tier 4	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment

If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

			ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Grading/Excavation	pounds per day	2.86	57.61	7.38	0.38	0.35	0.09	9,343.27	2.84	0.08	9,438.34
	Grading/Excavation	tons per phase	0.51	10.27	1.31	0.07	0.06	0.02	1,664.97	0.51	0.01	1,681.91

Drainage/Utilities/Subgrade Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Tier 4	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Air Compressors	0.10	2.44	0.20	0.01	0.01	0.00	375.26	0.03	0.00	376.94
			Tier 4	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Generator Sets	0.16	4.06	0.33	0.02	0.02	0.01	623.04	0.04	0.00	625.47
	1		Tier 4	Graders	0.19	3.29	0.38	0.02	0.02	0.01	622.91	0.20	0.01	629.41
			Tier 4	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Plate Compactors	0.02	0.36	0.32	0.02	0.02	0.00	34.48	0.00	0.00	34.65
			Tier 4	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Pumps	0.16	4.06	0.33	0.02	0.02	0.01	623.04	0.04	0.00	625.53
			Tier 4	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Rough Terrain Forklifts	0.11	2.61	0.21	0.01	0.01	0.00	343.10	0.11	0.00	346.70
			Tier 4	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Scrapers	0.46	7.97	0.92	0.05	0.04	0.02	1,488.83	0.47	0.01	1,504.44
	4		Tier 4	Signal Boards	0.10	2.08	1.85	0.10	0.10	0.00	197.25	0.02	0.00	198.26
			Tier 4	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Tier 4	Tractors/Loaders/Backhoes	0.29	7.10	0.58	0.03	0.03	0.01	938.22	0.29	0.01	948.04
			Tier 4	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Drainage/Utilities/Sub-Grade	pounds per day	1.59	33.97	5.11	0.27	0.25	0.05	5,246.14	1.21	0.04	5,289.44
Drainage/Utilities/Sub-Grade	tons per phase	0.19	4.04	0.61	0.03	0.03	0.01	623.24	0.14	0.01	628.39

Paving Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Tier 4	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Pavers	0.14	3.45	0.28	0.01	0.01	0.00	451.04	0.14	0.00	455.80
	1		Tier 4	Paving Equipment	0.12	3.08	0.25	0.01	0.01	0.00	400.14	0.13	0.00	404.37
			Tier 4	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Tier 4	Rollers	0.16	4.02	0.33	0.02	0.01	0.01	525.70	0.17	0.00	531.25
			Tier 4	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4		Tier 4	Signal Boards	0.10	2.08	1.85	0.10	0.10	0.00	197.25	0.02	0.00	198.26
			Tier 4	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Tier 4	Tractors/Loaders/Backhoes	0.29	7.10	0.58	0.03	0.03	0.01	931.86	0.29	0.01	941.67
			Tier 4	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment

If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

			ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Paving	pounds per day	0.82	19.73	3.28	0.18	0.16	0.03	2,506.00	0.75	0.02	2,531.34
	Paving	tons per phase	0.05	1.17	0.19	0.01	0.01	0.00	148.86	0.04	0.00	150.36
Total Emissions all Phases (tons per construction period) =>			0.77	16.04	2.23	0.12	0.11	0.03	2,519.24	0.72	0.02	2,543.63

Equipment default values for horsepower and hours/day can be overridden in cells D391 through D424 and F391 through F424.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/day	Default Values Hours/day	Horsepower	Load Factor adju
Aerial Lifts		63		8	63.00	0.31
Air Compressors		78		8	78.00	0.48
Bore/Drill Rigs		206		8	206.00	0.50
Cement and Mortar Mixers		9		8	9.00	0.56
Concrete/Industrial Saws		81		8	81.00	0.73
Cranes		226		8	226.00	0.29
Crawler Tractors		208		8	208.00	0.43
Crushing/Proc. Equipment		85		8	85.00	0.78
Excavators		163		8	163.00	0.38
Forklifts		89		8	89.00	0.20
Generator Sets		84		8	84.00	0.74
Graders		175		8	175.00	0.41
Off-Highway Tractors		123		8	123.00	0.44
Off-Highway Trucks		400		8	400.00	0.38
Other Construction Equipment		172		8	172.00	0.42
Other General Industrial Equipment		88		8	88.00	0.34
Other Material Handling Equipment		167		8	167.00	0.40
Pavers		126		8	126.00	0.42
Paving Equipment		131		8	131.00	0.36
Plate Compactors		8		8	8.00	0.43
Pressure Washers		13		8	13.00	0.30
Pumps		84		8	84.00	0.74
Rollers		81		8	81.00	0.38
Rough Terrain Forklifts		100		8	100.00	0.40
Rubber Tired Dozers		255		8	255.00	0.40
Rubber Tired Loaders		200		8	200.00	0.36
Scrapers		362		8	362.00	0.48
Signal Boards		6		8	6.00	0.82
Skid Steer Loaders		65		8	65.00	0.37
Surfacing Equipment		254		8	254.00	0.30
Sweepers/Scrubbers		64		8	64.00	0.46
Tractors/Loaders/Backhoes		98		8	98.00	0.37
Trenchers		81		8	81.00	0.50
Welders		46		8	46.00	0.45

US 50 Site 1 Mixed Use

El Dorado-Lake Tahoe County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	28.25	1000sqft	0.65	28,250.00	0
Enclosed Parking Structure	145.00	1000sqft	3.33	58,000.00	0
Parking Lot	73.00	Space	0.66	29,200.00	0
Apartments Mid Rise	72.00	Dwelling Unit	1.89	56,500.00	206

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

US 50 Site 1 Mixed Use - El Dorado-Lake Tahoe County, Annual

Project Characteristics -

Land Use - based on conceptual site plans in EIS

Construction Phase - conservatively assumed construction occurs in 1 year

Trips and VMT - ...

Demolition - based on estimation of buildings to be demolited and calculated by use of aerial imagery.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - assume all fireplaces gas and catalytic wood burning stoves

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	9.00
tblConstructionPhase	NumDays	230.00	212.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	4.00
tblConstructionPhase	PhaseEndDate	2/22/2018	12/31/2017
tblConstructionPhase	PhaseEndDate	1/3/2018	12/4/2017
tblConstructionPhase	PhaseEndDate	2/15/2017	2/9/2017
tblConstructionPhase	PhaseEndDate	1/29/2018	12/18/2017
tblConstructionPhase	PhaseEndDate	2/3/2017	2/2/2017
tblConstructionPhase	PhaseStartDate	1/30/2018	12/19/2017
tblConstructionPhase	PhaseStartDate	2/16/2017	2/10/2017
tblConstructionPhase	PhaseStartDate	2/4/2017	2/3/2017
tblConstructionPhase	PhaseStartDate	1/4/2018	12/5/2017
tblFireplaces	NumberGas	39.60	72.00
tblFireplaces	NumberNoFireplace	7.20	0.00

tblFireplaces	NumberWood	25.20	0.00
tblGrading	AcresOfGrading	2.50	10.00
tblLandUse	BuildingSpaceSquareFeet	145,000.00	58,000.00
tblLandUse	BuildingSpaceSquareFeet	72,000.00	56,500.00
tblLandUse	LandUseSquareFeet	145,000.00	58,000.00
tblLandUse	LandUseSquareFeet	72,000.00	56,500.00
tblTripsAndVMT	WorkerTripNumber	15.00	13.00
tblTripsAndVMT	WorkerTripNumber	18.00	8.00
tblTripsAndVMT	WorkerTripNumber	15.00	10.00
tblWoodstoves	NumberCatalytic	3.60	0.00
tblWoodstoves	NumberNoncatalytic	3.60	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	1.7348	4.0763	3.0256	5.2700e-003	0.1717	0.2346	0.4063	0.0585	0.2200	0.2785	0.0000	477.7659	477.7659	0.0862	0.0000	479.9215
Maximum	**1.7348**	**4.0763**	**3.0256**	**5.2700e-003**	**0.1717**	**0.2346**	**0.4063**	**0.0585**	**0.2200**	**0.2785**	**0.0000**	**477.7659**	**477.7659**	**0.0862**	**0.0000**	**479.9215**

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	1.7348	4.0763	3.0256	5.2700e-003	0.1717	0.2346	0.4063	0.0585	0.2200	0.2785	0.0000	477.7655	477.7655	0.0862	0.0000	479.9211
Maximum	**1.7348**	**4.0763**	**3.0256**	**5.2700e-003**	**0.1717**	**0.2346**	**0.4063**	**0.0585**	**0.2200**	**0.2785**	**0.0000**	**477.7655**	**477.7655**	**0.0862**	**0.0000**	**479.9211**

	ROG	**NOx**	**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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-2-2017**	**4-1-2017**	1.3187	1.3187
2	**4-2-2017**	**7-1-2017**	1.1433	1.1433
3	**7-2-2017**	**9-30-2017**	1.1433	1.1433
		Highest	1.3187	1.3187

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	1.1355	0.1639	8.2134	0.0221		1.0721	1.0721		1.0721	1.0721	145.5380	57.5885	203.1265	0.7908	1.0400e-003	223.2060
Energy	4.8900e-003	0.0435	0.0298	2.7000e-004		3.3800e-003	3.3800e-003		3.3800e-003	3.3800e-003	0.0000	364.3070	364.3070	0.0152	3.8400e-003	365.8325
Mobile	0.3281	1.1984	3.9468	9.0000e-003	0.7057	0.0137	0.7194	0.1894	0.0129	0.2023	0.0000	817.1569	817.1569	0.0348	0.0000	818.0266
Waste						0.0000	0.0000		0.0000	0.0000	12.0556	0.0000	12.0556	0.7125	0.0000	29.8673
Water						0.0000	0.0000		0.0000	0.0000	3.0812	21.4326	24.5137	0.3174	7.6700e-003	34.7362
Total	**1.4684**	**1.4057**	**12.1900**	**0.0314**	**0.7057**	**1.0891**	**1.7948**	**0.1894**	**1.0884**	**1.2778**	**160.6749**	**1,260.4848**	**1,421.1597**	**1.8707**	**0.0126**	**1,471.6687**

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	1.1355	0.1639	8.2134	0.0221		1.0721	1.0721		1.0721	1.0721	145.5380	57.5885	203.1265	0.7908	1.0400e-003	223.2060
Energy	4.8900e-003	0.0435	0.0298	2.7000e-004		3.3800e-003	3.3800e-003		3.3800e-003	3.3800e-003	0.0000	364.3070	364.3070	0.0152	3.8400e-003	365.8325
Mobile	0.3281	1.1984	3.9468	9.0000e-003	0.7057	0.0137	0.7194	0.1894	0.0129	0.2023	0.0000	817.1569	817.1569	0.0348	0.0000	818.0266
Waste						0.0000	0.0000		0.0000	0.0000	12.0556	0.0000	12.0556	0.7125	0.0000	29.8673
Water						0.0000	0.0000		0.0000	0.0000	3.0812	21.4326	24.5137	0.3174	7.6700e-003	34.7362
Total	**1.4684**	**1.4057**	**12.1900**	**0.0314**	**0.7057**	**1.0891**	**1.7948**	**0.1894**	**1.0884**	**1.2778**	**160.6749**	**1,260.4848**	**1,421.1597**	**1.8707**	**0.0126**	**1,471.6687**

	ROG	NOx	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	1/2/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/2/2017	5	4	
3	Grading	Grading	2/3/2017	2/9/2017	5	5	
4	Building Construction	Building Construction	2/10/2017	12/4/2017	5	212	
5	Paving	Paving	12/5/2017	12/18/2017	5	10	
6	Architectural Coating	Architectural Coating	12/19/2017	12/31/2017	5	9	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 3.99

Residential Indoor: 114,413; Residential Outdoor: 38,138; Non-Residential Indoor: 42,375; Non-Residential Outdoor: 14,125; Striped Parking Area: 5,232 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

US 50 Site 1 Mixed Use - El Dorado-Lake Tahoe County, Annual

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	158	0.38
demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	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
demolition	6	13.00	0.00	103.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	98.00	27.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 demolition - 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					
Fugitive Dust					0.0113	0.0000	0.0113	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0410	0.4275	0.2301	3.9000e-004		0.0219	0.0219		0.0204	0.0204	0.0000	35.6005	35.6005	9.7300e-003	0.0000	35.8438
Total	**0.0410**	**0.4275**	**0.2301**	**3.9000e-004**	**0.0113**	**0.0219**	**0.0333**	**1.7200e-003**	**0.0204**	**0.0222**	**0.0000**	**35.6005**	**35.6005**	**9.7300e-003**	**0.0000**	**35.8438**

3.2 demolition - 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	7.8000e-004	0.0225	6.7500e-003	4.0000e-005	8.5000e-004	2.2000e-004	1.0800e-003	2.3000e-004	2.1000e-004	4.5000e-004	0.0000	4.1046	4.1046	8.0000e-005	0.0000	4.1066
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5000e-004	5.9000e-004	6.2200e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	1.0120	1.0120	4.0000e-005	0.0000	1.0131
Total	**1.6300e-003**	**0.0231**	**0.0130**	**5.0000e-005**	**1.8700e-003**	**2.3000e-004**	**2.1100e-003**	**5.0000e-004**	**2.2000e-004**	**7.3000e-004**	**0.0000**	**5.1165**	**5.1165**	**1.2000e-004**	**0.0000**	**5.1196**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0113	0.0000	0.0113	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0410	0.4275	0.2301	3.9000e-004		0.0219	0.0219		0.0204	0.0204	0.0000	35.6005	35.6005	9.7300e-003	0.0000	35.8438
Total	**0.0410**	**0.4275**	**0.2301**	**3.9000e-004**	**0.0113**	**0.0219**	**0.0333**	**1.7200e-003**	**0.0204**	**0.0222**	**0.0000**	**35.6005**	**35.6005**	**9.7300e-003**	**0.0000**	**35.8438**

3.2 demolition - 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	7.8000e-004	0.0225	6.7500e-003	4.0000e-005	8.5000e-004	2.2000e-004	1.0800e-003	2.3000e-004	2.1000e-004	4.5000e-004	0.0000	4.1046	4.1046	8.0000e-005	0.0000	4.1066
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5000e-004	5.9000e-004	6.2200e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	1.0120	1.0120	4.0000e-005	0.0000	1.0131
Total	**1.6300e-003**	**0.0231**	**0.0130**	**5.0000e-005**	**1.8700e-003**	**2.3000e-004**	**2.1100e-003**	**5.0000e-004**	**2.2000e-004**	**7.3000e-004**	**0.0000**	**5.1165**	**5.1165**	**1.2000e-004**	**0.0000**	**5.1196**

3.3 Site Preparation - 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					
Fugitive Dust					0.0361	0.0000	0.0361	0.0199	0.0000	0.0199	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.9200e-003	0.1046	0.0469	8.0000e-005		5.7600e-003	5.7600e-003		5.3000e-003	5.3000e-003	0.0000	7.0669	7.0669	2.1700e-003	0.0000	7.1210
Total	**9.9200e-003**	**0.1046**	**0.0469**	**8.0000e-005**	**0.0361**	**5.7600e-003**	**0.0419**	**0.0199**	**5.3000e-003**	**0.0252**	**0.0000**	**7.0669**	**7.0669**	**2.1700e-003**	**0.0000**	**7.1210**

3.3 Site Preparation - 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	1.0000e-004	7.0000e-005	7.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1246	0.1246	1.0000e-005	0.0000	0.1247
Total	**1.0000e-004**	**7.0000e-005**	**7.7000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1246**	**0.1246**	**1.0000e-005**	**0.0000**	**0.1247**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0361	0.0000	0.0361	0.0199	0.0000	0.0199	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.9200e-003	0.1046	0.0469	8.0000e-005		5.7600e-003	5.7600e-003		5.3000e-003	5.3000e-003	0.0000	7.0669	7.0669	2.1700e-003	0.0000	7.1210
Total	**9.9200e-003**	**0.1046**	**0.0469**	**8.0000e-005**	**0.0361**	**5.7600e-003**	**0.0419**	**0.0199**	**5.3000e-003**	**0.0252**	**0.0000**	**7.0669**	**7.0669**	**2.1700e-003**	**0.0000**	**7.1210**

3.3 Site Preparation - 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	1.0000e-004	7.0000e-005	7.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1246	0.1246	1.0000e-005	0.0000	0.1247
Total	**1.0000e-004**	**7.0000e-005**	**7.7000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1246**	**0.1246**	**1.0000e-005**	**0.0000**	**0.1247**

3.4 Grading - 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					
Fugitive Dust					0.0204	0.0000	0.0204	8.8500e-003	0.0000	8.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6800e-003	0.0847	0.0428	7.0000e-005		4.4400e-003	4.4400e-003		4.0900e-003	4.0900e-003	0.0000	6.8899	6.8899	2.1100e-003	0.0000	6.9426
Total	**7.6800e-003**	**0.0847**	**0.0428**	**7.0000e-005**	**0.0204**	**4.4400e-003**	**0.0248**	**8.8500e-003**	**4.0900e-003**	**0.0129**	**0.0000**	**6.8899**	**6.8899**	**2.1100e-003**	**0.0000**	**6.9426**

3.4 Grading - 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	1.6000e-004	1.1000e-004	1.2000e-003	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1946	0.1946	1.0000e-005	0.0000	0.1948
Total	**1.6000e-004**	**1.1000e-004**	**1.2000e-003**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1946**	**0.1946**	**1.0000e-005**	**0.0000**	**0.1948**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0204	0.0000	0.0204	8.8500e-003	0.0000	8.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6800e-003	0.0847	0.0428	7.0000e-005		4.4400e-003	4.4400e-003		4.0900e-003	4.0900e-003	0.0000	6.8899	6.8899	2.1100e-003	0.0000	6.9426
Total	**7.6800e-003**	**0.0847**	**0.0428**	**7.0000e-005**	**0.0204**	**4.4400e-003**	**0.0248**	**8.8500e-003**	**4.0900e-003**	**0.0129**	**0.0000**	**6.8899**	**6.8899**	**2.1100e-003**	**0.0000**	**6.9426**

3.4 Grading - 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	1.6000e-004	1.1000e-004	1.2000e-003	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1946	0.1946	1.0000e-005	0.0000	0.1948
Total	**1.6000e-004**	**1.1000e-004**	**1.2000e-003**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1946**	**0.1946**	**1.0000e-005**	**0.0000**	**0.1948**

3.5 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	0.3302	2.8148	1.9273	2.8500e-003		0.1895	0.1895		0.1780	0.1780	0.0000	254.9224	254.9224	0.0628	0.0000	256.4925
Total	**0.3302**	**2.8148**	**1.9273**	**2.8500e-003**		**0.1895**	**0.1895**		**0.1780**	**0.1780**	**0.0000**	**254.9224**	**254.9224**	**0.0628**	**0.0000**	**256.4925**

3.5 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	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	0.0216	0.4606	0.1752	7.8000e-004	0.0186	5.4200e-003	0.0240	5.3700e-003	5.1900e-003	0.0106	0.0000	73.9831	73.9831	2.3400e-003	0.0000	74.0417
Worker	0.0679	0.0468	0.4968	9.0000e-004	0.0818	7.3000e-004	0.0825	0.0218	6.8000e-004	0.0224	0.0000	80.8625	80.8625	3.5100e-003	0.0000	80.9503
Total	**0.0895**	**0.5073**	**0.6721**	**1.6800e-003**	**0.1004**	**6.1500e-003**	**0.1065**	**0.0271**	**5.8700e-003**	**0.0330**	**0.0000**	**154.8456**	**154.8456**	**5.8500e-003**	**0.0000**	**154.9919**

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	0.3302	2.8148	1.9273	2.8500e-003		0.1895	0.1895		0.1780	0.1780	0.0000	254.9221	254.9221	0.0628	0.0000	256.4922
Total	**0.3302**	**2.8148**	**1.9273**	**2.8500e-003**		**0.1895**	**0.1895**		**0.1780**	**0.1780**	**0.0000**	**254.9221**	**254.9221**	**0.0628**	**0.0000**	**256.4922**

3.5 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	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	0.0216	0.4606	0.1752	7.8000e-004	0.0186	5.4200e-003	0.0240	5.3700e-003	5.1900e-003	0.0106	0.0000	73.9831	73.9831	2.3400e-003	0.0000	74.0417
Worker	0.0679	0.0468	0.4968	9.0000e-004	0.0818	7.3000e-004	0.0825	0.0218	6.8000e-004	0.0224	0.0000	80.8625	80.8625	3.5100e-003	0.0000	80.9503
Total	**0.0895**	**0.5073**	**0.6721**	**1.6800e-003**	**0.1004**	**6.1500e-003**	**0.1065**	**0.0271**	**5.8700e-003**	**0.0330**	**0.0000**	**154.8456**	**154.8456**	**5.8500e-003**	**0.0000**	**154.9919**

3.6 Paving - 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	9.7200e-003	0.1036	0.0752	1.1000e-004		5.8000e-003	5.8000e-003		5.3300e-003	5.3300e-003	0.0000	10.5716	10.5716	3.2400e-003	0.0000	10.6526
Paving	8.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0106**	**0.1036**	**0.0752**	**1.1000e-004**		**5.8000e-003**	**5.8000e-003**		**5.3300e-003**	**5.3300e-003**	**0.0000**	**10.5716**	**10.5716**	**3.2400e-003**	**0.0000**	**10.6526**

3.6 Paving - 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	4.9000e-004	3.4000e-004	3.5900e-003	1.0000e-005	5.9000e-004	1.0000e-005	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5838	0.5838	3.0000e-005	0.0000	0.5845
Total	**4.9000e-004**	**3.4000e-004**	**3.5900e-003**	**1.0000e-005**	**5.9000e-004**	**1.0000e-005**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5838**	**0.5838**	**3.0000e-005**	**0.0000**	**0.5845**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.7200e-003	0.1036	0.0752	1.1000e-004		5.8000e-003	5.8000e-003		5.3300e-003	5.3300e-003	0.0000	10.5716	10.5716	3.2400e-003	0.0000	10.6526
Paving	8.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0106**	**0.1036**	**0.0752**	**1.1000e-004**		**5.8000e-003**	**5.8000e-003**		**5.3300e-003**	**5.3300e-003**	**0.0000**	**10.5716**	**10.5716**	**3.2400e-003**	**0.0000**	**10.6526**

3.6 Paving - 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	4.9000e-004	3.4000e-004	3.5900e-003	1.0000e-005	5.9000e-004	1.0000e-005	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5838	0.5838	3.0000e-005	0.0000	0.5845
Total	**4.9000e-004**	**3.4000e-004**	**3.5900e-003**	**1.0000e-005**	**5.9000e-004**	**1.0000e-005**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5838**	**0.5838**	**3.0000e-005**	**0.0000**	**0.5845**

3.7 Architectural Coating - 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	1.2415					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-003	9.8300e-003	8.4100e-003	1.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	1.1490	1.1490	1.2000e-004	0.0000	1.1520
Total	**1.2430**	**9.8300e-003**	**8.4100e-003**	**1.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.8000e-004**	**7.8000e-004**	**0.0000**	**1.1490**	**1.1490**	**1.2000e-004**	**0.0000**	**1.1520**

3.7 Architectural Coating - 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	5.9000e-004	4.1000e-004	4.3000e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.1000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.7006	0.7006	3.0000e-005	0.0000	0.7013
Total	**5.9000e-004**	**4.1000e-004**	**4.3000e-003**	**1.0000e-005**	**7.1000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**0.7006**	**0.7006**	**3.0000e-005**	**0.0000**	**0.7013**

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	1.2415					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-003	9.8300e-003	8.4100e-003	1.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	1.1490	1.1490	1.2000e-004	0.0000	1.1520
Total	**1.2430**	**9.8300e-003**	**8.4100e-003**	**1.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.8000e-004**	**7.8000e-004**	**0.0000**	**1.1490**	**1.1490**	**1.2000e-004**	**0.0000**	**1.1520**

3.7 Architectural Coating - 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	5.9000e-004	4.1000e-004	4.3000e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.1000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.7006	0.7006	3.0000e-005	0.0000	0.7013
Total	**5.9000e-004**	**4.1000e-004**	**4.3000e-003**	**1.0000e-005**	**7.1000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**0.7006**	**0.7006**	**3.0000e-005**	**0.0000**	**0.7013**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3281	1.1984	3.9468	9.0000e-003	0.7057	0.0137	0.7194	0.1894	0.0129	0.2023	0.0000	817.1569	817.1569	0.0348	0.0000	818.0266
Unmitigated	0.3281	1.1984	3.9468	9.0000e-003	0.7057	0.0137	0.7194	0.1894	0.0129	0.2023	0.0000	817.1569	817.1569	0.0348	0.0000	818.0266

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	478.80	460.08	421.92	1,340,606	1,340,606
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	311.60	69.50	29.66	565,738	565,738
Parking Lot	0.00	0.00	0.00		
Total	790.40	529.58	451.58	1,906,344	1,906,344

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
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Enclosed Parking Structure	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Parking Lot	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Apartments Mid Rise	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188

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	315.8739	315.8739	0.0143	2.9600e-003	317.1116
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	315.8739	315.8739	0.0143	2.9600e-003	317.1116
NaturalGas Mitigated	4.8900e-003	0.0435	0.0298	2.7000e-004		3.3800e-003	3.3800e-003		3.3800e-003	3.3800e-003	0.0000	48.4330	48.4330	9.3000e-004	8.9000e-004	48.7209
NaturalGas Unmitigated	4.8900e-003	0.0435	0.0298	2.7000e-004		3.3800e-003	3.3800e-003		3.3800e-003	3.3800e-003	0.0000	48.4330	48.4330	9.3000e-004	8.9000e-004	48.7209

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					
Apartments Mid Rise	353053	1.9000e-003	0.0163	6.9200e-003	1.0000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003	0.0000	18.8403	18.8403	3.6000e-004	3.5000e-004	18.9522
Enclosed Parking Structure	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
General Office Building	554548	2.9900e-003	0.0272	0.0228	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003	0.0000	29.5928	29.5928	5.7000e-004	5.4000e-004	29.7686
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
Total		**4.8900e-003**	**0.0435**	**0.0298**	**2.6000e-004**		**3.3900e-003**	**3.3900e-003**		**3.3900e-003**	**3.3900e-003**	**0.0000**	**48.4331**	**48.4331**	**9.3000e-004**	**8.9000e-004**	**48.7209**

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					
Apartments Mid Rise	353053	1.9000e-003	0.0163	6.9200e-003	1.0000e-004		1.3200e-003	1.3200e-003		1.3200e-003	1.3200e-003	0.0000	18.8403	18.8403	3.6000e-004	3.5000e-004	18.9522
Enclosed Parking Structure	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
General Office Building	554548	2.9900e-003	0.0272	0.0228	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003	0.0000	29.5928	29.5928	5.7000e-004	5.4000e-004	29.7686
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
Total		**4.8900e-003**	**0.0435**	**0.0298**	**2.6000e-004**		**3.3900e-003**	**3.3900e-003**		**3.3900e-003**	**3.3900e-003**	**0.0000**	**48.4331**	**48.4331**	**9.3000e-004**	**8.9000e-004**	**48.7209**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	359857	104.6865	4.7300e-003	9.8000e-004	105.0966
Enclosed Parking Structure	379900	110.5173	5.0000e-003	1.0300e-003	110.9503
General Office Building	320355	93.1949	4.2100e-003	8.7000e-004	93.5601
Parking Lot	25696	7.4753	3.4000e-004	7.0000e-005	7.5046
Total		**315.8739**	**0.0143**	**2.9500e-003**	**317.1116**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	359857	104.6865	4.7300e-003	9.8000e-004	105.0966
Enclosed Parking Structure	379900	110.5173	5.0000e-003	1.0300e-003	110.9503
General Office Building	320355	93.1949	4.2100e-003	8.7000e-004	93.5601
Parking Lot	25696	7.4753	3.4000e-004	7.0000e-005	7.5046
Total		**315.8739**	**0.0143**	**2.9500e-003**	**317.1116**

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	1.1355	0.1639	8.2134	0.0221		1.0721	1.0721		1.0721	1.0721	145.5380	57.5885	203.1265	0.7908	1.0400e-003	223.2060
Unmitigated	1.1355	0.1639	8.2134	0.0221		1.0721	1.0721		1.0721	1.0721	145.5380	57.5885	203.1265	0.7908	1.0400e-003	223.2060

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1242					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3366					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6579	0.1577	7.6727	0.0221		1.0691	1.0691		1.0691	1.0691	145.5380	56.7108	202.2488	0.7899	1.0400e-003	222.3064
Landscaping	0.0168	6.2700e-003	0.5407	3.0000e-005		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	0.8777	0.8777	8.8000e-004	0.0000	0.8996
Total	**1.1355**	**0.1639**	**8.2134**	**0.0221**		**1.0721**	**1.0721**		**1.0721**	**1.0721**	**145.5380**	**57.5885**	**203.1265**	**0.7908**	**1.0400e-003**	**223.2060**

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	0.1242					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3366					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6579	0.1577	7.6727	0.0221		1.0691	1.0691		1.0691	1.0691	145.5380	56.7108	202.2488	0.7899	1.0400e-003	222.3064
Landscaping	0.0168	6.2700e-003	0.5407	3.0000e-005		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	0.8777	0.8777	8.8000e-004	0.0000	0.8996
Total	**1.1355**	**0.1639**	**8.2134**	**0.0221**		**1.0721**	**1.0721**		**1.0721**	**1.0721**	**145.5380**	**57.5885**	**203.1265**	**0.7908**	**1.0400e-003**	**223.2060**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	24.5137	0.3174	7.6700e-003	34.7362
Unmitigated	24.5137	0.3174	7.6700e-003	34.7362

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.69109 / 2.95743	11.8838	0.1533	3.7100e-003	16.8216
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	5.02098 / 3.07737	12.6299	0.1641	3.9700e-003	17.9146
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**24.5138**	**0.3174**	**7.6800e-003**	**34.7362**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.69109 / 2.95743	11.8838	0.1533	3.7100e-003	16.8216
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	5.02098 / 3.07737	12.6299	0.1641	3.9700e-003	17.9146
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**24.5138**	**0.3174**	**7.6800e-003**	**34.7362**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	12.0556	0.7125	0.0000	29.8673
Unmitigated	12.0556	0.7125	0.0000	29.8673

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	33.12	6.7231	0.3973	0.0000	16.6561
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	26.27	5.3326	0.3152	0.0000	13.2112
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**12.0556**	**0.7125**	**0.0000**	**29.8673**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	33.12	6.7231	0.3973	0.0000	16.6561
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	26.27	5.3326	0.3152	0.0000	13.2112
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**12.0556**	**0.7125**	**0.0000**	**29.8673**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

US 50 Site 1 Mixed Use

El Dorado-Lake Tahoe County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	28.25	1000sqft	0.65	28,250.00	0
Enclosed Parking Structure	145.00	1000sqft	3.33	58,000.00	0
Parking Lot	73.00	Space	0.66	29,200.00	0
Apartments Mid Rise	72.00	Dwelling Unit	1.89	56,500.00	206

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

US 50 Site 1 Mixed Use - El Dorado-Lake Tahoe County, Summer

Project Characteristics -

Land Use - based on conceptual site plans in EIS

Construction Phase - conservatively assumed construction occurs in 1 year

Trips and VMT - ...

Demolition - based on estimation of buildings to be demolited and calculated by use of aerial imagery.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - assume all fireplaces gas and catalytic wood burning stoves

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	9.00
tblConstructionPhase	NumDays	230.00	212.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	4.00
tblConstructionPhase	PhaseEndDate	2/22/2018	12/31/2017
tblConstructionPhase	PhaseEndDate	1/3/2018	12/4/2017
tblConstructionPhase	PhaseEndDate	2/15/2017	2/9/2017
tblConstructionPhase	PhaseEndDate	1/29/2018	12/18/2017
tblConstructionPhase	PhaseEndDate	2/3/2017	2/2/2017
tblConstructionPhase	PhaseStartDate	1/30/2018	12/19/2017
tblConstructionPhase	PhaseStartDate	2/16/2017	2/10/2017
tblConstructionPhase	PhaseStartDate	2/4/2017	2/3/2017
tblConstructionPhase	PhaseStartDate	1/4/2018	12/5/2017
tblFireplaces	NumberGas	39.60	72.00
tblFireplaces	NumberNoFireplace	7.20	0.00

tblFireplaces	NumberWood	25.20	0.00
tblGrading	AcresOfGrading	2.50	10.00
tblLandUse	BuildingSpaceSquareFeet	145,000.00	58,000.00
tblLandUse	BuildingSpaceSquareFeet	72,000.00	56,500.00
tblLandUse	LandUseSquareFeet	145,000.00	58,000.00
tblLandUse	LandUseSquareFeet	72,000.00	56,500.00
tblTripsAndVMT	WorkerTripNumber	15.00	13.00
tblTripsAndVMT	WorkerTripNumber	18.00	8.00
tblTripsAndVMT	WorkerTripNumber	15.00	10.00
tblWoodstoves	NumberCatalytic	3.60	0.00
tblWoodstoves	NumberNoncatalytic	3.60	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	276.3630	52.3069	24.7494	0.0444	18.1320	2.8791	21.0111	9.9481	2.6488	12.5969	0.0000	4,499.4918	4,499.4918	1.1966	0.0000	4,526.6579
Maximum	**276.3630**	**52.3069**	**24.7494**	**0.0444**	**18.1320**	**2.8791**	**21.0111**	**9.9481**	**2.6488**	**12.5969**	**0.0000**	**4,499.4918**	**4,499.4918**	**1.1966**	**0.0000**	**4,526.6579**

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	276.3630	52.3069	24.7494	0.0444	18.1320	2.8791	21.0111	9.9481	2.6488	12.5969	0.0000	4,499.4918	4,499.4918	1.1966	0.0000	4,526.6579
Maximum	**276.3630**	**52.3069**	**24.7494**	**0.0444**	**18.1320**	**2.8791**	**21.0111**	**9.9481**	**2.6488**	**12.5969**	**0.0000**	**4,499.4918**	**4,499.4918**	**1.1966**	**0.0000**	**4,526.6579**

	ROG	**NOx**	**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	18.7575	3.9150	193.1466	0.5381		26.1092	26.1092		26.1092	26.1092	3,912.8832	1,535.4555	5,448.3387	21.2480	0.0280	5,987.8690
Energy	0.0268	0.2381	0.1631	1.4600e-003		0.0185	0.0185		0.0185	0.0185		292.5386	292.5386	5.6100e-003	5.3600e-003	294.2770
Mobile	2.3745	6.8663	25.0500	0.0587	4.4885	0.0833	4.5718	1.2006	0.0787	1.2793		5,872.8495	5,872.8495	0.2398		5,878.8443
Total	**21.1588**	**11.0195**	**218.3596**	**0.5983**	**4.4885**	**26.2110**	**30.6995**	**1.2006**	**26.2063**	**27.4070**	**3,912.8832**	**7,700.8436**	**11,613.7268**	**21.4934**	**0.0333**	**12,160.9903**

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	18.7575	3.9150	193.1466	0.5381		26.1092	26.1092		26.1092	26.1092	3,912.8832	1,535.4555	5,448.3387	21.2480	0.0280	5,987.8690
Energy	0.0268	0.2381	0.1631	1.4600e-003		0.0185	0.0185		0.0185	0.0185		292.5386	292.5386	5.6100e-003	5.3600e-003	294.2770
Mobile	2.3745	6.8663	25.0500	0.0587	4.4885	0.0833	4.5718	1.2006	0.0787	1.2793		5,872.8495	5,872.8495	0.2398		5,878.8443
Total	**21.1588**	**11.0195**	**218.3596**	**0.5983**	**4.4885**	**26.2110**	**30.6995**	**1.2006**	**26.2063**	**27.4070**	**3,912.8832**	**7,700.8436**	**11,613.7268**	**21.4934**	**0.0333**	**12,160.9903**

	ROG	NOx	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	1/2/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/2/2017	5	4	
3	Grading	Grading	2/3/2017	2/9/2017	5	5	
4	Building Construction	Building Construction	2/10/2017	12/4/2017	5	212	
5	Paving	Paving	12/5/2017	12/18/2017	5	10	
6	Architectural Coating	Architectural Coating	12/19/2017	12/31/2017	5	9	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 3.99

Residential Indoor: 114,413; Residential Outdoor: 38,138; Non-Residential Indoor: 42,375; Non-Residential Outdoor: 14,125; Striped Parking Area: 5,232 (Architectural Coating – sqft)

OffRoad Equipment

US 50 Site 1 Mixed Use - El Dorado-Lake Tahoe County, Summer

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	158	0.38
demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	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
demolition	6	13.00	0.00	103.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	98.00	27.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 demolition - 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					
Fugitive Dust					1.1330	0.0000	1.1330	0.1716	0.0000	0.1716			0.0000			0.0000
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**	**1.1330**	**2.1935**	**3.3264**	**0.1716**	**2.0425**	**2.2141**		**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

3.2 demolition - 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	0.0772	2.1762	0.6610	4.3500e-003	0.0888	0.0222	0.1109	0.0242	0.0212	0.0454		454.3904	454.3904	8.5900e-003		454.6052
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0918	0.0512	0.6657	1.2200e-003	0.1068	9.2000e-004	0.1077	0.0283	8.5000e-004	0.0292		120.8180	120.8180	5.1100e-003		120.9458
Total	**0.1690**	**2.2273**	**1.3267**	**5.5700e-003**	**0.1956**	**0.0231**	**0.2186**	**0.0526**	**0.0221**	**0.0746**		**575.2085**	**575.2085**	**0.0137**		**575.5510**

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					1.1330	0.0000	1.1330	0.1716	0.0000	0.1716			0.0000			0.0000
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**	**1.1330**	**2.1935**	**3.3264**	**0.1716**	**2.0425**	**2.2141**	**0.0000**	**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

3.2 demolition - 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	0.0772	2.1762	0.6610	4.3500e-003	0.0888	0.0222	0.1109	0.0242	0.0212	0.0454		454.3904	454.3904	8.5900e-003		454.6052
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0918	0.0512	0.6657	1.2200e-003	0.1068	9.2000e-004	0.1077	0.0283	8.5000e-004	0.0292		120.8180	120.8180	5.1100e-003		120.9458
Total	**0.1690**	**2.2273**	**1.3267**	**5.5700e-003**	**0.1956**	**0.0231**	**0.2186**	**0.0526**	**0.0221**	**0.0746**		**575.2085**	**575.2085**	**0.0137**		**575.5510**

3.3 Site Preparation - 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					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.3 Site Preparation - 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	0.0565	0.0315	0.4096	7.5000e-004	0.0657	5.7000e-004	0.0663	0.0174	5.2000e-004	0.0180		74.3496	74.3496	3.1500e-003		74.4282
Total	**0.0565**	**0.0315**	**0.4096**	**7.5000e-004**	**0.0657**	**5.7000e-004**	**0.0663**	**0.0174**	**5.2000e-004**	**0.0180**		**74.3496**	**74.3496**	**3.1500e-003**		**74.4282**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.3 Site Preparation - 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	0.0565	0.0315	0.4096	7.5000e-004	0.0657	5.7000e-004	0.0663	0.0174	5.2000e-004	0.0180		74.3496	74.3496	3.1500e-003		74.4282
Total	**0.0565**	**0.0315**	**0.4096**	**7.5000e-004**	**0.0657**	**5.7000e-004**	**0.0663**	**0.0174**	**5.2000e-004**	**0.0180**		**74.3496**	**74.3496**	**3.1500e-003**		**74.4282**

3.4 Grading - 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					
Fugitive Dust					8.1431	0.0000	8.1431	3.5393	0.0000	3.5393			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352		3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**8.1431**	**1.7774**	**9.9205**	**3.5393**	**1.6352**	**5.1745**		**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

3.4 Grading - 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	0.0706	0.0394	0.5120	9.4000e-004	0.0822	7.1000e-004	0.0829	0.0218	6.5000e-004	0.0224		92.9370	92.9370	3.9300e-003		93.0352
Total	**0.0706**	**0.0394**	**0.5120**	**9.4000e-004**	**0.0822**	**7.1000e-004**	**0.0829**	**0.0218**	**6.5000e-004**	**0.0224**		**92.9370**	**92.9370**	**3.9300e-003**		**93.0352**

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					8.1431	0.0000	8.1431	3.5393	0.0000	3.5393			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352	0.0000	3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**8.1431**	**1.7774**	**9.9205**	**3.5393**	**1.6352**	**5.1745**	**0.0000**	**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

3.4 Grading - 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	0.0706	0.0394	0.5120	9.4000e-004	0.0822	7.1000e-004	0.0829	0.0218	6.5000e-004	0.0224		92.9370	92.9370	3.9300e-003		93.0352
Total	**0.0706**	**0.0394**	**0.5120**	**9.4000e-004**	**0.0822**	**7.1000e-004**	**0.0829**	**0.0218**	**6.5000e-004**	**0.0224**		**92.9370**	**92.9370**	**3.9300e-003**		**93.0352**

3.5 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	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**		**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.5 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	0.2002	4.2299	1.5490	7.4300e-003	0.1816	0.0508	0.2324	0.0522	0.0486	0.1008		774.7448	774.7448	0.0234		775.3297
Worker	0.6923	0.3857	5.0179	9.1700e-003	0.8051	6.9300e-003	0.8120	0.2135	6.4000e-003	0.2199		910.7821	910.7821	0.0385		911.7453
Total	**0.8924**	**4.6156**	**6.5669**	**0.0166**	**0.9866**	**0.0577**	**1.0444**	**0.2657**	**0.0550**	**0.3207**		**1,685.5269**	**1,685.5269**	**0.0619**		**1,687.0750**

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	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**	**0.0000**	**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.5 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	0.2002	4.2299	1.5490	7.4300e-003	0.1816	0.0508	0.2324	0.0522	0.0486	0.1008		774.7448	774.7448	0.0234		775.3297
Worker	0.6923	0.3857	5.0179	9.1700e-003	0.8051	6.9300e-003	0.8120	0.2135	6.4000e-003	0.2199		910.7821	910.7821	0.0385		911.7453
Total	**0.8924**	**4.6156**	**6.5669**	**0.0166**	**0.9866**	**0.0577**	**1.0444**	**0.2657**	**0.0550**	**0.3207**		**1,685.5269**	**1,685.5269**	**0.0619**		**1,687.0750**

3.6 Paving - 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	1.9449	20.7178	15.0320	0.0228		1.1592	1.1592		1.0665	1.0665		2,330.6461	2,330.6461	0.7141		2,348.4988
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1178**	**20.7178**	**15.0320**	**0.0228**		**1.1592**	**1.1592**		**1.0665**	**1.0665**		**2,330.6461**	**2,330.6461**	**0.7141**		**2,348.4988**

3.6 Paving - 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	0.1060	0.0590	0.7681	1.4000e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		139.4054	139.4054	5.9000e-003		139.5529
Total	**0.1060**	**0.0590**	**0.7681**	**1.4000e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**139.4054**	**139.4054**	**5.9000e-003**		**139.5529**

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	1.9449	20.7178	15.0320	0.0228		1.1592	1.1592		1.0665	1.0665	0.0000	2,330.6461	2,330.6461	0.7141		2,348.4988
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1178**	**20.7178**	**15.0320**	**0.0228**		**1.1592**	**1.1592**		**1.0665**	**1.0665**	**0.0000**	**2,330.6461**	**2,330.6461**	**0.7141**		**2,348.4988**

3.6 Paving - 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	0.1060	0.0590	0.7681	1.4000e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		139.4054	139.4054	5.9000e-003		139.5529
Total	**0.1060**	**0.0590**	**0.7681**	**1.4000e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**139.4054**	**139.4054**	**5.9000e-003**		**139.5529**

3.7 Architectural Coating - 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	275.8894					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		282.1909
Total	**276.2217**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.7 Architectural Coating - 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	0.1413	0.0787	1.0241	1.8700e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3100e-003	0.0449		185.8739	185.8739	7.8600e-003		186.0705
Total	**0.1413**	**0.0787**	**1.0241**	**1.8700e-003**	**0.1643**	**1.4100e-003**	**0.1657**	**0.0436**	**1.3100e-003**	**0.0449**		**185.8739**	**185.8739**	**7.8600e-003**		**186.0705**

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	275.8894					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		282.1909
Total	**276.2217**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.7 Architectural Coating - 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	0.1413	0.0787	1.0241	1.8700e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3100e-003	0.0449		185.8739	185.8739	7.8600e-003		186.0705
Total	**0.1413**	**0.0787**	**1.0241**	**1.8700e-003**	**0.1643**	**1.4100e-003**	**0.1657**	**0.0436**	**1.3100e-003**	**0.0449**		**185.8739**	**185.8739**	**7.8600e-003**		**186.0705**

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	2.3745	6.8663	25.0500	0.0587	4.4885	0.0833	4.5718	1.2006	0.0787	1.2793		5,872.8495	5,872.8495	0.2398		5,878.8443
Unmitigated	2.3745	6.8663	25.0500	0.0587	4.4885	0.0833	4.5718	1.2006	0.0787	1.2793		5,872.8495	5,872.8495	0.2398		5,878.8443

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	478.80	460.08	421.92	1,340,606	1,340,606
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	311.60	69.50	29.66	565,738	565,738
Parking Lot	0.00	0.00	0.00		
Total	790.40	529.58	451.58	1,906,344	1,906,344

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
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Enclosed Parking Structure	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Parking Lot	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Apartments Mid Rise	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0268	0.2381	0.1631	1.4600e-003		0.0185	0.0185		0.0185	0.0185		292.5386	292.5386	5.6100e-003	5.3600e-003	294.2770
NaturalGas Unmitigated	0.0268	0.2381	0.1631	1.4600e-003		0.0185	0.0185		0.0185	0.0185		292.5386	292.5386	5.6100e-003	5.3600e-003	294.2770

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					
Apartments Mid Rise	967.27	0.0104	0.0891	0.0379	5.7000e-004		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003		113.7964	113.7964	2.1800e-003	2.0900e-003	114.4727
Enclosed Parking Structure	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
General Office Building	1519.31	0.0164	0.1490	0.1251	8.9000e-004		0.0113	0.0113		0.0113	0.0113		178.7421	178.7421	3.4300e-003	3.2800e-003	179.8043
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
Total		**0.0268**	**0.2381**	**0.1631**	**1.4600e-003**		**0.0185**	**0.0185**		**0.0185**	**0.0185**		**292.5386**	**292.5386**	**5.6100e-003**	**5.3700e-003**	**294.2770**

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					
Apartments Mid Rise	0.96727	0.0104	0.0891	0.0379	5.7000e-004		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003		113.7964	113.7964	2.1800e-003	2.0900e-003	114.4727
Enclosed Parking Structure	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
General Office Building	1.51931	0.0164	0.1490	0.1251	8.9000e-004		0.0113	0.0113		0.0113	0.0113		178.7421	178.7421	3.4300e-003	3.2800e-003	179.8043
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
Total		**0.0268**	**0.2381**	**0.1631**	**1.4600e-003**		**0.0185**	**0.0185**		**0.0185**	**0.0185**		**292.5386**	**292.5386**	**5.6100e-003**	**5.3700e-003**	**294.2770**

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	18.7575	3.9150	193.1466	0.5381		26.1092	26.1092		26.1092	26.1092	3,912.8832	1,535.4555	5,448.3387	21.2480	0.0280	5,987.8690
Unmitigated	18.7575	3.9150	193.1466	0.5381		26.1092	26.1092		26.1092	26.1092	3,912.8832	1,535.4555	5,448.3387	21.2480	0.0280	5,987.8690

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6803					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	16.0458	3.8454	187.1390	0.5378		26.0764	26.0764		26.0764	26.0764	3,912.8832	1,524.7059	5,437.5891	21.2373	0.0280	5,976.8506
Landscaping	0.1868	0.0697	6.0076	3.2000e-004		0.0327	0.0327		0.0327	0.0327		10.7497	10.7497	0.0108		11.0184
Total	**18.7575**	**3.9150**	**193.1466**	**0.5381**		**26.1092**	**26.1092**		**26.1092**	**26.1092**	**3,912.8832**	**1,535.4555**	**5,448.3387**	**21.2480**	**0.0280**	**5,987.8690**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6803					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	16.0458	3.8454	187.1390	0.5378		26.0764	26.0764		26.0764	26.0764	3,912.8832	1,524.7059	5,437.5891	21.2373	0.0280	5,976.8506
Landscaping	0.1868	0.0697	6.0076	3.2000e-004		0.0327	0.0327		0.0327	0.0327		10.7497	10.7497	0.0108		11.0184
Total	**18.7575**	**3.9150**	**193.1466**	**0.5381**		**26.1092**	**26.1092**		**26.1092**	**26.1092**	**3,912.8832**	**1,535.4555**	**5,448.3387**	**21.2480**	**0.0280**	**5,987.8690**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

US 50 Site 1 Mixed Use

El Dorado-Lake Tahoe County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	28.25	1000sqft	0.65	28,250.00	0
Enclosed Parking Structure	145.00	1000sqft	3.33	58,000.00	0
Parking Lot	73.00	Space	0.66	29,200.00	0
Apartments Mid Rise	72.00	Dwelling Unit	1.89	56,500.00	206

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

US 50 Site 1 Mixed Use - El Dorado-Lake Tahoe County, Winter

Project Characteristics -

Land Use - based on conceptual site plans in EIS

Construction Phase - conservatively assumed construction occurs in 1 year

Trips and VMT - ...

Demolition - based on estimation of buildings to be demolited and calculated by use of aerial imagery.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - assume all fireplaces gas and catalytic wood burning stoves

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	9.00
tblConstructionPhase	NumDays	230.00	212.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	4.00
tblConstructionPhase	PhaseEndDate	2/22/2018	12/31/2017
tblConstructionPhase	PhaseEndDate	1/3/2018	12/4/2017
tblConstructionPhase	PhaseEndDate	2/15/2017	2/9/2017
tblConstructionPhase	PhaseEndDate	1/29/2018	12/18/2017
tblConstructionPhase	PhaseEndDate	2/3/2017	2/2/2017
tblConstructionPhase	PhaseStartDate	1/30/2018	12/19/2017
tblConstructionPhase	PhaseStartDate	2/16/2017	2/10/2017
tblConstructionPhase	PhaseStartDate	2/4/2017	2/3/2017
tblConstructionPhase	PhaseStartDate	1/4/2018	12/5/2017
tblFireplaces	NumberGas	39.60	72.00
tblFireplaces	NumberNoFireplace	7.20	0.00

tblFireplaces	NumberWood	25.20	0.00
tblGrading	AcresOfGrading	2.50	10.00
tblLandUse	BuildingSpaceSquareFeet	145,000.00	58,000.00
tblLandUse	BuildingSpaceSquareFeet	72,000.00	56,500.00
tblLandUse	LandUseSquareFeet	145,000.00	58,000.00
tblLandUse	LandUseSquareFeet	72,000.00	56,500.00
tblTripsAndVMT	WorkerTripNumber	15.00	13.00
tblTripsAndVMT	WorkerTripNumber	18.00	8.00
tblTripsAndVMT	WorkerTripNumber	15.00	10.00
tblWoodstoves	NumberCatalytic	3.60	0.00
tblWoodstoves	NumberNoncatalytic	3.60	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	276.3661	52.3143	24.7205	0.0442	18.1320	2.8791	21.0111	9.9481	2.6488	12.5969	0.0000	4,483.2908	4,483.2908	1.1964	0.0000	4,510.4613
Maximum	**276.3661**	**52.3143**	**24.7205**	**0.0442**	**18.1320**	**2.8791**	**21.0111**	**9.9481**	**2.6488**	**12.5969**	**0.0000**	**4,483.2908**	**4,483.2908**	**1.1964**	**0.0000**	**4,510.4613**

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	276.3661	52.3143	24.7205	0.0442	18.1320	2.8791	21.0111	9.9481	2.6488	12.5969	0.0000	4,483.2908	4,483.2908	1.1964	0.0000	4,510.4613
Maximum	**276.3661**	**52.3143**	**24.7205**	**0.0442**	**18.1320**	**2.8791**	**21.0111**	**9.9481**	**2.6488**	**12.5969**	**0.0000**	**4,483.2908**	**4,483.2908**	**1.1964**	**0.0000**	**4,510.4613**

	ROG	**NOx**	**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	18.7575	3.9150	193.1466	0.5381		26.1092	26.1092		26.1092	26.1092	3,912.8832	1,535.4555	5,448.3387	21.2480	0.0280	5,987.8690
Energy	0.0268	0.2381	0.1631	1.4600e-003		0.0185	0.0185		0.0185	0.0185		292.5386	292.5386	5.6100e-003	5.3600e-003	294.2770
Mobile	1.9932	7.5418	24.9669	0.0540	4.4885	0.0837	4.5722	1.2006	0.0790	1.2797		5,406.7206	5,406.7206	0.2373		5,412.6541
Total	**20.7775**	**11.6949**	**218.2765**	**0.5936**	**4.4885**	**26.2114**	**30.6998**	**1.2006**	**26.2067**	**27.4074**	**3,912.8832**	**7,234.7147**	**11,147.5979**	**21.4910**	**0.0333**	**11,694.8001**

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	18.7575	3.9150	193.1466	0.5381		26.1092	26.1092		26.1092	26.1092	3,912.8832	1,535.4555	5,448.3387	21.2480	0.0280	5,987.8690
Energy	0.0268	0.2381	0.1631	1.4600e-003		0.0185	0.0185		0.0185	0.0185		292.5386	292.5386	5.6100e-003	5.3600e-003	294.2770
Mobile	1.9932	7.5418	24.9669	0.0540	4.4885	0.0837	4.5722	1.2006	0.0790	1.2797		5,406.7206	5,406.7206	0.2373		5,412.6541
Total	**20.7775**	**11.6949**	**218.2765**	**0.5936**	**4.4885**	**26.2114**	**30.6998**	**1.2006**	**26.2067**	**27.4074**	**3,912.8832**	**7,234.7147**	**11,147.5979**	**21.4910**	**0.0333**	**11,694.8001**

	ROG	NOx	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	1/2/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/2/2017	5	4	
3	Grading	Grading	2/3/2017	2/9/2017	5	5	
4	Building Construction	Building Construction	2/10/2017	12/4/2017	5	212	
5	Paving	Paving	12/5/2017	12/18/2017	5	10	
6	Architectural Coating	Architectural Coating	12/19/2017	12/31/2017	5	9	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 3.99

Residential Indoor: 114,413; Residential Outdoor: 38,138; Non-Residential Indoor: 42,375; Non-Residential Outdoor: 14,125; Striped Parking Area: 5,232 (Architectural Coating – sqft)

OffRoad Equipment

US 50 Site 1 Mixed Use - El Dorado-Lake Tahoe County, Winter

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	158	0.38
demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	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
demolition	6	13.00	0.00	103.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	98.00	27.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 demolition - 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					
Fugitive Dust					1.1330	0.0000	1.1330	0.1716	0.0000	0.1716			0.0000			0.0000
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**	**1.1330**	**2.1935**	**3.3264**	**0.1716**	**2.0425**	**2.2141**		**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

3.2 demolition - 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	0.0787	2.2572	0.6917	4.3000e-003	0.0888	0.0224	0.1112	0.0242	0.0215	0.0457		449.7696	449.7696	9.0100e-003		449.9948
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0939	0.0633	0.6356	1.1000e-003	0.1068	9.2000e-004	0.1077	0.0283	8.5000e-004	0.0292		109.2379	109.2379	4.8600e-003		109.3595
Total	**0.1726**	**2.3206**	**1.3274**	**5.4000e-003**	**0.1956**	**0.0234**	**0.2189**	**0.0526**	**0.0223**	**0.0749**		**559.0075**	**559.0075**	**0.0139**		**559.3543**

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					1.1330	0.0000	1.1330	0.1716	0.0000	0.1716			0.0000			0.0000
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**	**1.1330**	**2.1935**	**3.3264**	**0.1716**	**2.0425**	**2.2141**	**0.0000**	**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

3.2 demolition - 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	0.0787	2.2572	0.6917	4.3000e-003	0.0888	0.0224	0.1112	0.0242	0.0215	0.0457		449.7696	449.7696	9.0100e-003		449.9948
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0939	0.0633	0.6356	1.1000e-003	0.1068	9.2000e-004	0.1077	0.0283	8.5000e-004	0.0292		109.2379	109.2379	4.8600e-003		109.3595
Total	**0.1726**	**2.3206**	**1.3274**	**5.4000e-003**	**0.1956**	**0.0234**	**0.2189**	**0.0526**	**0.0223**	**0.0749**		**559.0075**	**559.0075**	**0.0139**		**559.3543**

3.3 Site Preparation - 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					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.3 Site Preparation - 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	0.0578	0.0390	0.3912	6.8000e-004	0.0657	5.7000e-004	0.0663	0.0174	5.2000e-004	0.0180		67.2233	67.2233	2.9900e-003		67.2982
Total	**0.0578**	**0.0390**	**0.3912**	**6.8000e-004**	**0.0657**	**5.7000e-004**	**0.0663**	**0.0174**	**5.2000e-004**	**0.0180**		**67.2233**	**67.2233**	**2.9900e-003**		**67.2982**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.3 Site Preparation - 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	0.0578	0.0390	0.3912	6.8000e-004	0.0657	5.7000e-004	0.0663	0.0174	5.2000e-004	0.0180		67.2233	67.2233	2.9900e-003		67.2982
Total	**0.0578**	**0.0390**	**0.3912**	**6.8000e-004**	**0.0657**	**5.7000e-004**	**0.0663**	**0.0174**	**5.2000e-004**	**0.0180**		**67.2233**	**67.2233**	**2.9900e-003**		**67.2982**

3.4 Grading - 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					
Fugitive Dust					8.1431	0.0000	8.1431	3.5393	0.0000	3.5393			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352		3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**8.1431**	**1.7774**	**9.9205**	**3.5393**	**1.6352**	**5.1745**		**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

3.4 Grading - 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	0.0722	0.0487	0.4890	8.5000e-004	0.0822	7.1000e-004	0.0829	0.0218	6.5000e-004	0.0224		84.0291	84.0291	3.7400e-003		84.1227
Total	**0.0722**	**0.0487**	**0.4890**	**8.5000e-004**	**0.0822**	**7.1000e-004**	**0.0829**	**0.0218**	**6.5000e-004**	**0.0224**		**84.0291**	**84.0291**	**3.7400e-003**		**84.1227**

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					8.1431	0.0000	8.1431	3.5393	0.0000	3.5393			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352	0.0000	3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**8.1431**	**1.7774**	**9.9205**	**3.5393**	**1.6352**	**5.1745**	**0.0000**	**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

3.4 Grading - 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	0.0722	0.0487	0.4890	8.5000e-004	0.0822	7.1000e-004	0.0829	0.0218	6.5000e-004	0.0224		84.0291	84.0291	3.7400e-003		84.1227
Total	**0.0722**	**0.0487**	**0.4890**	**8.5000e-004**	**0.0822**	**7.1000e-004**	**0.0829**	**0.0218**	**6.5000e-004**	**0.0224**		**84.0291**	**84.0291**	**3.7400e-003**		**84.1227**

3.5 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	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**		**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.5 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	0.2093	4.3485	1.7463	7.3100e-003	0.1816	0.0516	0.2332	0.0522	0.0494	0.1016		761.9393	761.9393	0.0253		762.5713
Worker	0.7077	0.4773	4.7917	8.3000e-003	0.8051	6.9300e-003	0.8120	0.2135	6.4000e-003	0.2199		823.4856	823.4856	0.0367		824.4023
Total	**0.9170**	**4.8257**	**6.5380**	**0.0156**	**0.9866**	**0.0586**	**1.0452**	**0.2657**	**0.0558**	**0.3215**		**1,585.4249**	**1,585.4249**	**0.0620**		**1,586.9736**

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	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**	**0.0000**	**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.5 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	0.2093	4.3485	1.7463	7.3100e-003	0.1816	0.0516	0.2332	0.0522	0.0494	0.1016		761.9393	761.9393	0.0253		762.5713
Worker	0.7077	0.4773	4.7917	8.3000e-003	0.8051	6.9300e-003	0.8120	0.2135	6.4000e-003	0.2199		823.4856	823.4856	0.0367		824.4023
Total	**0.9170**	**4.8257**	**6.5380**	**0.0156**	**0.9866**	**0.0586**	**1.0452**	**0.2657**	**0.0558**	**0.3215**		**1,585.4249**	**1,585.4249**	**0.0620**		**1,586.9736**

3.6 Paving - 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	1.9449	20.7178	15.0320	0.0228		1.1592	1.1592		1.0665	1.0665		2,330.6461	2,330.6461	0.7141		2,348.4988
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1178**	**20.7178**	**15.0320**	**0.0228**		**1.1592**	**1.1592**		**1.0665**	**1.0665**		**2,330.6461**	**2,330.6461**	**0.7141**		**2,348.4988**

3.6 Paving - 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	0.1083	0.0731	0.7334	1.2700e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		126.0437	126.0437	5.6100e-003		126.1840
Total	**0.1083**	**0.0731**	**0.7334**	**1.2700e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**126.0437**	**126.0437**	**5.6100e-003**		**126.1840**

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	1.9449	20.7178	15.0320	0.0228		1.1592	1.1592		1.0665	1.0665	0.0000	2,330.6461	2,330.6461	0.7141		2,348.4988
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1178**	**20.7178**	**15.0320**	**0.0228**		**1.1592**	**1.1592**		**1.0665**	**1.0665**	**0.0000**	**2,330.6461**	**2,330.6461**	**0.7141**		**2,348.4988**

3.6 Paving - 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	0.1083	0.0731	0.7334	1.2700e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		126.0437	126.0437	5.6100e-003		126.1840
Total	**0.1083**	**0.0731**	**0.7334**	**1.2700e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**126.0437**	**126.0437**	**5.6100e-003**		**126.1840**

3.7 Architectural Coating - 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	275.8894					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		282.1909
Total	**276.2217**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.7 Architectural Coating - 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	0.1444	0.0974	0.9779	1.6900e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3100e-003	0.0449		168.0583	168.0583	7.4800e-003		168.2454
Total	**0.1444**	**0.0974**	**0.9779**	**1.6900e-003**	**0.1643**	**1.4100e-003**	**0.1657**	**0.0436**	**1.3100e-003**	**0.0449**		**168.0583**	**168.0583**	**7.4800e-003**		**168.2454**

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	275.8894					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		282.1909
Total	**276.2217**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.7 Architectural Coating - 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	0.1444	0.0974	0.9779	1.6900e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3100e-003	0.0449		168.0583	168.0583	7.4800e-003		168.2454
Total	**0.1444**	**0.0974**	**0.9779**	**1.6900e-003**	**0.1643**	**1.4100e-003**	**0.1657**	**0.0436**	**1.3100e-003**	**0.0449**		**168.0583**	**168.0583**	**7.4800e-003**		**168.2454**

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	1.9932	7.5418	24.9669	0.0540	4.4885	0.0837	4.5722	1.2006	0.0790	1.2797		5,406.7206	5,406.7206	0.2373		5,412.6541
Unmitigated	1.9932	7.5418	24.9669	0.0540	4.4885	0.0837	4.5722	1.2006	0.0790	1.2797		5,406.7206	5,406.7206	0.2373		5,412.6541

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	478.80	460.08	421.92	1,340,606	1,340,606
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	311.60	69.50	29.66	565,738	565,738
Parking Lot	0.00	0.00	0.00		
Total	790.40	529.58	451.58	1,906,344	1,906,344

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
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Enclosed Parking Structure	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Parking Lot	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Apartments Mid Rise	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0268	0.2381	0.1631	1.4600e-003		0.0185	0.0185		0.0185	0.0185		292.5386	292.5386	5.6100e-003	5.3600e-003	294.2770
NaturalGas Unmitigated	0.0268	0.2381	0.1631	1.4600e-003		0.0185	0.0185		0.0185	0.0185		292.5386	292.5386	5.6100e-003	5.3600e-003	294.2770

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					
Apartments Mid Rise	967.27	0.0104	0.0891	0.0379	5.7000e-004		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003		113.7964	113.7964	2.1800e-003	2.0900e-003	114.4727
Enclosed Parking Structure	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
General Office Building	1519.31	0.0164	0.1490	0.1251	8.9000e-004		0.0113	0.0113		0.0113	0.0113		178.7421	178.7421	3.4300e-003	3.2800e-003	179.8043
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
Total		**0.0268**	**0.2381**	**0.1631**	**1.4600e-003**		**0.0185**	**0.0185**		**0.0185**	**0.0185**		**292.5386**	**292.5386**	**5.6100e-003**	**5.3700e-003**	**294.2770**

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					
Apartments Mid Rise	0.96727	0.0104	0.0891	0.0379	5.7000e-004		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003		113.7964	113.7964	2.1800e-003	2.0900e-003	114.4727
Enclosed Parking Structure	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
General Office Building	1.51931	0.0164	0.1490	0.1251	8.9000e-004		0.0113	0.0113		0.0113	0.0113		178.7421	178.7421	3.4300e-003	3.2800e-003	179.8043
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
Total		**0.0268**	**0.2381**	**0.1631**	**1.4600e-003**		**0.0185**	**0.0185**		**0.0185**	**0.0185**		**292.5386**	**292.5386**	**5.6100e-003**	**5.3700e-003**	**294.2770**

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	18.7575	3.9150	193.1466	0.5381		26.1092	26.1092		26.1092	26.1092	3,912.8832	1,535.4555	5,448.3387	21.2480	0.0280	5,987.8690
Unmitigated	18.7575	3.9150	193.1466	0.5381		26.1092	26.1092		26.1092	26.1092	3,912.8832	1,535.4555	5,448.3387	21.2480	0.0280	5,987.8690

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6803					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	16.0458	3.8454	187.1390	0.5378		26.0764	26.0764		26.0764	26.0764	3,912.8832	1,524.7059	5,437.5891	21.2373	0.0280	5,976.8506
Landscaping	0.1868	0.0697	6.0076	3.2000e-004		0.0327	0.0327		0.0327	0.0327		10.7497	10.7497	0.0108		11.0184
Total	**18.7575**	**3.9150**	**193.1466**	**0.5381**		**26.1092**	**26.1092**		**26.1092**	**26.1092**	**3,912.8832**	**1,535.4555**	**5,448.3387**	**21.2480**	**0.0280**	**5,987.8690**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6803					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	16.0458	3.8454	187.1390	0.5378		26.0764	26.0764		26.0764	26.0764	3,912.8832	1,524.7059	5,437.5891	21.2373	0.0280	5,976.8506
Landscaping	0.1868	0.0697	6.0076	3.2000e-004		0.0327	0.0327		0.0327	0.0327		10.7497	10.7497	0.0108		11.0184
Total	**18.7575**	**3.9150**	**193.1466**	**0.5381**		**26.1092**	**26.1092**		**26.1092**	**26.1092**	**3,912.8832**	**1,535.4555**	**5,448.3387**	**21.2480**	**0.0280**	**5,987.8690**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

US 50 Site 2 Mixed Use

El Dorado-Lake Tahoe County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	8.63	1000sqft	0.20	8,630.00	0
Enclosed Parking Structure	4.00	1000sqft	0.09	4,000.00	0
Parking Lot	105.00	Space	0.95	42,000.00	0
Apartments Mid Rise	70.00	Dwelling Unit	1.84	51,300.00	200
Strip Mall	8.00	1000sqft	0.18	8,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - yujkyu

Construction Phase - kjhgkjh

Trips and VMT - ;...

Demolition -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - assume all fireplaces gas and non-catalytic wood burning stoves

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	13.00
tblConstructionPhase	NumDays	230.00	197.00
tblConstructionPhase	PhaseEndDate	2/22/2018	12/31/2017
tblConstructionPhase	PhaseEndDate	1/3/2018	11/18/2017
tblConstructionPhase	PhaseEndDate	1/29/2018	12/13/2017
tblConstructionPhase	PhaseStartDate	1/30/2018	12/13/2017
tblConstructionPhase	PhaseStartDate	1/4/2018	11/19/2017
tblFireplaces	NumberGas	38.50	70.00
tblFireplaces	NumberWood	24.50	0.00
tblLandUse	BuildingSpaceSquareFeet	70,000.00	51,300.00
tblLandUse	LandUseSquareFeet	70,000.00	51,300.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblWoodstoves	NumberCatalytic	3.50	0.00
tblWoodstoves	NumberNoncatalytic	3.50	70.00

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	1.4683	3.8252	2.7697	4.6600e-003	0.1600	0.2268	0.3868	0.0606	0.2125	0.2731	0.0000	421.9949	421.9949	0.0832	0.0000	424.0752
Maximum	**1.4683**	**3.8252**	**2.7697**	**4.6600e-003**	**0.1600**	**0.2268**	**0.3868**	**0.0606**	**0.2125**	**0.2731**	**0.0000**	**421.9949**	**421.9949**	**0.0832**	**0.0000**	**424.0752**

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	1.4683	3.8251	2.7697	4.6600e-003	0.1600	0.2268	0.3868	0.0606	0.2125	0.2731	0.0000	421.9945	421.9945	0.0832	0.0000	424.0748
Maximum	**1.4683**	**3.8251**	**2.7697**	**4.6600e-003**	**0.1600**	**0.2268**	**0.3868**	**0.0606**	**0.2125**	**0.2731**	**0.0000**	**421.9945**	**421.9945**	**0.0832**	**0.0000**	**424.0748**

	ROG	**NOx**	**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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-2-2017**	**4-1-2017**	1.3060	1.3060
2	**4-2-2017**	**7-1-2017**	1.0871	1.0871
3	**7-2-2017**	**9-30-2017**	1.0871	1.0871
		Highest	1.3060	1.3060

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	1.0251	0.1593	7.9831	0.0215		1.0423	1.0423		1.0423	1.0423	141.4953	55.9868	197.4821	0.7688	1.0100e-003	217.0035
Energy	3.0800e-003	0.0270	0.0161	1.7000e-004		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	211.4239	211.4239	8.7700e-003	2.2500e-003	212.3139
Mobile	0.3686	1.2652	4.2190	9.3400e-003	0.7312	0.0142	0.7454	0.1962	0.0134	0.2096	0.0000	847.8507	847.8507	0.0365	0.0000	848.7633
Waste						0.0000	0.0000		0.0000	0.0000	9.8715	0.0000	9.8715	0.5834	0.0000	24.4561
Water						0.0000	0.0000		0.0000	0.0000	2.1215	14.7811	16.9026	0.2186	5.2800e-003	23.9413
Total	**1.3968**	**1.4515**	**12.2182**	**0.0310**	**0.7312**	**1.0586**	**1.7898**	**0.1962**	**1.0579**	**1.2541**	**153.4883**	**1,130.0424**	**1,283.5307**	**1.6160**	**8.5400e-003**	**1,326.4782**

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	1.0251	0.1593	7.9831	0.0215		1.0423	1.0423		1.0423	1.0423	141.4953	55.9868	197.4821	0.7688	1.0100e-003	217.0035
Energy	3.0800e-003	0.0270	0.0161	1.7000e-004		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	211.4239	211.4239	8.7700e-003	2.2500e-003	212.3139
Mobile	0.3686	1.2652	4.2190	9.3400e-003	0.7312	0.0142	0.7454	0.1962	0.0134	0.2096	0.0000	847.8507	847.8507	0.0365	0.0000	848.7633
Waste						0.0000	0.0000		0.0000	0.0000	9.8715	0.0000	9.8715	0.5834	0.0000	24.4561
Water						0.0000	0.0000		0.0000	0.0000	2.1215	14.7811	16.9026	0.2186	5.2800e-003	23.9413
Total	**1.3968**	**1.4515**	**12.2182**	**0.0310**	**0.7312**	**1.0586**	**1.7898**	**0.1962**	**1.0579**	**1.2541**	**153.4883**	**1,130.0424**	**1,283.5307**	**1.6160**	**8.5400e-003**	**1,326.4782**

	ROG	NOx	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	1/2/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/3/2017	5	5	
3	Grading	Grading	2/4/2017	2/15/2017	5	8	
4	Building Construction	Building Construction	2/16/2017	11/18/2017	5	197	
5	Paving	Paving	11/19/2017	12/13/2017	5	18	
6	Architectural Coating	Architectural Coating	12/13/2017	12/31/2017	5	13	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.04

Residential Indoor: 103,883; Residential Outdoor: 34,628; Non-Residential Indoor: 24,945; Non-Residential Outdoor: 8,315; Striped Parking Area: 2,760 (Architectural Coating – sqft)

OffRoad Equipment

US 50 Site 2 Mixed Use - El Dorado-Lake Tahoe County, Annual

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	158	0.38
demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	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
demolition	6	15.00	0.00	125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	75.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 demolition - 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					
Fugitive Dust					0.0138	0.0000	0.0138	2.0800e-003	0.0000	2.0800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0410	0.4275	0.2301	3.9000e-004		0.0219	0.0219		0.0204	0.0204	0.0000	35.6005	35.6005	9.7300e-003	0.0000	35.8438
Total	**0.0410**	**0.4275**	**0.2301**	**3.9000e-004**	**0.0138**	**0.0219**	**0.0357**	**2.0800e-003**	**0.0204**	**0.0225**	**0.0000**	**35.6005**	**35.6005**	**9.7300e-003**	**0.0000**	**35.8438**

3.2 demolition - 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	9.4000e-004	0.0273	8.2000e-003	5.0000e-005	1.0400e-003	2.7000e-004	1.3100e-003	2.8000e-004	2.6000e-004	5.4000e-004	0.0000	4.9813	4.9813	1.0000e-004	0.0000	4.9837
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.8000e-004	6.8000e-004	7.1700e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.1676	1.1676	5.0000e-005	0.0000	1.1689
Total	**1.9200e-003**	**0.0280**	**0.0154**	**6.0000e-005**	**2.2200e-003**	**2.8000e-004**	**2.5000e-003**	**5.9000e-004**	**2.7000e-004**	**8.6000e-004**	**0.0000**	**6.1489**	**6.1489**	**1.5000e-004**	**0.0000**	**6.1526**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0138	0.0000	0.0138	2.0800e-003	0.0000	2.0800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0410	0.4275	0.2301	3.9000e-004		0.0219	0.0219		0.0204	0.0204	0.0000	35.6005	35.6005	9.7300e-003	0.0000	35.8438
Total	**0.0410**	**0.4275**	**0.2301**	**3.9000e-004**	**0.0138**	**0.0219**	**0.0357**	**2.0800e-003**	**0.0204**	**0.0225**	**0.0000**	**35.6005**	**35.6005**	**9.7300e-003**	**0.0000**	**35.8438**

3.2 demolition - 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	9.4000e-004	0.0273	8.2000e-003	5.0000e-005	1.0400e-003	2.7000e-004	1.3100e-003	2.8000e-004	2.6000e-004	5.4000e-004	0.0000	4.9813	4.9813	1.0000e-004	0.0000	4.9837
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.8000e-004	6.8000e-004	7.1700e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.1676	1.1676	5.0000e-005	0.0000	1.1689
Total	**1.9200e-003**	**0.0280**	**0.0154**	**6.0000e-005**	**2.2200e-003**	**2.8000e-004**	**2.5000e-003**	**5.9000e-004**	**2.7000e-004**	**8.6000e-004**	**0.0000**	**6.1489**	**6.1489**	**1.5000e-004**	**0.0000**	**6.1526**

3.3 Site Preparation - 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					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1307	0.0586	1.0000e-004		7.2000e-003	7.2000e-003		6.6200e-003	6.6200e-003	0.0000	8.8336	8.8336	2.7100e-003	0.0000	8.9013
Total	**0.0124**	**0.1307**	**0.0586**	**1.0000e-004**	**0.0452**	**7.2000e-003**	**0.0524**	**0.0248**	**6.6200e-003**	**0.0315**	**0.0000**	**8.8336**	**8.8336**	**2.7100e-003**	**0.0000**	**8.9013**

3.3 Site Preparation - 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	2.9000e-004	2.0000e-004	2.1500e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3503	0.3503	2.0000e-005	0.0000	0.3507
Total	**2.9000e-004**	**2.0000e-004**	**2.1500e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3503**	**0.3503**	**2.0000e-005**	**0.0000**	**0.3507**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1307	0.0586	1.0000e-004		7.2000e-003	7.2000e-003		6.6200e-003	6.6200e-003	0.0000	8.8336	8.8336	2.7100e-003	0.0000	8.9013
Total	**0.0124**	**0.1307**	**0.0586**	**1.0000e-004**	**0.0452**	**7.2000e-003**	**0.0524**	**0.0248**	**6.6200e-003**	**0.0315**	**0.0000**	**8.8336**	**8.8336**	**2.7100e-003**	**0.0000**	**8.9013**

3.3 Site Preparation - 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	2.9000e-004	2.0000e-004	2.1500e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3503	0.3503	2.0000e-005	0.0000	0.3507
Total	**2.9000e-004**	**2.0000e-004**	**2.1500e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3503**	**0.3503**	**2.0000e-005**	**0.0000**	**0.3507**

3.4 Grading - 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					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1356	0.0684	1.2000e-004		7.1100e-003	7.1100e-003		6.5400e-003	6.5400e-003	0.0000	11.0238	11.0238	3.3800e-003	0.0000	11.1082
Total	**0.0123**	**0.1356**	**0.0684**	**1.2000e-004**	**0.0262**	**7.1100e-003**	**0.0333**	**0.0135**	**6.5400e-003**	**0.0200**	**0.0000**	**11.0238**	**11.0238**	**3.3800e-003**	**0.0000**	**11.1082**

3.4 Grading - 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	3.9000e-004	2.7000e-004	2.8700e-003	1.0000e-005	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4671	0.4671	2.0000e-005	0.0000	0.4676
Total	**3.9000e-004**	**2.7000e-004**	**2.8700e-003**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4671**	**0.4671**	**2.0000e-005**	**0.0000**	**0.4676**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1356	0.0684	1.2000e-004		7.1100e-003	7.1100e-003		6.5400e-003	6.5400e-003	0.0000	11.0238	11.0238	3.3800e-003	0.0000	11.1082
Total	**0.0123**	**0.1356**	**0.0684**	**1.2000e-004**	**0.0262**	**7.1100e-003**	**0.0333**	**0.0135**	**6.5400e-003**	**0.0200**	**0.0000**	**11.0238**	**11.0238**	**3.3800e-003**	**0.0000**	**11.1082**

3.4 Grading - 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	3.9000e-004	2.7000e-004	2.8700e-003	1.0000e-005	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4671	0.4671	2.0000e-005	0.0000	0.4676
Total	**3.9000e-004**	**2.7000e-004**	**2.8700e-003**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4671**	**0.4671**	**2.0000e-005**	**0.0000**	**0.4676**

3.5 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	0.3068	2.6156	1.7910	2.6500e-003		0.1761	0.1761		0.1654	0.1654	0.0000	236.8854	236.8854	0.0584	0.0000	238.3445
Total	**0.3068**	**2.6156**	**1.7910**	**2.6500e-003**		**0.1761**	**0.1761**		**0.1654**	**0.1654**	**0.0000**	**236.8854**	**236.8854**	**0.0584**	**0.0000**	**238.3445**

3.5 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	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	0.0134	0.2853	0.1086	4.8000e-004	0.0115	3.3600e-003	0.0149	3.3300e-003	3.2100e-003	6.5400e-003	0.0000	45.8323	45.8323	1.4500e-003	0.0000	45.8686
Worker	0.0483	0.0333	0.3533	6.4000e-004	0.0582	5.2000e-004	0.0587	0.0155	4.8000e-004	0.0160	0.0000	57.5059	57.5059	2.5000e-003	0.0000	57.5684
Total	**0.0616**	**0.3186**	**0.4619**	**1.1200e-003**	**0.0697**	**3.8800e-003**	**0.0736**	**0.0188**	**3.6900e-003**	**0.0225**	**0.0000**	**103.3382**	**103.3382**	**3.9500e-003**	**0.0000**	**103.4369**

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	0.3068	2.6156	1.7910	2.6500e-003		0.1761	0.1761		0.1654	0.1654	0.0000	236.8852	236.8852	0.0584	0.0000	238.3442
Total	**0.3068**	**2.6156**	**1.7910**	**2.6500e-003**		**0.1761**	**0.1761**		**0.1654**	**0.1654**	**0.0000**	**236.8852**	**236.8852**	**0.0584**	**0.0000**	**238.3442**

3.5 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	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	0.0134	0.2853	0.1086	4.8000e-004	0.0115	3.3600e-003	0.0149	3.3300e-003	3.2100e-003	6.5400e-003	0.0000	45.8323	45.8323	1.4500e-003	0.0000	45.8686
Worker	0.0483	0.0333	0.3533	6.4000e-004	0.0582	5.2000e-004	0.0587	0.0155	4.8000e-004	0.0160	0.0000	57.5059	57.5059	2.5000e-003	0.0000	57.5684
Total	**0.0616**	**0.3186**	**0.4619**	**1.1200e-003**	**0.0697**	**3.8800e-003**	**0.0736**	**0.0188**	**3.6900e-003**	**0.0225**	**0.0000**	**103.3382**	**103.3382**	**3.9500e-003**	**0.0000**	**103.4369**

3.6 Paving - 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	0.0151	0.1534	0.1139	1.7000e-004		9.1500e-003	9.1500e-003		8.4400e-003	8.4400e-003	0.0000	15.5274	15.5274	4.6300e-003	0.0000	15.6432
Paving	1.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0163**	**0.1534**	**0.1139**	**1.7000e-004**		**9.1500e-003**	**9.1500e-003**		**8.4400e-003**	**8.4400e-003**	**0.0000**	**15.5274**	**15.5274**	**4.6300e-003**	**0.0000**	**15.6432**

3.6 Paving - 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	1.1800e-003	8.1000e-004	8.6100e-003	2.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.4012	1.4012	6.0000e-005	0.0000	1.4027
Total	**1.1800e-003**	**8.1000e-004**	**8.6100e-003**	**2.0000e-005**	**1.4200e-003**	**1.0000e-005**	**1.4300e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.4012**	**1.4012**	**6.0000e-005**	**0.0000**	**1.4027**

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	0.0151	0.1534	0.1139	1.7000e-004		9.1500e-003	9.1500e-003		8.4400e-003	8.4400e-003	0.0000	15.5274	15.5274	4.6300e-003	0.0000	15.6432
Paving	1.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0163**	**0.1534**	**0.1139**	**1.7000e-004**		**9.1500e-003**	**9.1500e-003**		**8.4400e-003**	**8.4400e-003**	**0.0000**	**15.5274**	**15.5274**	**4.6300e-003**	**0.0000**	**15.6432**

3.6 Paving - 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	1.1800e-003	8.1000e-004	8.6100e-003	2.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.4012	1.4012	6.0000e-005	0.0000	1.4027
Total	**1.1800e-003**	**8.1000e-004**	**8.6100e-003**	**2.0000e-005**	**1.4200e-003**	**1.0000e-005**	**1.4300e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.4012**	**1.4012**	**6.0000e-005**	**0.0000**	**1.4027**

3.7 Architectural Coating - 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	1.0112					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1600e-003	0.0142	0.0121	2.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	1.6596	1.6596	1.8000e-004	0.0000	1.6640
Total	**1.0134**	**0.0142**	**0.0121**	**2.0000e-005**		**1.1300e-003**	**1.1300e-003**		**1.1300e-003**	**1.1300e-003**	**0.0000**	**1.6596**	**1.6596**	**1.8000e-004**	**0.0000**	**1.6640**

3.7 Architectural Coating - 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	6.4000e-004	4.4000e-004	4.6600e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.7590	0.7590	3.0000e-005	0.0000	0.7598
Total	**6.4000e-004**	**4.4000e-004**	**4.6600e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.7590**	**0.7590**	**3.0000e-005**	**0.0000**	**0.7598**

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	1.0112					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1600e-003	0.0142	0.0121	2.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	1.6596	1.6596	1.8000e-004	0.0000	1.6640
Total	**1.0134**	**0.0142**	**0.0121**	**2.0000e-005**		**1.1300e-003**	**1.1300e-003**		**1.1300e-003**	**1.1300e-003**	**0.0000**	**1.6596**	**1.6596**	**1.8000e-004**	**0.0000**	**1.6640**

3.7 Architectural Coating - 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	6.4000e-004	4.4000e-004	4.6600e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.7590	0.7590	3.0000e-005	0.0000	0.7598
Total	**6.4000e-004**	**4.4000e-004**	**4.6600e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.7590**	**0.7590**	**3.0000e-005**	**0.0000**	**0.7598**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3686	1.2652	4.2190	9.3400e-003	0.7312	0.0142	0.7454	0.1962	0.0134	0.2096	0.0000	847.8507	847.8507	0.0365	0.0000	848.7633
Unmitigated	0.3686	1.2652	4.2190	9.3400e-003	0.7312	0.0142	0.7454	0.1962	0.0134	0.2096	0.0000	847.8507	847.8507	0.0365	0.0000	848.7633

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	465.50	447.30	410.20	1,303,367	1,303,367
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	95.19	21.23	9.06	172,825	172,825
Parking Lot	0.00	0.00	0.00		
Strip Mall	354.56	336.32	163.44	499,974	499,974
Total	915.25	804.85	582.70	1,976,166	1,976,166

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
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.503470	0.043416	0.226017	0.144790	0.038824	0.007695	0.015319	0.009013	0.001565	0.001250	0.005814	0.000843	0.001986
Enclosed Parking Structure	0.503470	0.043416	0.226017	0.144790	0.038824	0.007695	0.015319	0.009013	0.001565	0.001250	0.005814	0.000843	0.001986
Parking Lot	0.503470	0.043416	0.226017	0.144790	0.038824	0.007695	0.015319	0.009013	0.001565	0.001250	0.005814	0.000843	0.001986
Apartments Mid Rise	0.503470	0.043416	0.226017	0.144790	0.038824	0.007695	0.015319	0.009013	0.001565	0.001250	0.005814	0.000843	0.001986
Strip Mall	0.503470	0.043416	0.226017	0.144790	0.038824	0.007695	0.015319	0.009013	0.001565	0.001250	0.005814	0.000843	0.001986

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	180.9716	180.9716	8.1800e-003	1.6900e-003	181.6807
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	180.9716	180.9716	8.1800e-003	1.6900e-003	181.6807
NaturalGas Mitigated	3.0800e-003	0.0270	0.0161	1.7000e-004		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	30.4522	30.4522	5.8000e-004	5.6000e-004	30.6332
NaturalGas Unmitigated	3.0800e-003	0.0270	0.0161	1.7000e-004		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	30.4522	30.4522	5.8000e-004	5.6000e-004	30.6332

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					
Apartments Mid Rise	343246	1.8500e-003	0.0158	6.7300e-003	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3169	18.3169	3.5000e-004	3.4000e-004	18.4258
Enclosed Parking Structure	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
General Office Building	169407	9.1000e-004	8.3000e-003	6.9800e-003	5.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	9.0402	9.0402	1.7000e-004	1.7000e-004	9.0939
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
Strip Mall	58000	3.1000e-004	2.8400e-003	2.3900e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	3.0951	3.0951	6.0000e-005	6.0000e-005	3.1135
Total		**3.0700e-003**	**0.0270**	**0.0161**	**1.7000e-004**		**2.1300e-003**	**2.1300e-003**		**2.1300e-003**	**2.1300e-003**	**0.0000**	**30.4522**	**30.4522**	**5.8000e-004**	**5.7000e-004**	**30.6332**

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					
Apartments Mid Rise	343246	1.8500e-003	0.0158	6.7300e-003	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3169	18.3169	3.5000e-004	3.4000e-004	18.4258
Enclosed Parking Structure	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
General Office Building	169407	9.1000e-004	8.3000e-003	6.9800e-003	5.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	9.0402	9.0402	1.7000e-004	1.7000e-004	9.0939
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
Strip Mall	58000	3.1000e-004	2.8400e-003	2.3900e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	3.0951	3.0951	6.0000e-005	6.0000e-005	3.1135
Total		**3.0700e-003**	**0.0270**	**0.0161**	**1.7000e-004**		**2.1300e-003**	**2.1300e-003**		**2.1300e-003**	**2.1300e-003**	**0.0000**	**30.4522**	**30.4522**	**5.8000e-004**	**5.7000e-004**	**30.6332**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	349861	101.7785	4.6000e-003	9.5000e-004	102.1773
Enclosed Parking Structure	26200	7.6219	3.4000e-004	7.0000e-005	7.6518
General Office Building	97864.2	28.4698	1.2900e-003	2.7000e-004	28.5814
Parking Lot	36960	10.7521	4.9000e-004	1.0000e-004	10.7942
Strip Mall	111200	32.3494	1.4600e-003	3.0000e-004	32.4761
Total		**180.9716**	**8.1800e-003**	**1.6900e-003**	**181.6807**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	349861	101.7785	4.6000e-003	9.5000e-004	102.1773
Enclosed Parking Structure	26200	7.6219	3.4000e-004	7.0000e-005	7.6518
General Office Building	97864.2	28.4698	1.2900e-003	2.7000e-004	28.5814
Parking Lot	36960	10.7521	4.9000e-004	1.0000e-004	10.7942
Strip Mall	111200	32.3494	1.4600e-003	3.0000e-004	32.4761
Total		**180.9716**	**8.1800e-003**	**1.6900e-003**	**181.6807**

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	1.0251	0.1593	7.9831	0.0215		1.0423	1.0423		1.0423	1.0423	141.4953	55.9868	197.4821	0.7688	1.0100e-003	217.0035
Unmitigated	1.0251	0.1593	7.9831	0.0215		1.0423	1.0423		1.0423	1.0423	141.4953	55.9868	197.4821	0.7688	1.0100e-003	217.0035

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1011					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2683					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6396	0.1533	7.4596	0.0214		1.0394	1.0394		1.0394	1.0394	141.4953	55.1355	196.6308	0.7680	1.0100e-003	216.1312
Landscaping	0.0161	6.0600e-003	0.5235	3.0000e-005		2.8700e-003	2.8700e-003		2.8700e-003	2.8700e-003	0.0000	0.8513	0.8513	8.4000e-004	0.0000	0.8723
Total	**1.0251**	**0.1593**	**7.9831**	**0.0215**		**1.0423**	**1.0423**		**1.0423**	**1.0423**	**141.4953**	**55.9868**	**197.4821**	**0.7688**	**1.0100e-003**	**217.0035**

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	0.1011					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2683					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.6396	0.1533	7.4596	0.0214		1.0394	1.0394		1.0394	1.0394	141.4953	55.1355	196.6308	0.7680	1.0100e-003	216.1312
Landscaping	0.0161	6.0600e-003	0.5235	3.0000e-005		2.8700e-003	2.8700e-003		2.8700e-003	2.8700e-003	0.0000	0.8513	0.8513	8.4000e-004	0.0000	0.8723
Total	**1.0251**	**0.1593**	**7.9831**	**0.0215**		**1.0423**	**1.0423**		**1.0423**	**1.0423**	**141.4953**	**55.9868**	**197.4821**	**0.7688**	**1.0100e-003**	**217.0035**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.9026	0.2186	5.2800e-003	23.9413
Unmitigated	16.9026	0.2186	5.2800e-003	23.9413

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.56078 / 2.87528	11.5537	0.1491	3.6000e-003	16.3544
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	1.53384 / 0.940097	3.8583	0.0501	1.2100e-003	5.4727
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.59258 / 0.363194	1.4906	0.0194	4.7000e-004	2.1143
Total		**16.9026**	**0.2186**	**5.2800e-003**	**23.9413**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.56078 / 2.87528	11.5537	0.1491	3.6000e-003	16.3544
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	1.53384 / 0.940097	3.8583	0.0501	1.2100e-003	5.4727
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.59258 / 0.363194	1.4906	0.0194	4.7000e-004	2.1143
Total		**16.9026**	**0.2186**	**5.2800e-003**	**23.9413**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	9.8715	0.5834	0.0000	24.4561
Unmitigated	9.8715	0.5834	0.0000	24.4561

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	32.2	6.5363	0.3863	0.0000	16.1934
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	8.03	1.6300	0.0963	0.0000	4.0383
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	8.4	1.7051	0.1008	0.0000	4.2244
Total		**9.8715**	**0.5834**	**0.0000**	**24.4561**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	32.2	6.5363	0.3863	0.0000	16.1934
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	8.03	1.6300	0.0963	0.0000	4.0383
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	8.4	1.7051	0.1008	0.0000	4.2244
Total		**9.8715**	**0.5834**	**0.0000**	**24.4561**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

US 50 Site 2 Mixed Use

El Dorado-Lake Tahoe County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	8.63	1000sqft	0.20	8,630.00	0
Enclosed Parking Structure	4.00	1000sqft	0.09	4,000.00	0
Parking Lot	105.00	Space	0.95	42,000.00	0
Strip Mall	8.00	1000sqft	0.18	8,000.00	0
Apartments Mid Rise	70.00	Dwelling Unit	1.84	51,300.00	200

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - yujkyu

Construction Phase - kjhgkjh

Trips and VMT - ;...

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Demolition -

Woodstoves - assume all fireplaces gas and catalytic wood burning stoves

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	12.00
tblConstructionPhase	NumDays	230.00	197.00
tblConstructionPhase	NumDays	8.00	9.00
tblConstructionPhase	NumDays	18.00	17.00
tblConstructionPhase	NumDays	5.00	6.00
tblConstructionPhase	PhaseEndDate	11/13/2017	12/31/2017
tblConstructionPhase	PhaseEndDate	10/16/2017	11/20/2017
tblConstructionPhase	PhaseEndDate	1/9/2017	2/16/2017
tblConstructionPhase	PhaseEndDate	10/30/2017	12/13/2017
tblConstructionPhase	PhaseEndDate	1/3/2017	2/3/2017
tblConstructionPhase	PhaseStartDate	10/31/2017	12/14/2017
tblConstructionPhase	PhaseStartDate	1/10/2017	2/17/2017
tblConstructionPhase	PhaseStartDate	1/4/2017	2/4/2017
tblConstructionPhase	PhaseStartDate	10/17/2017	11/21/2017
tblConstructionPhase	PhaseStartDate	1/2/2017	1/27/2017
tblFireplaces	NumberGas	38.50	70.00
tblFireplaces	NumberNoFireplace	7.00	0.00
tblFireplaces	NumberWood	24.50	0.00
tblGrading	AcresOfGrading	4.50	4.00
tblLandUse	BuildingSpaceSquareFeet	70,000.00	51,300.00
tblLandUse	LandUseSquareFeet	70,000.00	51,300.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblWoodstoves	NumberCatalytic	3.50	70.00
tblWoodstoves	NumberNoncatalytic	3.50	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					
2017	168.9698	97.7937	48.9595	0.0852	19.8203	5.1013	24.9215	10.2402	4.7187	14.9589	0.0000	8,677.3700	8,677.3700	2.2898	0.0000	8,734.6137
Maximum	**168.9698**	**97.7937**	**48.9595**	**0.0852**	**19.8203**	**5.1013**	**24.9215**	**10.2402**	**4.7187**	**14.9589**	**0.0000**	**8,677.3700**	**8,677.3700**	**2.2898**	**0.0000**	**8,734.6137**

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	168.9698	97.7937	48.9595	0.0852	19.8203	5.1013	24.9215	10.2402	4.7187	14.9589	0.0000	8,677.3700	8,677.3700	2.2898	0.0000	8,734.6137
Maximum	**168.9698**	**97.7937**	**48.9595**	**0.0852**	**19.8203**	**5.1013**	**24.9215**	**10.2402**	**4.7187**	**14.9589**	**0.0000**	**8,677.3700**	**8,677.3700**	**2.2898**	**0.0000**	**8,734.6137**

	ROG	**NOx**	**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	21.6691	3.8059	140.8493	0.5232		26.4149	26.4149		26.4149	26.4149	3,804.1920	1,492.7791	5,296.9711	14.9874	0.0272	5,679.7551
Energy	0.0169	0.1478	0.0882	9.2000e-004		0.0117	0.0117		0.0117	0.0117		183.9334	183.9334	3.5300e-003	3.3700e-003	185.0264
Mobile	2.3752	6.4863	23.1590	0.0566	4.4665	0.0751	4.5416	1.1944	0.0708	1.2652		5,665.9502	5,665.9502	0.2188		5,671.4201
Total	**24.0611**	**10.4399**	**164.0964**	**0.5807**	**4.4665**	**26.5016**	**30.9681**	**1.1944**	**26.4973**	**27.6917**	**3,804.1920**	**7,342.6627**	**11,146.8547**	**15.2097**	**0.0306**	**11,536.2015**

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	21.6691	3.8059	140.8493	0.5232		26.4149	26.4149		26.4149	26.4149	3,804.1920	1,492.7791	5,296.9711	14.9874	0.0272	5,679.7551
Energy	0.0169	0.1478	0.0882	9.2000e-004		0.0117	0.0117		0.0117	0.0117		183.9334	183.9334	3.5300e-003	3.3700e-003	185.0264
Mobile	2.3752	6.4863	23.1590	0.0566	4.4665	0.0751	4.5416	1.1944	0.0708	1.2652		5,665.9502	5,665.9502	0.2188		5,671.4201
Total	**24.0611**	**10.4399**	**164.0964**	**0.5807**	**4.4665**	**26.5016**	**30.9681**	**1.1944**	**26.4973**	**27.6917**	**3,804.1920**	**7,342.6627**	**11,146.8547**	**15.2097**	**0.0306**	**11,536.2015**

	ROG	NOx	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	1/27/2017	2/3/2017	5	6	
2	Grading	Grading	2/4/2017	2/16/2017	5	9	
3	Building Construction	Building Construction	2/17/2017	11/20/2017	5	197	
4	Paving	Paving	11/21/2017	12/13/2017	5	17	
5	Architectural Coating	Architectural Coating	12/14/2017	12/31/2017	5	12	
6	demolition	Demolition	1/1/2017	1/27/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.04

Residential Indoor: 103,883; Residential Outdoor: 34,628; Non-Residential Indoor: 24,945; Non-Residential Outdoor: 8,315; Striped Parking Area: 2,760 (Architectural Coating – sqft)

OffRoad Equipment

US 50 Site 2 Mixed Use - El Dorado-Lake Tahoe County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Grading	Excavators	1	8.00	158	0.38
demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
demolition	Excavators	3	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
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
Architectural Coating	1	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	75.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
demolition	6	15.00	0.00	125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.2 Site Preparation - 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	0.1272	0.0709	0.9217	1.6800e-003	0.1479	1.2700e-003	0.1491	0.0392	1.1800e-003	0.0404		167.2865	167.2865	7.0800e-003		167.4634
Total	**0.1272**	**0.0709**	**0.9217**	**1.6800e-003**	**0.1479**	**1.2700e-003**	**0.1491**	**0.0392**	**1.1800e-003**	**0.0404**		**167.2865**	**167.2865**	**7.0800e-003**		**167.4634**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.2 Site Preparation - 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	0.1272	0.0709	0.9217	1.6800e-003	0.1479	1.2700e-003	0.1491	0.0392	1.1800e-003	0.0404		167.2865	167.2865	7.0800e-003		167.4634
Total	**0.1272**	**0.0709**	**0.9217**	**1.6800e-003**	**0.1479**	**1.2700e-003**	**0.1491**	**0.0392**	**1.1800e-003**	**0.0404**		**167.2865**	**167.2865**	**7.0800e-003**		**167.4634**

3.3 Grading - 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					
Fugitive Dust					6.4934	0.0000	6.4934	3.3611	0.0000	3.3611			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352		3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**6.4934**	**1.7774**	**8.2709**	**3.3611**	**1.6352**	**4.9964**		**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

3.3 Grading - 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	0.1060	0.0590	0.7681	1.4000e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		139.4054	139.4054	5.9000e-003		139.5529
Total	**0.1060**	**0.0590**	**0.7681**	**1.4000e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**139.4054**	**139.4054**	**5.9000e-003**		**139.5529**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4934	0.0000	6.4934	3.3611	0.0000	3.3611			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352	0.0000	3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**6.4934**	**1.7774**	**8.2709**	**3.3611**	**1.6352**	**4.9964**	**0.0000**	**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

3.3 Grading - 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	0.1060	0.0590	0.7681	1.4000e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		139.4054	139.4054	5.9000e-003		139.5529
Total	**0.1060**	**0.0590**	**0.7681**	**1.4000e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**139.4054**	**139.4054**	**5.9000e-003**		**139.5529**

3.4 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	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**		**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.4 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	0.1334	2.8199	1.0326	4.9500e-003	0.1211	0.0339	0.1549	0.0348	0.0324	0.0672		516.4965	516.4965	0.0156		516.8865
Worker	0.5298	0.2952	3.8403	7.0200e-003	0.6161	5.3000e-003	0.6214	0.1634	4.9000e-003	0.1683		697.0271	697.0271	0.0295		697.7642
Total	**0.6632**	**3.1151**	**4.8729**	**0.0120**	**0.7372**	**0.0392**	**0.7763**	**0.1982**	**0.0373**	**0.2355**		**1,213.5236**	**1,213.5236**	**0.0451**		**1,214.6507**

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	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**	**0.0000**	**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.4 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	0.1334	2.8199	1.0326	4.9500e-003	0.1211	0.0339	0.1549	0.0348	0.0324	0.0672		516.4965	516.4965	0.0156		516.8865
Worker	0.5298	0.2952	3.8403	7.0200e-003	0.6161	5.3000e-003	0.6214	0.1634	4.9000e-003	0.1683		697.0271	697.0271	0.0295		697.7642
Total	**0.6632**	**3.1151**	**4.8729**	**0.0120**	**0.7372**	**0.0392**	**0.7763**	**0.1982**	**0.0373**	**0.2355**		**1,213.5236**	**1,213.5236**	**0.0451**		**1,214.6507**

3.5 Paving - 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	1.6763	17.0389	12.6556	0.0189		1.0172	1.0172		0.9376	0.9376		1,901.7766	1,901.7766	0.5674		1,915.9604
Paving	0.1464					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8228**	**17.0389**	**12.6556**	**0.0189**		**1.0172**	**1.0172**		**0.9376**	**0.9376**		**1,901.7766**	**1,901.7766**	**0.5674**		**1,915.9604**

3.5 Paving - 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	0.1413	0.0787	1.0241	1.8700e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3100e-003	0.0449		185.8739	185.8739	7.8600e-003		186.0705
Total	**0.1413**	**0.0787**	**1.0241**	**1.8700e-003**	**0.1643**	**1.4100e-003**	**0.1657**	**0.0436**	**1.3100e-003**	**0.0449**		**185.8739**	**185.8739**	**7.8600e-003**		**186.0705**

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	1.6763	17.0389	12.6556	0.0189		1.0172	1.0172		0.9376	0.9376	0.0000	1,901.7766	1,901.7766	0.5674		1,915.9604
Paving	0.1464					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8228**	**17.0389**	**12.6556**	**0.0189**		**1.0172**	**1.0172**		**0.9376**	**0.9376**	**0.0000**	**1,901.7766**	**1,901.7766**	**0.5674**		**1,915.9604**

3.5 Paving - 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	0.1413	0.0787	1.0241	1.8700e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3100e-003	0.0449		185.8739	185.8739	7.8600e-003		186.0705
Total	**0.1413**	**0.0787**	**1.0241**	**1.8700e-003**	**0.1643**	**1.4100e-003**	**0.1657**	**0.0436**	**1.3100e-003**	**0.0449**		**185.8739**	**185.8739**	**7.8600e-003**		**186.0705**

3.6 Architectural Coating - 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	168.5315					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		282.1909
Total	**168.8638**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.6 Architectural Coating - 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	0.1060	0.0590	0.7681	1.4000e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		139.4054	139.4054	5.9000e-003		139.5529
Total	**0.1060**	**0.0590**	**0.7681**	**1.4000e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**139.4054**	**139.4054**	**5.9000e-003**		**139.5529**

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	168.5315					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		282.1909
Total	**168.8638**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.6 Architectural Coating - 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	0.1060	0.0590	0.7681	1.4000e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		139.4054	139.4054	5.9000e-003		139.5529
Total	**0.1060**	**0.0590**	**0.7681**	**1.4000e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**139.4054**	**139.4054**	**5.9000e-003**		**139.5529**

3.7 demolition - 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					
Fugitive Dust					1.3752	0.0000	1.3752	0.2082	0.0000	0.2082			0.0000			0.0000
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**	**1.3752**	**2.1935**	**3.5686**	**0.2082**	**2.0425**	**2.2507**		**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

3.7 demolition - 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	0.0937	2.6410	0.8022	5.2800e-003	0.1077	0.0269	0.1346	0.0294	0.0257	0.0551		551.4447	551.4447	0.0104		551.7053
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1060	0.0590	0.7681	1.4000e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		139.4054	139.4054	5.9000e-003		139.5529
Total	**0.1996**	**2.7000**	**1.5702**	**6.6800e-003**	**0.2309**	**0.0280**	**0.2589**	**0.0621**	**0.0267**	**0.0888**		**690.8501**	**690.8501**	**0.0163**		**691.2581**

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					1.3752	0.0000	1.3752	0.2082	0.0000	0.2082			0.0000			0.0000
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**	**1.3752**	**2.1935**	**3.5686**	**0.2082**	**2.0425**	**2.2507**	**0.0000**	**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

3.7 demolition - 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	0.0937	2.6410	0.8022	5.2800e-003	0.1077	0.0269	0.1346	0.0294	0.0257	0.0551		551.4447	551.4447	0.0104		551.7053
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1060	0.0590	0.7681	1.4000e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		139.4054	139.4054	5.9000e-003		139.5529
Total	**0.1996**	**2.7000**	**1.5702**	**6.6800e-003**	**0.2309**	**0.0280**	**0.2589**	**0.0621**	**0.0267**	**0.0888**		**690.8501**	**690.8501**	**0.0163**		**691.2581**

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	2.3752	6.4863	23.1590	0.0566	4.4665	0.0751	4.5416	1.1944	0.0708	1.2652		5,665.9502	5,665.9502	0.2188		5,671.4201
Unmitigated	2.3752	6.4863	23.1590	0.0566	4.4665	0.0751	4.5416	1.1944	0.0708	1.2652		5,665.9502	5,665.9502	0.2188		5,671.4201

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	465.50	447.30	410.20	1,303,367	1,303,367
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	95.19	21.23	9.06	172,825	172,825
Parking Lot	0.00	0.00	0.00		
Strip Mall	354.56	336.32	163.44	499,974	499,974
Total	915.25	804.85	582.70	1,976,166	1,976,166

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
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.503470	0.043416	0.226017	0.144790	0.038824	0.007695	0.015319	0.009013	0.001565	0.001250	0.005814	0.000843	0.001986
Enclosed Parking Structure	0.503470	0.043416	0.226017	0.144790	0.038824	0.007695	0.015319	0.009013	0.001565	0.001250	0.005814	0.000843	0.001986
Parking Lot	0.503470	0.043416	0.226017	0.144790	0.038824	0.007695	0.015319	0.009013	0.001565	0.001250	0.005814	0.000843	0.001986
Strip Mall	0.503470	0.043416	0.226017	0.144790	0.038824	0.007695	0.015319	0.009013	0.001565	0.001250	0.005814	0.000843	0.001986
Apartments Mid Rise	0.503470	0.043416	0.226017	0.144790	0.038824	0.007695	0.015319	0.009013	0.001565	0.001250	0.005814	0.000843	0.001986

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0169	0.1478	0.0882	9.2000e-004		0.0117	0.0117		0.0117	0.0117		183.9334	183.9334	3.5300e-003	3.3700e-003	185.0264
NaturalGas Unmitigated	0.0169	0.1478	0.0882	9.2000e-004		0.0117	0.0117		0.0117	0.0117		183.9334	183.9334	3.5300e-003	3.3700e-003	185.0264

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					
Apartments Mid Rise	940.401	0.0101	0.0867	0.0369	5.5000e-004		7.0100e-003	7.0100e-003		7.0100e-003	7.0100e-003		110.6354	110.6354	2.1200e-003	2.0300e-003	111.2929
Enclosed Parking Structure	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
General Office Building	464.128	5.0100e-003	0.0455	0.0382	2.7000e-004		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		54.6034	54.6034	1.0500e-003	1.0000e-003	54.9278
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
Strip Mall	158.904	1.7100e-003	0.0156	0.0131	9.0000e-005		1.1800e-003	1.1800e-003		1.1800e-003	1.1800e-003		18.6946	18.6946	3.6000e-004	3.4000e-004	18.8057
Total		**0.0169**	**0.1477**	**0.0882**	**9.1000e-004**		**0.0117**	**0.0117**		**0.0117**	**0.0117**		**183.9334**	**183.9334**	**3.5300e-003**	**3.3700e-003**	**185.0264**

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					
Apartments Mid Rise	0.940401	0.0101	0.0867	0.0369	5.5000e-004		7.0100e-003	7.0100e-003		7.0100e-003	7.0100e-003		110.6354	110.6354	2.1200e-003	2.0300e-003	111.2929
Enclosed Parking Structure	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
General Office Building	0.464128	5.0100e-003	0.0455	0.0382	2.7000e-004		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		54.6034	54.6034	1.0500e-003	1.0000e-003	54.9278
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
Strip Mall	0.158904	1.7100e-003	0.0156	0.0131	9.0000e-005		1.1800e-003	1.1800e-003		1.1800e-003	1.1800e-003		18.6946	18.6946	3.6000e-004	3.4000e-004	18.8057
Total		**0.0169**	**0.1477**	**0.0882**	**9.1000e-004**		**0.0117**	**0.0117**		**0.0117**	**0.0117**		**183.9334**	**183.9334**	**3.5300e-003**	**3.3700e-003**	**185.0264**

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	21.6691	3.8059	140.8493	0.5232		26.4149	26.4149		26.4149	26.4149	3,804.1920	1,492.7791	5,296.9711	14.9874	0.0272	5,679.7551
Unmitigated	21.6691	3.8059	140.8493	0.5232		26.4149	26.4149		26.4149	26.4149	3,804.1920	1,492.7791	5,296.9711	14.9874	0.0272	5,679.7551

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5541					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4700					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	19.4661	3.7385	135.0326	0.5229		26.3830	26.3830		26.3830	26.3830	3,804.1920	1,482.3529	5,286.5449	14.9771	0.0272	5,669.0719
Landscaping	0.1789	0.0673	5.8166	3.1000e-004		0.0319	0.0319		0.0319	0.0319		10.4262	10.4262	0.0103		10.6832
Total	**21.6691**	**3.8059**	**140.8493**	**0.5232**		**26.4149**	**26.4149**		**26.4149**	**26.4149**	**3,804.1920**	**1,492.7791**	**5,296.9711**	**14.9874**	**0.0272**	**5,679.7551**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5541					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4700					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	19.4661	3.7385	135.0326	0.5229		26.3830	26.3830		26.3830	26.3830	3,804.1920	1,482.3529	5,286.5449	14.9771	0.0272	5,669.0719
Landscaping	0.1789	0.0673	5.8166	3.1000e-004		0.0319	0.0319		0.0319	0.0319		10.4262	10.4262	0.0103		10.6832
Total	**21.6691**	**3.8059**	**140.8493**	**0.5232**		**26.4149**	**26.4149**		**26.4149**	**26.4149**	**3,804.1920**	**1,492.7791**	**5,296.9711**	**14.9874**	**0.0272**	**5,679.7551**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

US 50 Site 2 Mixed Use

El Dorado-Lake Tahoe County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	8.63	1000sqft	0.20	8,630.00	0
Enclosed Parking Structure	4.00	1000sqft	0.09	4,000.00	0
Parking Lot	105.00	Space	0.95	42,000.00	0
Strip Mall	8.00	1000sqft	0.18	8,000.00	0
Apartments Mid Rise	70.00	Dwelling Unit	1.84	51,300.00	200

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - yujkyu

Construction Phase - kjhgkjh

Trips and VMT - ;...

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Demolition -

Woodstoves - assume all fireplaces gas and catalytic wood burning stoves

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	11/13/2017	12/31/2017
tblConstructionPhase	PhaseEndDate	10/16/2017	11/20/2017
tblConstructionPhase	PhaseEndDate	1/9/2017	2/16/2017
tblConstructionPhase	PhaseEndDate	10/30/2017	12/13/2017
tblConstructionPhase	PhaseEndDate	1/3/2017	2/3/2017
tblConstructionPhase	PhaseStartDate	10/31/2017	12/14/2017
tblConstructionPhase	PhaseStartDate	1/10/2017	2/17/2017
tblConstructionPhase	PhaseStartDate	1/4/2017	2/4/2017
tblConstructionPhase	PhaseStartDate	10/17/2017	11/21/2017
tblConstructionPhase	PhaseStartDate	1/2/2017	1/27/2017
tblFireplaces	NumberGas	38.50	70.00
tblFireplaces	NumberWood	24.50	0.00
tblLandUse	BuildingSpaceSquareFeet	70,000.00	51,300.00
tblLandUse	LandUseSquareFeet	70,000.00	51,300.00
tblWoodstoves	NumberNoncatalytic	3.50	70.00

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	112.7950	97.9230	48.9206	0.0849	19.8203	5.1016	24.9218	10.2402	4.7190	14.9592	0.0000	8,642.3664	8,642.3664	2.2896	0.0000	8,699.6072
Maximum	**112.7950**	**97.9230**	**48.9206**	**0.0849**	**19.8203**	**5.1016**	**24.9218**	**10.2402**	**4.7190**	**14.9592**	**0.0000**	**8,642.3664**	**8,642.3664**	**2.2896**	**0.0000**	**8,699.6072**

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	112.7950	97.9230	48.9206	0.0849	19.8203	5.1016	24.9218	10.2402	4.7190	14.9592	0.0000	8,642.3664	8,642.3664	2.2896	0.0000	8,699.6072
Maximum	**112.7950**	**97.9230**	**48.9206**	**0.0849**	**19.8203**	**5.1016**	**24.9218**	**10.2402**	**4.7190**	**14.9592**	**0.0000**	**8,642.3664**	**8,642.3664**	**2.2896**	**0.0000**	**8,699.6072**

US 50 Site 2 Mixed Use - El Dorado-Lake Tahoe County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	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	18.7712	3.9350	194.4965	0.5490		26.6983	26.6983		26.6983	26.6983	3,994.4016	1,492.7791	5,487.1807	21.4052	0.0272	6,030.4082
Energy	0.0169	0.1478	0.0882	9.2000e-004		0.0117	0.0117		0.0117	0.0117		183.9334	183.9334	3.5300e-003	3.3700e-003	185.0264
Mobile	2.1807	7.7630	26.0642	0.0541	4.4689	0.0843	4.5532	1.1954	0.0796	1.2750		5,412.8447	5,412.8447	0.2444		5,418.9546
Total	**20.9688**	**11.8458**	**220.6489**	**0.6040**	**4.4689**	**26.7943**	**31.2632**	**1.1954**	**26.7896**	**27.9850**	**3,994.4016**	**7,089.5572**	**11,083.9588**	**21.6531**	**0.0306**	**11,634.3891**

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	18.7712	3.9350	194.4965	0.5490		26.6983	26.6983		26.6983	26.6983	3,994.4016	1,492.7791	5,487.1807	21.4052	0.0272	6,030.4082
Energy	0.0169	0.1478	0.0882	9.2000e-004		0.0117	0.0117		0.0117	0.0117		183.9334	183.9334	3.5300e-003	3.3700e-003	185.0264
Mobile	2.1807	7.7630	26.0642	0.0541	4.4689	0.0843	4.5532	1.1954	0.0796	1.2750		5,412.8447	5,412.8447	0.2444		5,418.9546
Total	**20.9688**	**11.8458**	**220.6489**	**0.6040**	**4.4689**	**26.7943**	**31.2632**	**1.1954**	**26.7896**	**27.9850**	**3,994.4016**	**7,089.5572**	**11,083.9588**	**21.6531**	**0.0306**	**11,634.3891**

	ROG	NOx	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	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/27/2017	2/3/2017	5	5	
3	Grading	Grading	2/4/2017	2/16/2017	5	8	
4	Building Construction	Building Construction	2/17/2017	11/20/2017	5	230	
5	Paving	Paving	11/21/2017	12/13/2017	5	18	
6	Architectural Coating	Architectural Coating	12/14/2017	12/31/2017	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.04

Residential Indoor: 103,883; Residential Outdoor: 34,628; Non-Residential Indoor: 24,945; Non-Residential Outdoor: 8,315; Striped Parking Area: 2,760 (Architectural Coating – sqft)

OffRoad Equipment

US 50 Site 2 Mixed Use - El Dorado-Lake Tahoe County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Grading	Excavators	1	8.00	158	0.38
demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
demolition	Excavators	3	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
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
Architectural Coating	1	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	75.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
demolition	6	15.00	0.00	125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 demolition - 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					
Fugitive Dust					1.3752	0.0000	1.3752	0.2082	0.0000	0.2082			0.0000			0.0000
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**	**1.3752**	**2.1935**	**3.5686**	**0.2082**	**2.0425**	**2.2507**		**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

3.2 demolition - 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	0.0956	2.7394	0.8395	5.2200e-003	0.1077	0.0272	0.1349	0.0294	0.0261	0.0555		545.8369	545.8369	0.0109		546.1102
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1083	0.0731	0.7334	1.2700e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		126.0437	126.0437	5.6100e-003		126.1840
Total	**0.2039**	**2.8124**	**1.5729**	**6.4900e-003**	**0.2309**	**0.0283**	**0.2592**	**0.0621**	**0.0270**	**0.0891**		**671.8806**	**671.8806**	**0.0165**		**672.2942**

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					1.3752	0.0000	1.3752	0.2082	0.0000	0.2082			0.0000			0.0000
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**	**1.3752**	**2.1935**	**3.5686**	**0.2082**	**2.0425**	**2.2507**	**0.0000**	**3,924.2833**	**3,924.2833**	**1.0730**		**3,951.1070**

3.2 demolition - 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	0.0956	2.7394	0.8395	5.2200e-003	0.1077	0.0272	0.1349	0.0294	0.0261	0.0555		545.8369	545.8369	0.0109		546.1102
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1083	0.0731	0.7334	1.2700e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		126.0437	126.0437	5.6100e-003		126.1840
Total	**0.2039**	**2.8124**	**1.5729**	**6.4900e-003**	**0.2309**	**0.0283**	**0.2592**	**0.0621**	**0.0270**	**0.0891**		**671.8806**	**671.8806**	**0.0165**		**672.2942**

3.3 Site Preparation - 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					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.3 Site Preparation - 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	0.1300	0.0877	0.8801	1.5200e-003	0.1479	1.2700e-003	0.1491	0.0392	1.1800e-003	0.0404		151.2525	151.2525	6.7300e-003		151.4208
Total	**0.1300**	**0.0877**	**0.8801**	**1.5200e-003**	**0.1479**	**1.2700e-003**	**0.1491**	**0.0392**	**1.1800e-003**	**0.0404**		**151.2525**	**151.2525**	**6.7300e-003**		**151.4208**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.3 Site Preparation - 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	0.1300	0.0877	0.8801	1.5200e-003	0.1479	1.2700e-003	0.1491	0.0392	1.1800e-003	0.0404		151.2525	151.2525	6.7300e-003		151.4208
Total	**0.1300**	**0.0877**	**0.8801**	**1.5200e-003**	**0.1479**	**1.2700e-003**	**0.1491**	**0.0392**	**1.1800e-003**	**0.0404**		**151.2525**	**151.2525**	**6.7300e-003**		**151.4208**

3.4 Grading - 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					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352		3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**6.5523**	**1.7774**	**8.3298**	**3.3675**	**1.6352**	**5.0027**		**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

3.4 Grading - 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	0.1083	0.0731	0.7334	1.2700e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		126.0437	126.0437	5.6100e-003		126.1840
Total	**0.1083**	**0.0731**	**0.7334**	**1.2700e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**126.0437**	**126.0437**	**5.6100e-003**		**126.1840**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352	0.0000	3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**6.5523**	**1.7774**	**8.3298**	**3.3675**	**1.6352**	**5.0027**	**0.0000**	**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

3.4 Grading - 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	0.1083	0.0731	0.7334	1.2700e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		126.0437	126.0437	5.6100e-003		126.1840
Total	**0.1083**	**0.0731**	**0.7334**	**1.2700e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**126.0437**	**126.0437**	**5.6100e-003**		**126.1840**

3.5 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	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**		**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.5 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	0.1395	2.8990	1.1642	4.8700e-003	0.1211	0.0344	0.1555	0.0348	0.0329	0.0677		507.9595	507.9595	0.0169		508.3809
Worker	0.5416	0.3653	3.6671	6.3500e-003	0.6161	5.3000e-003	0.6214	0.1634	4.9000e-003	0.1683		630.2186	630.2186	0.0281		630.9201
Total	**0.6812**	**3.2642**	**4.8313**	**0.0112**	**0.7372**	**0.0397**	**0.7769**	**0.1982**	**0.0378**	**0.2360**		**1,138.1781**	**1,138.1781**	**0.0449**		**1,139.3010**

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	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**	**0.0000**	**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.5 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	0.1395	2.8990	1.1642	4.8700e-003	0.1211	0.0344	0.1555	0.0348	0.0329	0.0677		507.9595	507.9595	0.0169		508.3809
Worker	0.5416	0.3653	3.6671	6.3500e-003	0.6161	5.3000e-003	0.6214	0.1634	4.9000e-003	0.1683		630.2186	630.2186	0.0281		630.9201
Total	**0.6812**	**3.2642**	**4.8313**	**0.0112**	**0.7372**	**0.0397**	**0.7769**	**0.1982**	**0.0378**	**0.2360**		**1,138.1781**	**1,138.1781**	**0.0449**		**1,139.3010**

3.6 Paving - 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	1.6763	17.0389	12.6556	0.0189		1.0172	1.0172		0.9376	0.9376		1,901.7766	1,901.7766	0.5674		1,915.9604
Paving	0.1383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8146**	**17.0389**	**12.6556**	**0.0189**		**1.0172**	**1.0172**		**0.9376**	**0.9376**		**1,901.7766**	**1,901.7766**	**0.5674**		**1,915.9604**

3.6 Paving - 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	0.1444	0.0974	0.9779	1.6900e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3100e-003	0.0449		168.0583	168.0583	7.4800e-003		168.2454
Total	**0.1444**	**0.0974**	**0.9779**	**1.6900e-003**	**0.1643**	**1.4100e-003**	**0.1657**	**0.0436**	**1.3100e-003**	**0.0449**		**168.0583**	**168.0583**	**7.4800e-003**		**168.2454**

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	1.6763	17.0389	12.6556	0.0189		1.0172	1.0172		0.9376	0.9376	0.0000	1,901.7766	1,901.7766	0.5674		1,915.9604
Paving	0.1383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8146**	**17.0389**	**12.6556**	**0.0189**		**1.0172**	**1.0172**		**0.9376**	**0.9376**	**0.0000**	**1,901.7766**	**1,901.7766**	**0.5674**		**1,915.9604**

3.6 Paving - 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	0.1444	0.0974	0.9779	1.6900e-003	0.1643	1.4100e-003	0.1657	0.0436	1.3100e-003	0.0449		168.0583	168.0583	7.4800e-003		168.2454
Total	**0.1444**	**0.0974**	**0.9779**	**1.6900e-003**	**0.1643**	**1.4100e-003**	**0.1657**	**0.0436**	**1.3100e-003**	**0.0449**		**168.0583**	**168.0583**	**7.4800e-003**		**168.2454**

3.7 Architectural Coating - 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	112.3543					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		282.1909
Total	**112.6866**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.7 Architectural Coating - 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	0.1083	0.0731	0.7334	1.2700e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		126.0437	126.0437	5.6100e-003		126.1840
Total	**0.1083**	**0.0731**	**0.7334**	**1.2700e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**126.0437**	**126.0437**	**5.6100e-003**		**126.1840**

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	112.3543					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		282.1909
Total	**112.6866**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.7 Architectural Coating - 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	0.1083	0.0731	0.7334	1.2700e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		126.0437	126.0437	5.6100e-003		126.1840
Total	**0.1083**	**0.0731**	**0.7334**	**1.2700e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**126.0437**	**126.0437**	**5.6100e-003**		**126.1840**

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	2.1807	7.7630	26.0642	0.0541	4.4689	0.0843	4.5532	1.1954	0.0796	1.2750		5,412.8447	5,412.8447	0.2444		5,418.9546
Unmitigated	2.1807	7.7630	26.0642	0.0541	4.4689	0.0843	4.5532	1.1954	0.0796	1.2750		5,412.8447	5,412.8447	0.2444		5,418.9546

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	465.50	447.30	410.20	1,303,367	1,303,367
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	95.19	21.23	9.06	172,825	172,825
Parking Lot	0.00	0.00	0.00		
Strip Mall	354.56	336.32	163.44	499,974	499,974
Total	915.25	804.85	582.70	1,976,166	1,976,166

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
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Enclosed Parking Structure	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Parking Lot	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Strip Mall	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Apartments Mid Rise	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0169	0.1478	0.0882	9.2000e-004		0.0117	0.0117		0.0117	0.0117		183.9334	183.9334	3.5300e-003	3.3700e-003	185.0264
NaturalGas Unmitigated	0.0169	0.1478	0.0882	9.2000e-004		0.0117	0.0117		0.0117	0.0117		183.9334	183.9334	3.5300e-003	3.3700e-003	185.0264

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					
Apartments Mid Rise	940.401	0.0101	0.0867	0.0369	5.5000e-004		7.0100e-003	7.0100e-003		7.0100e-003	7.0100e-003		110.6354	110.6354	2.1200e-003	2.0300e-003	111.2929
Enclosed Parking Structure	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
General Office Building	464.128	5.0100e-003	0.0455	0.0382	2.7000e-004		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		54.6034	54.6034	1.0500e-003	1.0000e-003	54.9278
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
Strip Mall	158.904	1.7100e-003	0.0156	0.0131	9.0000e-005		1.1800e-003	1.1800e-003		1.1800e-003	1.1800e-003		18.6946	18.6946	3.6000e-004	3.4000e-004	18.8057
Total		**0.0169**	**0.1477**	**0.0882**	**9.1000e-004**		**0.0117**	**0.0117**		**0.0117**	**0.0117**		**183.9334**	**183.9334**	**3.5300e-003**	**3.3700e-003**	**185.0264**

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					
Apartments Mid Rise	0.940401	0.0101	0.0867	0.0369	5.5000e-004		7.0100e-003	7.0100e-003		7.0100e-003	7.0100e-003		110.6354	110.6354	2.1200e-003	2.0300e-003	111.2929
Enclosed Parking Structure	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
General Office Building	0.464128	5.0100e-003	0.0455	0.0382	2.7000e-004		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		54.6034	54.6034	1.0500e-003	1.0000e-003	54.9278
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
Strip Mall	0.158904	1.7100e-003	0.0156	0.0131	9.0000e-005		1.1800e-003	1.1800e-003		1.1800e-003	1.1800e-003		18.6946	18.6946	3.6000e-004	3.4000e-004	18.8057
Total		**0.0169**	**0.1477**	**0.0882**	**9.1000e-004**		**0.0117**	**0.0117**		**0.0117**	**0.0117**		**183.9334**	**183.9334**	**3.5300e-003**	**3.3700e-003**	**185.0264**

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	18.7712	3.9350	194.4965	0.5490		26.6983	26.6983		26.6983	26.6983	3,994.4016	1,492.7791	5,487.1807	21.4052	0.0272	6,030.4082
Unmitigated	18.7712	3.9350	194.4965	0.5490		26.6983	26.6983		26.6983	26.6983	3,994.4016	1,492.7791	5,487.1807	21.4052	0.0272	6,030.4082

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5541					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4700					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	16.5666	3.8674	188.6676	0.5487		26.6665	26.6665		26.6665	26.6665	3,994.4016	1,482.3529	5,476.7545	21.3948	0.0272	6,019.7225
Landscaping	0.1805	0.0676	5.8289	3.1000e-004		0.0318	0.0318		0.0318	0.0318		10.4262	10.4262	0.0104		10.6857
Total	**18.7712**	**3.9350**	**194.4965**	**0.5490**		**26.6983**	**26.6983**		**26.6983**	**26.6983**	**3,994.4016**	**1,492.7791**	**5,487.1807**	**21.4052**	**0.0272**	**6,030.4082**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5541					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4700					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	16.5666	3.8674	188.6676	0.5487		26.6665	26.6665		26.6665	26.6665	3,994.4016	1,482.3529	5,476.7545	21.3948	0.0272	6,019.7225
Landscaping	0.1805	0.0676	5.8289	3.1000e-004		0.0318	0.0318		0.0318	0.0318		10.4262	10.4262	0.0104		10.6857
Total	**18.7712**	**3.9350**	**194.4965**	**0.5490**		**26.6983**	**26.6983**		**26.6983**	**26.6983**	**3,994.4016**	**1,492.7791**	**5,487.1807**	**21.4052**	**0.0272**	**6,030.4082**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Site 3

El Dorado-Lake Tahoe County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	30.00	1000sqft	0.69	30,000.00	0
Apartments Mid Rise	87.00	Dwelling Unit	1.00	78,400.00	249
Strip Mall	29.40	1000sqft	0.67	29,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - size/LU based on concept plan in PD

Construction Phase - construction compressed to one year for conservative analysis.

Woodstoves - no wood stoves

Site 3 - El Dorado-Lake Tahoe County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	NumDays	220.00	200.00
tblConstructionPhase	NumDays	6.00	22.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	3.00	16.00
tblConstructionPhase	PhaseEndDate	1/17/2018	12/25/2017
tblConstructionPhase	PhaseEndDate	12/20/2017	11/27/2017
tblConstructionPhase	PhaseEndDate	2/15/2017	2/21/2017
tblConstructionPhase	PhaseEndDate	1/3/2018	12/6/2017
tblConstructionPhase	PhaseEndDate	2/7/2017	1/23/2017
tblConstructionPhase	PhaseStartDate	1/4/2018	12/6/2017
tblConstructionPhase	PhaseStartDate	2/16/2017	2/21/2017
tblConstructionPhase	PhaseStartDate	2/8/2017	1/23/2017
tblConstructionPhase	PhaseStartDate	12/21/2017	11/27/2017
tblConstructionPhase	PhaseStartDate	2/3/2017	1/1/2017
tblFireplaces	NumberGas	47.85	0.00
tblFireplaces	NumberWood	30.45	0.00
tblGrading	AcresOfGrading	11.00	3.00
tblGrading	AcresOfGrading	24.00	4.50
tblLandUse	BuildingSpaceSquareFeet	87,000.00	78,400.00
tblLandUse	LandUseSquareFeet	87,000.00	78,400.00
tblLandUse	LotAcreage	2.29	1.00
tblWoodstoves	NumberCatalytic	4.35	0.00
tblWoodstoves	NumberNoncatalytic	4.35	87.00

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	2.0354	3.2321	2.4666	4.3000e-003	0.1523	0.1797	0.3320	0.0590	0.1710	0.2300	0.0000	378.6111	378.6111	0.0662	0.0000	380.2653
Maximum	**2.0354**	**3.2321**	**2.4666**	**4.3000e-003**	**0.1523**	**0.1797**	**0.3320**	**0.0590**	**0.1710**	**0.2300**	**0.0000**	**378.6111**	**378.6111**	**0.0662**	**0.0000**	**380.2653**

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	2.0354	3.2321	2.4666	4.3000e-003	0.1523	0.1797	0.3320	0.0590	0.1710	0.2300	0.0000	378.6108	378.6108	0.0662	0.0000	380.2650
Maximum	**2.0354**	**3.2321**	**2.4666**	**4.3000e-003**	**0.1523**	**0.1797**	**0.3320**	**0.0590**	**0.1710**	**0.2300**	**0.0000**	**378.6108**	**378.6108**	**0.0662**	**0.0000**	**380.2650**

	ROG	**NOx**	**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**

Site 3 - El Dorado-Lake Tahoe County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-6-2017**	**4-5-2017**	0.9732	0.9732
2	**4-6-2017**	**7-5-2017**	0.9887	0.9887
3	**7-6-2017**	**9-30-2017**	0.9453	0.9453
		Highest	0.9887	0.9887

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	1.3888	0.1389	9.8971	0.0263		1.2906	1.2906		1.2906	1.2906	175.8585	1.0563	176.9147	0.9542	0.0000	200.7700
Energy	3.4500e-003	0.0301	0.0171	1.9000e-004		2.3800e-003	2.3800e-003		2.3800e-003	2.3800e-003	0.0000	336.6839	336.6839	0.0143	3.4600e-003	338.0723
Mobile	0.7315	2.3432	7.8667	0.0165	1.2798	0.0254	1.3052	0.3436	0.0240	0.3676	0.0000	1,500.7426	1,500.7426	0.0676	0.0000	1,502.4315
Waste						0.0000	0.0000		0.0000	0.0000	14.3900	0.0000	14.3900	0.8504	0.0000	35.6507
Water						0.0000	0.0000		0.0000	0.0000	2.4892	17.3484	19.8376	0.2565	6.2000e-003	28.0962
Total	**2.1238**	**2.5122**	**17.7809**	**0.0430**	**1.2798**	**1.3184**	**2.5983**	**0.3436**	**1.3170**	**1.6606**	**192.7377**	**1,855.8311**	**2,048.5688**	**2.1430**	**9.6600e-003**	**2,105.0206**

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	1.3888	0.1389	9.8971	0.0263		1.2906	1.2906		1.2906	1.2906	175.8585	1.0563	176.9147	0.9542	0.0000	200.7700
Energy	3.4500e-003	0.0301	0.0171	1.9000e-004		2.3800e-003	2.3800e-003		2.3800e-003	2.3800e-003	0.0000	336.6839	336.6839	0.0143	3.4600e-003	338.0723
Mobile	0.7315	2.3432	7.8667	0.0165	1.2798	0.0254	1.3052	0.3436	0.0240	0.3676	0.0000	1,500.7426	1,500.7426	0.0676	0.0000	1,502.4315
Waste						0.0000	0.0000		0.0000	0.0000	14.3900	0.0000	14.3900	0.8504	0.0000	35.6507
Water						0.0000	0.0000		0.0000	0.0000	2.4892	17.3484	19.8376	0.2565	6.2000e-003	28.0962
Total	**2.1238**	**2.5122**	**17.7809**	**0.0430**	**1.2798**	**1.3184**	**2.5983**	**0.3436**	**1.3170**	**1.6606**	**192.7377**	**1,855.8311**	**2,048.5688**	**2.1430**	**9.6600e-003**	**2,105.0206**

	ROG	NOx	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

Site 3 - El Dorado-Lake Tahoe County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2017	1/23/2017	5	16	
2	Grading	Grading	1/23/2017	2/21/2017	5	22	
3	Building Construction	Building Construction	2/21/2017	11/27/2017	5	200	
4	Paving	Paving	11/27/2017	12/6/2017	5	8	
5	Architectural Coating	Architectural Coating	12/6/2017	12/25/2017	5	14	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.69

Residential Indoor: 158,760; Residential Outdoor: 52,920; Non-Residential Indoor: 44,100; Non-Residential Outdoor: 14,700; Striped Parking Area: 1,800 (Architectural Coating – sqft)

OffRoad Equipment

Site 3 - El Dorado-Lake Tahoe County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	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
Architectural Coating	1	17.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	85.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.2138	0.1154	2.0000e-004		8.8800e-003	8.8800e-003		8.1700e-003	8.1700e-003	0.0000	18.2047	18.2047	5.5800e-003	0.0000	18.3442
Total	**0.0171**	**0.2138**	**0.1154**	**2.0000e-004**	**2.3900e-003**	**8.8800e-003**	**0.0113**	**2.6000e-004**	**8.1700e-003**	**8.4300e-003**	**0.0000**	**18.2047**	**18.2047**	**5.5800e-003**	**0.0000**	**18.3442**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	2.9000e-004	3.0600e-003	1.0000e-005	5.0000e-004	0.0000	5.1000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4982	0.4982	2.0000e-005	0.0000	0.4987
Total	**4.2000e-004**	**2.9000e-004**	**3.0600e-003**	**1.0000e-005**	**5.0000e-004**	**0.0000**	**5.1000e-004**	**1.3000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4982**	**0.4982**	**2.0000e-005**	**0.0000**	**0.4987**

3.2 Site Preparation - 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					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.2138	0.1154	2.0000e-004		8.8800e-003	8.8800e-003		8.1700e-003	8.1700e-003	0.0000	18.2047	18.2047	5.5800e-003	0.0000	18.3442
Total	**0.0171**	**0.2138**	**0.1154**	**2.0000e-004**	**2.3900e-003**	**8.8800e-003**	**0.0113**	**2.6000e-004**	**8.1700e-003**	**8.4300e-003**	**0.0000**	**18.2047**	**18.2047**	**5.5800e-003**	**0.0000**	**18.3442**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	2.9000e-004	3.0600e-003	1.0000e-005	5.0000e-004	0.0000	5.1000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4982	0.4982	2.0000e-005	0.0000	0.4987
Total	**4.2000e-004**	**2.9000e-004**	**3.0600e-003**	**1.0000e-005**	**5.0000e-004**	**0.0000**	**5.1000e-004**	**1.3000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4982**	**0.4982**	**2.0000e-005**	**0.0000**	**0.4987**

3.3 Grading - 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					
Fugitive Dust					0.0678	0.0000	0.0678	0.0366	0.0000	0.0366	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0255	0.2878	0.1185	2.3000e-004		0.0143	0.0143		0.0131	0.0131	0.0000	21.0775	21.0775	6.4600e-003	0.0000	21.2390
Total	**0.0255**	**0.2878**	**0.1185**	**2.3000e-004**	**0.0678**	**0.0143**	**0.0821**	**0.0366**	**0.0131**	**0.0497**	**0.0000**	**21.0775**	**21.0775**	**6.4600e-003**	**0.0000**	**21.2390**

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	7.2000e-004	5.0000e-004	5.2600e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8563	0.8563	4.0000e-005	0.0000	0.8572
Total	**7.2000e-004**	**5.0000e-004**	**5.2600e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**	**0.0000**	**0.8563**	**0.8563**	**4.0000e-005**	**0.0000**	**0.8572**

3.3 Grading - 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					
Fugitive Dust					0.0678	0.0000	0.0678	0.0366	0.0000	0.0366	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0255	0.2878	0.1185	2.3000e-004		0.0143	0.0143		0.0131	0.0131	0.0000	21.0775	21.0775	6.4600e-003	0.0000	21.2390
Total	**0.0255**	**0.2878**	**0.1185**	**2.3000e-004**	**0.0678**	**0.0143**	**0.0821**	**0.0366**	**0.0131**	**0.0497**	**0.0000**	**21.0775**	**21.0775**	**6.4600e-003**	**0.0000**	**21.2390**

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	7.2000e-004	5.0000e-004	5.2600e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8563	0.8563	4.0000e-005	0.0000	0.8572
Total	**7.2000e-004**	**5.0000e-004**	**5.2600e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**	**0.0000**	**0.8563**	**0.8563**	**4.0000e-005**	**0.0000**	**0.8572**

3.4 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	0.3342	2.3029	1.6310	2.5000e-003		0.1470	0.1470		0.1407	0.1407	0.0000	212.9726	212.9726	0.0474	0.0000	214.1584
Total	**0.3342**	**2.3029**	**1.6310**	**2.5000e-003**		**0.1470**	**0.1470**		**0.1407**	**0.1407**	**0.0000**	**212.9726**	**212.9726**	**0.0474**	**0.0000**	**214.1584**

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	0.0143	0.3058	0.1163	5.2000e-004	0.0123	3.6000e-003	0.0159	3.5700e-003	3.4400e-003	7.0100e-003	0.0000	49.1153	49.1153	1.5600e-003	0.0000	49.1542
Worker	0.0555	0.0383	0.4065	7.3000e-004	0.0669	6.0000e-004	0.0675	0.0178	5.6000e-004	0.0184	0.0000	66.1659	66.1659	2.8700e-003	0.0000	66.2377
Total	**0.0699**	**0.3440**	**0.5229**	**1.2500e-003**	**0.0793**	**4.2000e-003**	**0.0835**	**0.0214**	**4.0000e-003**	**0.0254**	**0.0000**	**115.2812**	**115.2812**	**4.4300e-003**	**0.0000**	**115.3919**

3.4 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	0.3342	2.3029	1.6310	2.5000e-003		0.1470	0.1470		0.1407	0.1407	0.0000	212.9724	212.9724	0.0474	0.0000	214.1581
Total	**0.3342**	**2.3029**	**1.6310**	**2.5000e-003**		**0.1470**	**0.1470**		**0.1407**	**0.1407**	**0.0000**	**212.9724**	**212.9724**	**0.0474**	**0.0000**	**214.1581**

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	0.0143	0.3058	0.1163	5.2000e-004	0.0123	3.6000e-003	0.0159	3.5700e-003	3.4400e-003	7.0100e-003	0.0000	49.1153	49.1153	1.5600e-003	0.0000	49.1542
Worker	0.0555	0.0383	0.4065	7.3000e-004	0.0669	6.0000e-004	0.0675	0.0178	5.6000e-004	0.0184	0.0000	66.1659	66.1659	2.8700e-003	0.0000	66.2377
Total	**0.0699**	**0.3440**	**0.5229**	**1.2500e-003**	**0.0793**	**4.2000e-003**	**0.0835**	**0.0214**	**4.0000e-003**	**0.0254**	**0.0000**	**115.2812**	**115.2812**	**4.4300e-003**	**0.0000**	**115.3919**

3.5 Paving - 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	6.6400e-003	0.0667	0.0488	7.0000e-005		4.1300e-003	4.1300e-003		3.8100e-003	3.8100e-003	0.0000	6.5400	6.5400	1.9700e-003	0.0000	6.5891
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.6400e-003**	**0.0667**	**0.0488**	**7.0000e-005**		**4.1300e-003**	**4.1300e-003**		**3.8100e-003**	**3.8100e-003**	**0.0000**	**6.5400**	**6.5400**	**1.9700e-003**	**0.0000**	**6.5891**

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	3.9000e-004	2.7000e-004	2.8700e-003	1.0000e-005	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4671	0.4671	2.0000e-005	0.0000	0.4676
Total	**3.9000e-004**	**2.7000e-004**	**2.8700e-003**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4671**	**0.4671**	**2.0000e-005**	**0.0000**	**0.4676**

3.5 Paving - 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	6.6400e-003	0.0667	0.0488	7.0000e-005		4.1300e-003	4.1300e-003		3.8100e-003	3.8100e-003	0.0000	6.5400	6.5400	1.9700e-003	0.0000	6.5891
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.6400e-003**	**0.0667**	**0.0488**	**7.0000e-005**		**4.1300e-003**	**4.1300e-003**		**3.8100e-003**	**3.8100e-003**	**0.0000**	**6.5400**	**6.5400**	**1.9700e-003**	**0.0000**	**6.5891**

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	3.9000e-004	2.7000e-004	2.8700e-003	1.0000e-005	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4671	0.4671	2.0000e-005	0.0000	0.4676
Total	**3.9000e-004**	**2.7000e-004**	**2.8700e-003**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4671**	**0.4671**	**2.0000e-005**	**0.0000**	**0.4676**

3.6 Architectural Coating - 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	1.5775					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3300e-003	0.0153	0.0131	2.0000e-005		1.2100e-003	1.2100e-003		1.2100e-003	1.2100e-003	0.0000	1.7873	1.7873	1.9000e-004	0.0000	1.7920
Total	**1.5799**	**0.0153**	**0.0131**	**2.0000e-005**		**1.2100e-003**	**1.2100e-003**		**1.2100e-003**	**1.2100e-003**	**0.0000**	**1.7873**	**1.7873**	**1.9000e-004**	**0.0000**	**1.7920**

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	7.8000e-004	5.4000e-004	5.6900e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.9263	0.9263	4.0000e-005	0.0000	0.9273
Total	**7.8000e-004**	**5.4000e-004**	**5.6900e-003**	**1.0000e-005**	**9.4000e-004**	**1.0000e-005**	**9.5000e-004**	**2.5000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.9263**	**0.9263**	**4.0000e-005**	**0.0000**	**0.9273**

3.6 Architectural Coating - 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	1.5775					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3300e-003	0.0153	0.0131	2.0000e-005		1.2100e-003	1.2100e-003		1.2100e-003	1.2100e-003	0.0000	1.7873	1.7873	1.9000e-004	0.0000	1.7920
Total	**1.5799**	**0.0153**	**0.0131**	**2.0000e-005**		**1.2100e-003**	**1.2100e-003**		**1.2100e-003**	**1.2100e-003**	**0.0000**	**1.7873**	**1.7873**	**1.9000e-004**	**0.0000**	**1.7920**

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	7.8000e-004	5.4000e-004	5.6900e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.9263	0.9263	4.0000e-005	0.0000	0.9273
Total	**7.8000e-004**	**5.4000e-004**	**5.6900e-003**	**1.0000e-005**	**9.4000e-004**	**1.0000e-005**	**9.5000e-004**	**2.5000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.9263**	**0.9263**	**4.0000e-005**	**0.0000**	**0.9273**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7315	2.3432	7.8667	0.0165	1.2798	0.0254	1.3052	0.3436	0.0240	0.3676	0.0000	1,500.7426	1,500.7426	0.0676	0.0000	1,502.4315
Unmitigated	0.7315	2.3432	7.8667	0.0165	1.2798	0.0254	1.3052	0.3436	0.0240	0.3676	0.0000	1,500.7426	1,500.7426	0.0676	0.0000	1,502.4315

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	578.55	555.93	509.82	1,619,899	1,619,899
Enclosed Parking Structure	0.00	0.00	0.00		
Strip Mall	1,303.01	1,235.98	600.64	1,837,404	1,837,404
Total	1,881.56	1,791.91	1,110.46	3,457,303	3,457,303

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
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Apartments Mid Rise	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Strip Mall	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188

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	302.5441	302.5441	0.0137	2.8300e-003	303.7296
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	302.5441	302.5441	0.0137	2.8300e-003	303.7296
NaturalGas Mitigated	3.4500e-003	0.0301	0.0171	1.9000e-004		2.3800e-003	2.3800e-003		2.3800e-003	2.3800e-003	0.0000	34.1398	34.1398	6.5000e-004	6.3000e-004	34.3427
NaturalGas Unmitigated	3.4500e-003	0.0301	0.0171	1.9000e-004		2.3800e-003	2.3800e-003		2.3800e-003	2.3800e-003	0.0000	34.1398	34.1398	6.5000e-004	6.3000e-004	34.3427

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					
Apartments Mid Rise	426606	2.3000e-003	0.0197	8.3600e-003	1.3000e-004		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003	0.0000	22.7653	22.7653	4.4000e-004	4.2000e-004	22.9006
Enclosed Parking Structure	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
Strip Mall	213150	1.1500e-003	0.0105	8.7800e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.3745	11.3745	2.2000e-004	2.1000e-004	11.4421
Total		**3.4500e-003**	**0.0301**	**0.0171**	**1.9000e-004**		**2.3800e-003**	**2.3800e-003**		**2.3800e-003**	**2.3800e-003**	**0.0000**	**34.1398**	**34.1398**	**6.6000e-004**	**6.3000e-004**	**34.3427**

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					
Apartments Mid Rise	426606	2.3000e-003	0.0197	8.3600e-003	1.3000e-004		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003	0.0000	22.7653	22.7653	4.4000e-004	4.2000e-004	22.9006
Enclosed Parking Structure	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
Strip Mall	213150	1.1500e-003	0.0105	8.7800e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.3745	11.3745	2.2000e-004	2.1000e-004	11.4421
Total		**3.4500e-003**	**0.0301**	**0.0171**	**1.9000e-004**		**2.3800e-003**	**2.3800e-003**		**2.3800e-003**	**2.3800e-003**	**0.0000**	**34.1398**	**34.1398**	**6.6000e-004**	**6.3000e-004**	**34.3427**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	434827	126.4961	5.7200e-003	1.1800e-003	126.9918
Enclosed Parking Structure	196500	57.1641	2.5800e-003	5.3000e-004	57.3881
Strip Mall	408660	118.8839	5.3800e-003	1.1100e-003	119.3497
Total		**302.5441**	**0.0137**	**2.8200e-003**	**303.7296**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	434827	126.4961	5.7200e-003	1.1800e-003	126.9918
Enclosed Parking Structure	196500	57.1641	2.5800e-003	5.3000e-004	57.3881
Strip Mall	408660	118.8839	5.3800e-003	1.1100e-003	119.3497
Total		**302.5441**	**0.0137**	**2.8200e-003**	**303.7296**

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	1.3888	0.1389	9.8971	0.0263		1.2906	1.2906		1.2906	1.2906	175.8585	1.0563	176.9147	0.9542	0.0000	200.7700
Unmitigated	1.3888	0.1389	9.8971	0.0263		1.2906	1.2906		1.2906	1.2906	175.8585	1.0563	176.9147	0.9542	0.0000	200.7700

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1578					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.7880	0.1313	9.2460	0.0263		1.2871	1.2871		1.2871	1.2871	175.8585	0.0000	175.8585	0.9532	0.0000	199.6875
Landscaping	0.0201	7.5600e-003	0.6511	3.0000e-005		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	1.0563	1.0563	1.0500e-003	0.0000	1.0825
Total	**1.3888**	**0.1389**	**9.8971**	**0.0263**		**1.2906**	**1.2906**		**1.2906**	**1.2906**	**175.8585**	**1.0563**	**176.9147**	**0.9542**	**0.0000**	**200.7700**

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	0.1578					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.7880	0.1313	9.2460	0.0263		1.2871	1.2871		1.2871	1.2871	175.8585	0.0000	175.8585	0.9532	0.0000	199.6875
Landscaping	0.0201	7.5600e-003	0.6511	3.0000e-005		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	1.0563	1.0563	1.0500e-003	0.0000	1.0825
Total	**1.3888**	**0.1389**	**9.8971**	**0.0263**		**1.2906**	**1.2906**		**1.2906**	**1.2906**	**175.8585**	**1.0563**	**176.9147**	**0.9542**	**0.0000**	**200.7700**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	19.8376	0.2565	6.2000e-003	28.0962
Unmitigated	19.8376	0.2565	6.2000e-003	28.0962

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	5.6684 / 3.57356	14.3596	0.1853	4.4800e-003	20.3261
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.17773 / 1.33474	5.4779	0.0712	1.7200e-003	7.7700
Total		**19.8376**	**0.2565**	**6.2000e-003**	**28.0962**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	5.6684 / 3.57356	14.3596	0.1853	4.4800e-003	20.3261
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.17773 / 1.33474	5.4779	0.0712	1.7200e-003	7.7700
Total		**19.8376**	**0.2565**	**6.2000e-003**	**28.0962**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14.3900	0.8504	0.0000	35.6507
Unmitigated	14.3900	0.8504	0.0000	35.6507

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	40.02	8.1237	0.4801	0.0000	20.1261
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	30.87	6.2663	0.3703	0.0000	15.5246
Total		**14.3900**	**0.8504**	**0.0000**	**35.6507**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	40.02	8.1237	0.4801	0.0000	20.1261
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	30.87	6.2663	0.3703	0.0000	15.5246
Total		**14.3900**	**0.8504**	**0.0000**	**35.6507**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Site 3

El Dorado-Lake Tahoe County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	30.00	1000sqft	0.69	30,000.00	0
Apartments Mid Rise	87.00	Dwelling Unit	1.00	78,400.00	249
Strip Mall	29.40	1000sqft	0.67	29,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - size/LU based on concept plan in PD

Construction Phase - construction compressed to one year for conservative analysis.

Woodstoves - no wood stoves

Site 3 - El Dorado-Lake Tahoe County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	NumDays	220.00	200.00
tblConstructionPhase	NumDays	6.00	22.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	3.00	16.00
tblConstructionPhase	PhaseEndDate	1/17/2018	12/25/2017
tblConstructionPhase	PhaseEndDate	12/20/2017	11/27/2017
tblConstructionPhase	PhaseEndDate	2/15/2017	2/21/2017
tblConstructionPhase	PhaseEndDate	1/3/2018	12/6/2017
tblConstructionPhase	PhaseEndDate	2/7/2017	1/23/2017
tblConstructionPhase	PhaseStartDate	1/4/2018	12/6/2017
tblConstructionPhase	PhaseStartDate	2/16/2017	2/21/2017
tblConstructionPhase	PhaseStartDate	2/8/2017	1/23/2017
tblConstructionPhase	PhaseStartDate	12/21/2017	11/27/2017
tblConstructionPhase	PhaseStartDate	2/3/2017	1/1/2017
tblFireplaces	NumberGas	47.85	0.00
tblFireplaces	NumberWood	30.45	0.00
tblGrading	AcresOfGrading	11.00	3.00
tblGrading	AcresOfGrading	24.00	4.50
tblLandUse	BuildingSpaceSquareFeet	87,000.00	78,400.00
tblLandUse	LandUseSquareFeet	87,000.00	78,400.00
tblLandUse	LotAcreage	2.29	1.00
tblWoodstoves	NumberCatalytic	4.35	0.00
tblWoodstoves	NumberNoncatalytic	4.35	87.00

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	227.5776	52.9589	34.7296	0.0598	7.0749	2.8107	9.8856	3.5696	2.6419	6.2114	0.0000	5,887.8951	5,887.8951	1.4228	0.0000	5,918.4907
Maximum	**227.5776**	**52.9589**	**34.7296**	**0.0598**	**7.0749**	**2.8107**	**9.8856**	**3.5696**	**2.6419**	**6.2114**	**0.0000**	**5,887.8951**	**5,887.8951**	**1.4228**	**0.0000**	**5,918.4907**

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	227.5776	52.9589	34.7296	0.0598	7.0749	2.8107	9.8856	3.5696	2.6419	6.2114	0.0000	5,887.8951	5,887.8951	1.4228	0.0000	5,918.4907
Maximum	**227.5776**	**52.9589**	**34.7296**	**0.0598**	**7.0749**	**2.8107**	**9.8856**	**3.5696**	**2.6419**	**6.2114**	**0.0000**	**5,887.8951**	**5,887.8951**	**1.4228**	**0.0000**	**5,918.4907**

	ROG	**NOx**	**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	22.6251	3.2873	232.7467	0.6410		31.4318	31.4318		31.4318	31.4318	4,728.0672	12.9371	4,741.0043	25.6392	0.0000	5,381.9849
Energy	0.0189	0.1650	0.0939	1.0300e-003		0.0131	0.0131		0.0131	0.0131		206.2067	206.2067	3.9500e-003	3.7800e-003	207.4321
Mobile	5.1348	12.8578	46.6446	0.1029	7.7714	0.1479	7.9193	2.0788	0.1396	2.2184		10,291.7216	10,291.7216	0.4389		10,302.6952
Total	**27.7788**	**16.3100**	**279.4852**	**0.7449**	**7.7714**	**31.5928**	**39.3641**	**2.0788**	**31.5845**	**33.6633**	**4,728.0672**	**10,510.8654**	**15,238.9326**	**26.0821**	**3.7800e-003**	**15,892.1121**

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	22.6251	3.2873	232.7467	0.6410		31.4318	31.4318		31.4318	31.4318	4,728.0672	12.9371	4,741.0043	25.6392	0.0000	5,381.9849
Energy	0.0189	0.1650	0.0939	1.0300e-003		0.0131	0.0131		0.0131	0.0131		206.2067	206.2067	3.9500e-003	3.7800e-003	207.4321
Mobile	5.1348	12.8578	46.6446	0.1029	7.7714	0.1479	7.9193	2.0788	0.1396	2.2184		10,291.7216	10,291.7216	0.4389		10,302.6952
Total	**27.7788**	**16.3100**	**279.4852**	**0.7449**	**7.7714**	**31.5928**	**39.3641**	**2.0788**	**31.5845**	**33.6633**	**4,728.0672**	**10,510.8654**	**15,238.9326**	**26.0821**	**3.7800e-003**	**15,892.1121**

	ROG	NOx	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	1/1/2017	1/23/2017	5	16	
2	Grading	Grading	1/23/2017	2/21/2017	5	22	
3	Building Construction	Building Construction	2/21/2017	11/27/2017	5	200	
4	Paving	Paving	11/27/2017	12/6/2017	5	8	
5	Architectural Coating	Architectural Coating	12/6/2017	12/25/2017	5	14	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.69

Residential Indoor: 158,760; Residential Outdoor: 52,920; Non-Residential Indoor: 44,100; Non-Residential Outdoor: 14,700; Striped Parking Area: 1,800 (Architectural Coating – sqft)

OffRoad Equipment

Site 3 - El Dorado-Lake Tahoe County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	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
Architectural Coating	1	17.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	85.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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					
Fugitive Dust					0.2983	0.0000	0.2983	0.0322	0.0000	0.0322			0.0000			0.0000
Off-Road	2.1335	26.7238	14.4219	0.0245		1.1097	1.1097		1.0209	1.0209		2,508.4086	2,508.4086	0.7686		2,527.6229
Total	**2.1335**	**26.7238**	**14.4219**	**0.0245**	**0.2983**	**1.1097**	**1.4079**	**0.0322**	**1.0209**	**1.0531**		**2,508.4086**	**2,508.4086**	**0.7686**		**2,527.6229**

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	0.0565	0.0315	0.4096	7.5000e-004	0.0657	5.7000e-004	0.0663	0.0174	5.2000e-004	0.0180		74.3496	74.3496	3.1500e-003		74.4282
Total	**0.0565**	**0.0315**	**0.4096**	**7.5000e-004**	**0.0657**	**5.7000e-004**	**0.0663**	**0.0174**	**5.2000e-004**	**0.0180**		**74.3496**	**74.3496**	**3.1500e-003**		**74.4282**

3.2 Site Preparation - 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					
Fugitive Dust					0.2983	0.0000	0.2983	0.0322	0.0000	0.0322			0.0000			0.0000
Off-Road	2.1335	26.7238	14.4219	0.0245		1.1097	1.1097		1.0209	1.0209	0.0000	2,508.4086	2,508.4086	0.7686		2,527.6229
Total	**2.1335**	**26.7238**	**14.4219**	**0.0245**	**0.2983**	**1.1097**	**1.4079**	**0.0322**	**1.0209**	**1.0531**	**0.0000**	**2,508.4086**	**2,508.4086**	**0.7686**		**2,527.6229**

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	0.0565	0.0315	0.4096	7.5000e-004	0.0657	5.7000e-004	0.0663	0.0174	5.2000e-004	0.0180		74.3496	74.3496	3.1500e-003		74.4282
Total	**0.0565**	**0.0315**	**0.4096**	**7.5000e-004**	**0.0657**	**5.7000e-004**	**0.0663**	**0.0174**	**5.2000e-004**	**0.0180**		**74.3496**	**74.3496**	**3.1500e-003**		**74.4282**

3.3 Grading - 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					
Fugitive Dust					6.1667	0.0000	6.1667	3.3258	0.0000	3.3258			0.0000			0.0000
Off-Road	2.3212	26.1643	10.7753	0.0206		1.2985	1.2985		1.1947	1.1947		2,112.1822	2,112.1822	0.6472		2,128.3614
Total	**2.3212**	**26.1643**	**10.7753**	**0.0206**	**6.1667**	**1.2985**	**7.4652**	**3.3258**	**1.1947**	**4.5205**		**2,112.1822**	**2,112.1822**	**0.6472**		**2,128.3614**

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	0.0706	0.0394	0.5120	9.4000e-004	0.0822	7.1000e-004	0.0829	0.0218	6.5000e-004	0.0224		92.9370	92.9370	3.9300e-003		93.0352
Total	**0.0706**	**0.0394**	**0.5120**	**9.4000e-004**	**0.0822**	**7.1000e-004**	**0.0829**	**0.0218**	**6.5000e-004**	**0.0224**		**92.9370**	**92.9370**	**3.9300e-003**		**93.0352**

3.3 Grading - 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					
Fugitive Dust					6.1667	0.0000	6.1667	3.3258	0.0000	3.3258			0.0000			0.0000
Off-Road	2.3212	26.1643	10.7753	0.0206		1.2985	1.2985		1.1947	1.1947	0.0000	2,112.1822	2,112.1822	0.6472		2,128.3614
Total	**2.3212**	**26.1643**	**10.7753**	**0.0206**	**6.1667**	**1.2985**	**7.4652**	**3.3258**	**1.1947**	**4.5205**	**0.0000**	**2,112.1822**	**2,112.1822**	**0.6472**		**2,128.3614**

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	0.0706	0.0394	0.5120	9.4000e-004	0.0822	7.1000e-004	0.0829	0.0218	6.5000e-004	0.0224		92.9370	92.9370	3.9300e-003		93.0352
Total	**0.0706**	**0.0394**	**0.5120**	**9.4000e-004**	**0.0822**	**7.1000e-004**	**0.0829**	**0.0218**	**6.5000e-004**	**0.0224**		**92.9370**	**92.9370**	**3.9300e-003**		**93.0352**

3.4 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	3.3418	23.0287	16.3102	0.0250		1.4697	1.4697		1.4068	1.4068		2,347.6211	2,347.6211	0.5228		2,360.6922
Total	**3.3418**	**23.0287**	**16.3102**	**0.0250**		**1.4697**	**1.4697**		**1.4068**	**1.4068**		**2,347.6211**	**2,347.6211**	**0.5228**		**2,360.6922**

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	0.1409	2.9766	1.0900	5.2300e-003	0.1278	0.0358	0.1635	0.0367	0.0342	0.0709		545.1908	545.1908	0.0165		545.6024
Worker	0.6004	0.3346	4.3523	7.9600e-003	0.6983	6.0100e-003	0.7043	0.1852	5.5500e-003	0.1908		789.9641	789.9641	0.0334		790.7995
Total	**0.7413**	**3.3112**	**5.4423**	**0.0132**	**0.8260**	**0.0418**	**0.8678**	**0.2219**	**0.0398**	**0.2617**		**1,335.1548**	**1,335.1548**	**0.0499**		**1,336.4018**

3.4 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	lb/day										lb/day					
Off-Road	3.3418	23.0287	16.3102	0.0250		1.4697	1.4697		1.4068	1.4068	0.0000	2,347.6211	2,347.6211	0.5228		2,360.6922
Total	**3.3418**	**23.0287**	**16.3102**	**0.0250**		**1.4697**	**1.4697**		**1.4068**	**1.4068**	**0.0000**	**2,347.6211**	**2,347.6211**	**0.5228**		**2,360.6922**

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	0.1409	2.9766	1.0900	5.2300e-003	0.1278	0.0358	0.1635	0.0367	0.0342	0.0709		545.1908	545.1908	0.0165		545.6024
Worker	0.6004	0.3346	4.3523	7.9600e-003	0.6983	6.0100e-003	0.7043	0.1852	5.5500e-003	0.1908		789.9641	789.9641	0.0334		790.7995
Total	**0.7413**	**3.3112**	**5.4423**	**0.0132**	**0.8260**	**0.0418**	**0.8678**	**0.2219**	**0.0398**	**0.2617**		**1,335.1548**	**1,335.1548**	**0.0499**		**1,336.4018**

3.5 Paving - 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	1.6589	16.6726	12.2090	0.0178		1.0334	1.0334		0.9519	0.9519		1,802.2682	1,802.2682	0.5420		1,815.8177
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6589**	**16.6726**	**12.2090**	**0.0178**		**1.0334**	**1.0334**		**0.9519**	**0.9519**		**1,802.2682**	**1,802.2682**	**0.5420**		**1,815.8177**

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	0.1060	0.0590	0.7681	1.4000e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		139.4054	139.4054	5.9000e-003		139.5529
Total	**0.1060**	**0.0590**	**0.7681**	**1.4000e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**139.4054**	**139.4054**	**5.9000e-003**		**139.5529**

3.5 Paving - 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	1.6589	16.6726	12.2090	0.0178		1.0334	1.0334		0.9519	0.9519	0.0000	1,802.2682	1,802.2682	0.5420		1,815.8177
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6589**	**16.6726**	**12.2090**	**0.0178**		**1.0334**	**1.0334**		**0.9519**	**0.9519**	**0.0000**	**1,802.2682**	**1,802.2682**	**0.5420**		**1,815.8177**

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	0.1060	0.0590	0.7681	1.4000e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		139.4054	139.4054	5.9000e-003		139.5529
Total	**0.1060**	**0.0590**	**0.7681**	**1.4000e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**139.4054**	**139.4054**	**5.9000e-003**		**139.5529**

3.6 Architectural Coating - 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	225.3603					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		282.1909
Total	**225.6926**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.1909**

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	0.1201	0.0669	0.8705	1.5900e-003	0.1397	1.2000e-003	0.1409	0.0370	1.1100e-003	0.0382		157.9928	157.9928	6.6800e-003		158.1599
Total	**0.1201**	**0.0669**	**0.8705**	**1.5900e-003**	**0.1397**	**1.2000e-003**	**0.1409**	**0.0370**	**1.1100e-003**	**0.0382**		**157.9928**	**157.9928**	**6.6800e-003**		**158.1599**

3.6 Architectural Coating - 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	225.3603					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		282.1909
Total	**225.6926**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.1909**

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	0.1201	0.0669	0.8705	1.5900e-003	0.1397	1.2000e-003	0.1409	0.0370	1.1100e-003	0.0382		157.9928	157.9928	6.6800e-003		158.1599
Total	**0.1201**	**0.0669**	**0.8705**	**1.5900e-003**	**0.1397**	**1.2000e-003**	**0.1409**	**0.0370**	**1.1100e-003**	**0.0382**		**157.9928**	**157.9928**	**6.6800e-003**		**158.1599**

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	5.1348	12.8578	46.6446	0.1029	7.7714	0.1479	7.9193	2.0788	0.1396	2.2184		10,291.7216	10,291.7216	0.4389		10,302.6952
Unmitigated	5.1348	12.8578	46.6446	0.1029	7.7714	0.1479	7.9193	2.0788	0.1396	2.2184		10,291.7216	10,291.7216	0.4389		10,302.6952

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	578.55	555.93	509.82	1,619,899	1,619,899
Enclosed Parking Structure	0.00	0.00	0.00		
Strip Mall	1,303.01	1,235.98	600.64	1,837,404	1,837,404
Total	1,881.56	1,791.91	1,110.46	3,457,303	3,457,303

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
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Apartments Mid Rise	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Strip Mall	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0189	0.1650	0.0939	1.0300e-003		0.0131	0.0131		0.0131	0.0131		206.2067	206.2067	3.9500e-003	3.7800e-003	207.4321
NaturalGas Unmitigated	0.0189	0.1650	0.0939	1.0300e-003		0.0131	0.0131		0.0131	0.0131		206.2067	206.2067	3.9500e-003	3.7800e-003	207.4321

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					
Apartments Mid Rise	1168.78	0.0126	0.1077	0.0458	6.9000e-004		8.7100e-003	8.7100e-003		8.7100e-003	8.7100e-003		137.5040	137.5040	2.6400e-003	2.5200e-003	138.3211
Enclosed Parking Structure	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	583.973	6.3000e-003	0.0573	0.0481	3.4000e-004		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003		68.7027	68.7027	1.3200e-003	1.2600e-003	69.1109
Total		**0.0189**	**0.1650**	**0.0939**	**1.0300e-003**		**0.0131**	**0.0131**		**0.0131**	**0.0131**		**206.2067**	**206.2067**	**3.9600e-003**	**3.7800e-003**	**207.4321**

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					
Apartments Mid Rise	1.16878	0.0126	0.1077	0.0458	6.9000e-004		8.7100e-003	8.7100e-003		8.7100e-003	8.7100e-003		137.5040	137.5040	2.6400e-003	2.5200e-003	138.3211
Enclosed Parking Structure	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	0.583973	6.3000e-003	0.0573	0.0481	3.4000e-004		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003		68.7027	68.7027	1.3200e-003	1.2600e-003	69.1109
Total		**0.0189**	**0.1650**	**0.0939**	**1.0300e-003**		**0.0131**	**0.0131**		**0.0131**	**0.0131**		**206.2067**	**206.2067**	**3.9600e-003**	**3.7800e-003**	**207.4321**

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	22.6251	3.2873	232.7467	0.6410		31.4318	31.4318		31.4318	31.4318	4,728.0672	12.9371	4,741.0043	25.6392	0.0000	5,381.9849
Unmitigated	22.6251	3.2873	232.7467	0.6410		31.4318	31.4318		31.4318	31.4318	4,728.0672	12.9371	4,741.0043	25.6392	0.0000	5,381.9849

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3176					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	19.2198	3.2033	225.5122	0.6407		31.3923	31.3923		31.3923	31.3923	4,728.0672	0.0000	4,728.0672	25.6264	0.0000	5,368.7267
Landscaping	0.2234	0.0840	7.2345	3.8000e-004		0.0395	0.0395		0.0395	0.0395		12.9371	12.9371	0.0128		13.2581
Total	**22.6252**	**3.2873**	**232.7467**	**0.6410**		**31.4318**	**31.4318**		**31.4318**	**31.4318**	**4,728.0672**	**12.9371**	**4,741.0043**	**25.6392**	**0.0000**	**5,381.9849**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3176					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	19.2198	3.2033	225.5122	0.6407		31.3923	31.3923		31.3923	31.3923	4,728.0672	0.0000	4,728.0672	25.6264	0.0000	5,368.7267
Landscaping	0.2234	0.0840	7.2345	3.8000e-004		0.0395	0.0395		0.0395	0.0395		12.9371	12.9371	0.0128		13.2581
Total	**22.6252**	**3.2873**	**232.7467**	**0.6410**		**31.4318**	**31.4318**		**31.4318**	**31.4318**	**4,728.0672**	**12.9371**	**4,741.0043**	**25.6392**	**0.0000**	**5,381.9849**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Site 3

El Dorado-Lake Tahoe County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	30.00	1000sqft	0.69	30,000.00	0
Apartments Mid Rise	87.00	Dwelling Unit	1.00	78,400.00	249
Strip Mall	29.40	1000sqft	0.67	29,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - size/LU based on concept plan in PD

Construction Phase - construction compressed to one year for conservative analysis.

Woodstoves - no wood stoves

Site 3 - El Dorado-Lake Tahoe County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	NumDays	220.00	200.00
tblConstructionPhase	NumDays	6.00	22.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	3.00	16.00
tblConstructionPhase	PhaseEndDate	1/17/2018	12/25/2017
tblConstructionPhase	PhaseEndDate	12/20/2017	11/27/2017
tblConstructionPhase	PhaseEndDate	2/15/2017	2/21/2017
tblConstructionPhase	PhaseEndDate	1/3/2018	12/6/2017
tblConstructionPhase	PhaseEndDate	2/7/2017	1/23/2017
tblConstructionPhase	PhaseStartDate	1/4/2018	12/6/2017
tblConstructionPhase	PhaseStartDate	2/16/2017	2/21/2017
tblConstructionPhase	PhaseStartDate	2/8/2017	1/23/2017
tblConstructionPhase	PhaseStartDate	12/21/2017	11/27/2017
tblConstructionPhase	PhaseStartDate	2/3/2017	1/1/2017
tblFireplaces	NumberGas	47.85	0.00
tblFireplaces	NumberWood	30.45	0.00
tblGrading	AcresOfGrading	11.00	3.00
tblGrading	AcresOfGrading	24.00	4.50
tblLandUse	BuildingSpaceSquareFeet	87,000.00	78,400.00
tblLandUse	LandUseSquareFeet	87,000.00	78,400.00
tblLandUse	LotAcreage	2.29	1.00
tblWoodstoves	NumberCatalytic	4.35	0.00
tblWoodstoves	NumberNoncatalytic	4.35	87.00

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	227.5826	52.9758	34.6376	0.0588	7.0749	2.8112	9.8861	3.5696	2.6424	6.2120	0.0000	5,794.2597	5,794.2597	1.4225	0.0000	5,824.8433
Maximum	**227.5826**	**52.9758**	**34.6376**	**0.0588**	**7.0749**	**2.8112**	**9.8861**	**3.5696**	**2.6424**	**6.2120**	**0.0000**	**5,794.2597**	**5,794.2597**	**1.4225**	**0.0000**	**5,824.8433**

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	227.5826	52.9758	34.6376	0.0588	7.0749	2.8112	9.8861	3.5696	2.6424	6.2120	0.0000	5,794.2597	5,794.2597	1.4225	0.0000	5,824.8433
Maximum	**227.5826**	**52.9758**	**34.6376**	**0.0588**	**7.0749**	**2.8112**	**9.8861**	**3.5696**	**2.6424**	**6.2120**	**0.0000**	**5,794.2597**	**5,794.2597**	**1.4225**	**0.0000**	**5,824.8433**

	ROG	**NOx**	**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	22.6251	3.2873	232.7467	0.6410		31.4318	31.4318		31.4318	31.4318	4,728.0672	12.9371	4,741.0043	25.6392	0.0000	5,381.9849
Energy	0.0189	0.1650	0.0939	1.0300e-003		0.0131	0.0131		0.0131	0.0131		206.2067	206.2067	3.9500e-003	3.7800e-003	207.4321
Mobile	4.2356	14.0739	48.0512	0.0948	7.7714	0.1489	7.9202	2.0788	0.1405	2.2193		9,479.9533	9,479.9533	0.4433		9,491.0352
Total	**26.8796**	**17.5261**	**280.8918**	**0.7368**	**7.7714**	**31.5937**	**39.3651**	**2.0788**	**31.5854**	**33.6642**	**4,728.0672**	**9,699.0970**	**14,427.1642**	**26.0865**	**3.7800e-003**	**15,080.4521**

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	22.6251	3.2873	232.7467	0.6410		31.4318	31.4318		31.4318	31.4318	4,728.0672	12.9371	4,741.0043	25.6392	0.0000	5,381.9849
Energy	0.0189	0.1650	0.0939	1.0300e-003		0.0131	0.0131		0.0131	0.0131		206.2067	206.2067	3.9500e-003	3.7800e-003	207.4321
Mobile	4.2356	14.0739	48.0512	0.0948	7.7714	0.1489	7.9202	2.0788	0.1405	2.2193		9,479.9533	9,479.9533	0.4433		9,491.0352
Total	**26.8796**	**17.5261**	**280.8918**	**0.7368**	**7.7714**	**31.5937**	**39.3651**	**2.0788**	**31.5854**	**33.6642**	**4,728.0672**	**9,699.0970**	**14,427.1642**	**26.0865**	**3.7800e-003**	**15,080.4521**

	ROG	NOx	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	1/1/2017	1/23/2017	5	16	
2	Grading	Grading	1/23/2017	2/21/2017	5	22	
3	Building Construction	Building Construction	2/21/2017	11/27/2017	5	200	
4	Paving	Paving	11/27/2017	12/6/2017	5	8	
5	Architectural Coating	Architectural Coating	12/6/2017	12/25/2017	5	14	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.69

Residential Indoor: 158,760; Residential Outdoor: 52,920; Non-Residential Indoor: 44,100; Non-Residential Outdoor: 14,700; Striped Parking Area: 1,800 (Architectural Coating – sqft)

OffRoad Equipment

Site 3 - El Dorado-Lake Tahoe County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	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
Architectural Coating	1	17.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	85.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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					
Fugitive Dust					0.2983	0.0000	0.2983	0.0322	0.0000	0.0322			0.0000			0.0000
Off-Road	2.1335	26.7238	14.4219	0.0245		1.1097	1.1097		1.0209	1.0209		2,508.4086	2,508.4086	0.7686		2,527.6229
Total	**2.1335**	**26.7238**	**14.4219**	**0.0245**	**0.2983**	**1.1097**	**1.4079**	**0.0322**	**1.0209**	**1.0531**		**2,508.4086**	**2,508.4086**	**0.7686**		**2,527.6229**

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	0.0578	0.0390	0.3912	6.8000e-004	0.0657	5.7000e-004	0.0663	0.0174	5.2000e-004	0.0180		67.2233	67.2233	2.9900e-003		67.2982
Total	**0.0578**	**0.0390**	**0.3912**	**6.8000e-004**	**0.0657**	**5.7000e-004**	**0.0663**	**0.0174**	**5.2000e-004**	**0.0180**		**67.2233**	**67.2233**	**2.9900e-003**		**67.2982**

3.2 Site Preparation - 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					
Fugitive Dust					0.2983	0.0000	0.2983	0.0322	0.0000	0.0322			0.0000			0.0000
Off-Road	2.1335	26.7238	14.4219	0.0245		1.1097	1.1097		1.0209	1.0209	0.0000	2,508.4086	2,508.4086	0.7686		2,527.6229
Total	**2.1335**	**26.7238**	**14.4219**	**0.0245**	**0.2983**	**1.1097**	**1.4079**	**0.0322**	**1.0209**	**1.0531**	**0.0000**	**2,508.4086**	**2,508.4086**	**0.7686**		**2,527.6229**

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	0.0578	0.0390	0.3912	6.8000e-004	0.0657	5.7000e-004	0.0663	0.0174	5.2000e-004	0.0180		67.2233	67.2233	2.9900e-003		67.2982
Total	**0.0578**	**0.0390**	**0.3912**	**6.8000e-004**	**0.0657**	**5.7000e-004**	**0.0663**	**0.0174**	**5.2000e-004**	**0.0180**		**67.2233**	**67.2233**	**2.9900e-003**		**67.2982**

3.3 Grading - 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					
Fugitive Dust					6.1667	0.0000	6.1667	3.3258	0.0000	3.3258			0.0000			0.0000
Off-Road	2.3212	26.1643	10.7753	0.0206		1.2985	1.2985		1.1947	1.1947		2,112.1822	2,112.1822	0.6472		2,128.3614
Total	**2.3212**	**26.1643**	**10.7753**	**0.0206**	**6.1667**	**1.2985**	**7.4652**	**3.3258**	**1.1947**	**4.5205**		**2,112.1822**	**2,112.1822**	**0.6472**		**2,128.3614**

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	0.0722	0.0487	0.4890	8.5000e-004	0.0822	7.1000e-004	0.0829	0.0218	6.5000e-004	0.0224		84.0291	84.0291	3.7400e-003		84.1227
Total	**0.0722**	**0.0487**	**0.4890**	**8.5000e-004**	**0.0822**	**7.1000e-004**	**0.0829**	**0.0218**	**6.5000e-004**	**0.0224**		**84.0291**	**84.0291**	**3.7400e-003**		**84.1227**

3.3 Grading - 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					
Fugitive Dust					6.1667	0.0000	6.1667	3.3258	0.0000	3.3258			0.0000			0.0000
Off-Road	2.3212	26.1643	10.7753	0.0206		1.2985	1.2985		1.1947	1.1947	0.0000	2,112.1822	2,112.1822	0.6472		2,128.3614
Total	**2.3212**	**26.1643**	**10.7753**	**0.0206**	**6.1667**	**1.2985**	**7.4652**	**3.3258**	**1.1947**	**4.5205**	**0.0000**	**2,112.1822**	**2,112.1822**	**0.6472**		**2,128.3614**

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	0.0722	0.0487	0.4890	8.5000e-004	0.0822	7.1000e-004	0.0829	0.0218	6.5000e-004	0.0224		84.0291	84.0291	3.7400e-003		84.1227
Total	**0.0722**	**0.0487**	**0.4890**	**8.5000e-004**	**0.0822**	**7.1000e-004**	**0.0829**	**0.0218**	**6.5000e-004**	**0.0224**		**84.0291**	**84.0291**	**3.7400e-003**		**84.1227**

3.4 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	3.3418	23.0287	16.3102	0.0250		1.4697	1.4697		1.4068	1.4068		2,347.6211	2,347.6211	0.5228		2,360.6922
Total	**3.3418**	**23.0287**	**16.3102**	**0.0250**		**1.4697**	**1.4697**		**1.4068**	**1.4068**		**2,347.6211**	**2,347.6211**	**0.5228**		**2,360.6922**

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	0.1473	3.0600	1.2289	5.1400e-003	0.1278	0.0363	0.1641	0.0367	0.0348	0.0715		536.1795	536.1795	0.0178		536.6242
Worker	0.6139	0.4140	4.1561	7.2000e-003	0.6983	6.0100e-003	0.7043	0.1852	5.5500e-003	0.1908		714.2477	714.2477	0.0318		715.0428
Total	**0.7611**	**3.4740**	**5.3850**	**0.0123**	**0.8260**	**0.0423**	**0.8684**	**0.2219**	**0.0403**	**0.2622**		**1,250.4272**	**1,250.4272**	**0.0496**		**1,251.6670**

3.4 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	lb/day										lb/day					
Off-Road	3.3418	23.0287	16.3102	0.0250		1.4697	1.4697		1.4068	1.4068	0.0000	2,347.6211	2,347.6211	0.5228		2,360.6922
Total	**3.3418**	**23.0287**	**16.3102**	**0.0250**		**1.4697**	**1.4697**		**1.4068**	**1.4068**	**0.0000**	**2,347.6211**	**2,347.6211**	**0.5228**		**2,360.6922**

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	0.1473	3.0600	1.2289	5.1400e-003	0.1278	0.0363	0.1641	0.0367	0.0348	0.0715		536.1795	536.1795	0.0178		536.6242
Worker	0.6139	0.4140	4.1561	7.2000e-003	0.6983	6.0100e-003	0.7043	0.1852	5.5500e-003	0.1908		714.2477	714.2477	0.0318		715.0428
Total	**0.7611**	**3.4740**	**5.3850**	**0.0123**	**0.8260**	**0.0423**	**0.8684**	**0.2219**	**0.0403**	**0.2622**		**1,250.4272**	**1,250.4272**	**0.0496**		**1,251.6670**

3.5 Paving - 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	1.6589	16.6726	12.2090	0.0178		1.0334	1.0334		0.9519	0.9519		1,802.2682	1,802.2682	0.5420		1,815.8177
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6589**	**16.6726**	**12.2090**	**0.0178**		**1.0334**	**1.0334**		**0.9519**	**0.9519**		**1,802.2682**	**1,802.2682**	**0.5420**		**1,815.8177**

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	0.1083	0.0731	0.7334	1.2700e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		126.0437	126.0437	5.6100e-003		126.1840
Total	**0.1083**	**0.0731**	**0.7334**	**1.2700e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**126.0437**	**126.0437**	**5.6100e-003**		**126.1840**

3.5 Paving - 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	1.6589	16.6726	12.2090	0.0178		1.0334	1.0334		0.9519	0.9519	0.0000	1,802.2682	1,802.2682	0.5420		1,815.8177
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6589**	**16.6726**	**12.2090**	**0.0178**		**1.0334**	**1.0334**		**0.9519**	**0.9519**	**0.0000**	**1,802.2682**	**1,802.2682**	**0.5420**		**1,815.8177**

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	0.1083	0.0731	0.7334	1.2700e-003	0.1232	1.0600e-003	0.1243	0.0327	9.8000e-004	0.0337		126.0437	126.0437	5.6100e-003		126.1840
Total	**0.1083**	**0.0731**	**0.7334**	**1.2700e-003**	**0.1232**	**1.0600e-003**	**0.1243**	**0.0327**	**9.8000e-004**	**0.0337**		**126.0437**	**126.0437**	**5.6100e-003**		**126.1840**

3.6 Architectural Coating - 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	225.3603					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		282.1909
Total	**225.6926**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.1909**

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	0.1228	0.0828	0.8312	1.4400e-003	0.1397	1.2000e-003	0.1409	0.0370	1.1100e-003	0.0382		142.8495	142.8495	6.3600e-003		143.0086
Total	**0.1228**	**0.0828**	**0.8312**	**1.4400e-003**	**0.1397**	**1.2000e-003**	**0.1409**	**0.0370**	**1.1100e-003**	**0.0382**		**142.8495**	**142.8495**	**6.3600e-003**		**143.0086**

3.6 Architectural Coating - 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	225.3603					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		282.1909
Total	**225.6926**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.1909**

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	0.1228	0.0828	0.8312	1.4400e-003	0.1397	1.2000e-003	0.1409	0.0370	1.1100e-003	0.0382		142.8495	142.8495	6.3600e-003		143.0086
Total	**0.1228**	**0.0828**	**0.8312**	**1.4400e-003**	**0.1397**	**1.2000e-003**	**0.1409**	**0.0370**	**1.1100e-003**	**0.0382**		**142.8495**	**142.8495**	**6.3600e-003**		**143.0086**

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	4.2356	14.0739	48.0512	0.0948	7.7714	0.1489	7.9202	2.0788	0.1405	2.2193		9,479.9533	9,479.9533	0.4433		9,491.0352
Unmitigated	4.2356	14.0739	48.0512	0.0948	7.7714	0.1489	7.9202	2.0788	0.1405	2.2193		9,479.9533	9,479.9533	0.4433		9,491.0352

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	578.55	555.93	509.82	1,619,899	1,619,899
Enclosed Parking Structure	0.00	0.00	0.00		
Strip Mall	1,303.01	1,235.98	600.64	1,837,404	1,837,404
Total	1,881.56	1,791.91	1,110.46	3,457,303	3,457,303

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
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Apartments Mid Rise	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188
Strip Mall	0.493048	0.045614	0.226310	0.149206	0.042262	0.008296	0.014581	0.008742	0.001550	0.001340	0.006001	0.000863	0.002188

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0189	0.1650	0.0939	1.0300e-003		0.0131	0.0131		0.0131	0.0131		206.2067	206.2067	3.9500e-003	3.7800e-003	207.4321
NaturalGas Unmitigated	0.0189	0.1650	0.0939	1.0300e-003		0.0131	0.0131		0.0131	0.0131		206.2067	206.2067	3.9500e-003	3.7800e-003	207.4321

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					
Apartments Mid Rise	1168.78	0.0126	0.1077	0.0458	6.9000e-004		8.7100e-003	8.7100e-003		8.7100e-003	8.7100e-003		137.5040	137.5040	2.6400e-003	2.5200e-003	138.3211
Enclosed Parking Structure	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	583.973	6.3000e-003	0.0573	0.0481	3.4000e-004		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003		68.7027	68.7027	1.3200e-003	1.2600e-003	69.1109
Total		**0.0189**	**0.1650**	**0.0939**	**1.0300e-003**		**0.0131**	**0.0131**		**0.0131**	**0.0131**		**206.2067**	**206.2067**	**3.9600e-003**	**3.7800e-003**	**207.4321**

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					
Apartments Mid Rise	1.16878	0.0126	0.1077	0.0458	6.9000e-004		8.7100e-003	8.7100e-003		8.7100e-003	8.7100e-003		137.5040	137.5040	2.6400e-003	2.5200e-003	138.3211
Enclosed Parking Structure	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	0.583973	6.3000e-003	0.0573	0.0481	3.4000e-004		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003		68.7027	68.7027	1.3200e-003	1.2600e-003	69.1109
Total		**0.0189**	**0.1650**	**0.0939**	**1.0300e-003**		**0.0131**	**0.0131**		**0.0131**	**0.0131**		**206.2067**	**206.2067**	**3.9600e-003**	**3.7800e-003**	**207.4321**

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	22.6251	3.2873	232.7467	0.6410		31.4318	31.4318		31.4318	31.4318	4,728.0672	12.9371	4,741.0043	25.6392	0.0000	5,381.9849
Unmitigated	22.6251	3.2873	232.7467	0.6410		31.4318	31.4318		31.4318	31.4318	4,728.0672	12.9371	4,741.0043	25.6392	0.0000	5,381.9849

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3176					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	19.2198	3.2033	225.5122	0.6407		31.3923	31.3923		31.3923	31.3923	4,728.0672	0.0000	4,728.0672	25.6264	0.0000	5,368.7267
Landscaping	0.2234	0.0840	7.2345	3.8000e-004		0.0395	0.0395		0.0395	0.0395		12.9371	12.9371	0.0128		13.2581
Total	**22.6252**	**3.2873**	**232.7467**	**0.6410**		**31.4318**	**31.4318**		**31.4318**	**31.4318**	**4,728.0672**	**12.9371**	**4,741.0043**	**25.6392**	**0.0000**	**5,381.9849**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3176					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	19.2198	3.2033	225.5122	0.6407		31.3923	31.3923		31.3923	31.3923	4,728.0672	0.0000	4,728.0672	25.6264	0.0000	5,368.7267
Landscaping	0.2234	0.0840	7.2345	3.8000e-004		0.0395	0.0395		0.0395	0.0395		12.9371	12.9371	0.0128		13.2581
Total	**22.6252**	**3.2873**	**232.7467**	**0.6410**		**31.4318**	**31.4318**		**31.4318**	**31.4318**	**4,728.0672**	**12.9371**	**4,741.0043**	**25.6392**	**0.0000**	**5,381.9849**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Alignment_Demo

El Dorado-Lake Tahoe County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	0.32	1,800.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Run is used to estimate emissions from Demolition ONLY, so entered land use is irrelevent- no operational emissions.

Construction Phase - __

Off-road Equipment - Caleemod Defaults

Demolition - based on calulations of area to be demo from aerial imagery

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	42.00
tblConstructionPhase	PhaseEndDate	1/4/2017	3/3/2017
tblProjectCharacteristics	OperationalYear	2018	2019

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	0.0322	0.3772	0.2231	5.7000e-004	0.0860	0.0169	0.1029	0.0139	0.0161	0.0301	0.0000	52.5545	52.5545	5.0400e-003	0.0000	52.6805
Maximum	**0.0322**	**0.3772**	**0.2231**	**5.7000e-004**	**0.0860**	**0.0169**	**0.1029**	**0.0139**	**0.0161**	**0.0301**	**0.0000**	**52.5545**	**52.5545**	**5.0400e-003**	**0.0000**	**52.6805**

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	0.0322	0.3772	0.2231	5.7000e-004	0.0860	0.0169	0.1029	0.0139	0.0161	0.0301	0.0000	52.5544	52.5544	5.0400e-003	0.0000	52.6805
Maximum	**0.0322**	**0.3772**	**0.2231**	**5.7000e-004**	**0.0860**	**0.0169**	**0.1029**	**0.0139**	**0.0161**	**0.0301**	**0.0000**	**52.5544**	**52.5544**	**5.0400e-003**	**0.0000**	**52.6805**

	ROG	**NOx**	**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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-5-2017**	**4-4-2017**	0.4048	0.4048
		Highest	0.4048	0.4048

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0728	1.3100e-003	0.0849	1.4000e-004		0.0109	0.0109		0.0109	0.0109	1.0330	0.4453	1.4783	9.7000e-004	8.0000e-005	1.5266
Energy	8.0000e-005	6.9000e-004	2.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	3.5078	3.5078	1.4000e-004	4.0000e-005	3.5232
Mobile	4.0400e-003	0.0153	0.0495	1.2000e-004	0.0100	1.7000e-004	0.0102	2.6900e-003	1.6000e-004	2.8500e-003	0.0000	11.1595	11.1595	4.4000e-004	0.0000	11.1704
Waste						0.0000	0.0000		0.0000	0.0000	0.1522	0.0000	0.1522	9.0000e-003	0.0000	0.3772
Water						0.0000	0.0000		0.0000	0.0000	0.0207	0.1444	0.1651	2.1300e-003	5.0000e-005	0.2336
Total	**0.0769**	**0.0173**	**0.1347**	**2.6000e-004**	**0.0100**	**0.0111**	**0.0211**	**2.6900e-003**	**0.0111**	**0.0138**	**1.2059**	**15.2571**	**16.4629**	**0.0127**	**1.7000e-004**	**16.8311**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0728	1.3100e-003	0.0849	1.4000e-004		0.0109	0.0109		0.0109	0.0109	1.0330	0.4453	1.4783	9.7000e-004	8.0000e-005	1.5266
Energy	8.0000e-005	6.9000e-004	2.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	3.5078	3.5078	1.4000e-004	4.0000e-005	3.5232
Mobile	4.0400e-003	0.0153	0.0495	1.2000e-004	0.0100	1.7000e-004	0.0102	2.6900e-003	1.6000e-004	2.8500e-003	0.0000	11.1595	11.1595	4.4000e-004	0.0000	11.1704
Waste						0.0000	0.0000		0.0000	0.0000	0.1522	0.0000	0.1522	9.0000e-003	0.0000	0.3772
Water						0.0000	0.0000		0.0000	0.0000	0.0207	0.1444	0.1651	2.1300e-003	5.0000e-005	0.2336
Total	**0.0769**	**0.0173**	**0.1347**	**2.6000e-004**	**0.0100**	**0.0111**	**0.0211**	**2.6900e-003**	**0.0111**	**0.0138**	**1.2059**	**15.2571**	**16.4629**	**0.0127**	**1.7000e-004**	**16.8311**

	ROG	**NOx**	**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	1/5/2017	3/3/2017	5	42	

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; Striped Parking Area: 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	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

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	4	10.00	0.00	714.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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					
Fugitive Dust					0.0784	0.0000	0.0784	0.0119	0.0000	0.0119	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0254	0.2205	0.1663	2.5000e-004		0.0154	0.0154		0.0147	0.0147	0.0000	22.4668	22.4668	4.4200e-003	0.0000	22.5773
Total	**0.0254**	**0.2205**	**0.1663**	**2.5000e-004**	**0.0784**	**0.0154**	**0.0938**	**0.0119**	**0.0147**	**0.0265**	**0.0000**	**22.4668**	**22.4668**	**4.4200e-003**	**0.0000**	**22.5773**

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	5.3900e-003	0.1558	0.0468	3.0000e-004	5.9300e-003	1.5400e-003	7.4700e-003	1.6200e-003	1.4800e-003	3.1000e-003	0.0000	28.4529	28.4529	5.5000e-004	0.0000	28.4668
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3700e-003	9.5000e-004	0.0100	2.0000e-005	1.6500e-003	1.0000e-005	1.6700e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.6347	1.6347	7.0000e-005	0.0000	1.6365
Total	**6.7600e-003**	**0.1568**	**0.0569**	**3.2000e-004**	**7.5800e-003**	**1.5500e-003**	**9.1400e-003**	**2.0600e-003**	**1.4900e-003**	**3.5500e-003**	**0.0000**	**30.0876**	**30.0876**	**6.2000e-004**	**0.0000**	**30.1032**

3.2 Demolition - 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					
Fugitive Dust					0.0784	0.0000	0.0784	0.0119	0.0000	0.0119	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0254	0.2205	0.1663	2.5000e-004		0.0154	0.0154		0.0147	0.0147	0.0000	22.4668	22.4668	4.4200e-003	0.0000	22.5773
Total	**0.0254**	**0.2205**	**0.1663**	**2.5000e-004**	**0.0784**	**0.0154**	**0.0938**	**0.0119**	**0.0147**	**0.0265**	**0.0000**	**22.4668**	**22.4668**	**4.4200e-003**	**0.0000**	**22.5773**

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	5.3900e-003	0.1558	0.0468	3.0000e-004	5.9300e-003	1.5400e-003	7.4700e-003	1.6200e-003	1.4800e-003	3.1000e-003	0.0000	28.4529	28.4529	5.5000e-004	0.0000	28.4668
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3700e-003	9.5000e-004	0.0100	2.0000e-005	1.6500e-003	1.0000e-005	1.6700e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.6347	1.6347	7.0000e-005	0.0000	1.6365
Total	**6.7600e-003**	**0.1568**	**0.0569**	**3.2000e-004**	**7.5800e-003**	**1.5500e-003**	**9.1400e-003**	**2.0600e-003**	**1.4900e-003**	**3.5500e-003**	**0.0000**	**30.0876**	**30.0876**	**6.2000e-004**	**0.0000**	**30.1032**

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	4.0400e-003	0.0153	0.0495	1.2000e-004	0.0100	1.7000e-004	0.0102	2.6900e-003	1.6000e-004	2.8500e-003	0.0000	11.1595	11.1595	4.4000e-004	0.0000	11.1704
Unmitigated	4.0400e-003	0.0153	0.0495	1.2000e-004	0.0100	1.7000e-004	0.0102	2.6900e-003	1.6000e-004	2.8500e-003	0.0000	11.1595	11.1595	4.4000e-004	0.0000	11.1704

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	9.52	9.91	8.62	27,062	27,062
Total	9.52	9.91	8.62	27,062	27,062

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
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.503470	0.043416	0.226017	0.144790	0.038824	0.007695	0.015319	0.009013	0.001565	0.001250	0.005814	0.000843	0.001986

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	2.7120	2.7120	1.2000e-004	3.0000e-005	2.7227
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.7120	2.7120	1.2000e-004	3.0000e-005	2.7227
NaturalGas Mitigated	8.0000e-005	6.9000e-004	2.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.7958	0.7958	2.0000e-005	1.0000e-005	0.8005
NaturalGas Unmitigated	8.0000e-005	6.9000e-004	2.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.7958	0.7958	2.0000e-005	1.0000e-005	0.8005

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					
Single Family Housing	14912.3	8.0000e-005	6.9000e-004	2.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.7958	0.7958	2.0000e-005	1.0000e-005	0.8005
Total		**8.0000e-005**	**6.9000e-004**	**2.9000e-004**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.7958**	**0.7958**	**2.0000e-005**	**1.0000e-005**	**0.8005**

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					
Single Family Housing	14912.3	8.0000e-005	6.9000e-004	2.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.7958	0.7958	2.0000e-005	1.0000e-005	0.8005
Total		**8.0000e-005**	**6.9000e-004**	**2.9000e-004**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.7958**	**0.7958**	**2.0000e-005**	**1.0000e-005**	**0.8005**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	9322.55	2.7120	1.2000e-004	3.0000e-005	2.7227
Total		**2.7120**	**1.2000e-004**	**3.0000e-005**	**2.7227**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	9322.55	2.7120	1.2000e-004	3.0000e-005	2.7227
Total		**2.7120**	**1.2000e-004**	**3.0000e-005**	**2.7227**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0728	1.3100e-003	0.0849	1.4000e-004		0.0109	0.0109		0.0109	0.0109	1.0330	0.4453	1.4783	9.7000e-004	8.0000e-005	1.5266
Unmitigated	0.0728	1.3100e-003	0.0849	1.4000e-004		0.0109	0.0109		0.0109	0.0109	1.0330	0.4453	1.4783	9.7000e-004	8.0000e-005	1.5266

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	2.8200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0628	1.2300e-003	0.0775	1.4000e-004		0.0109	0.0109		0.0109	0.0109	1.0330	0.4332	1.4662	9.5000e-004	8.0000e-005	1.5142
Landscaping	2.3000e-004	9.0000e-005	7.4600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
Total	**0.0728**	**1.3200e-003**	**0.0849**	**1.4000e-004**		**0.0109**	**0.0109**		**0.0109**	**0.0109**	**1.0330**	**0.4453**	**1.4783**	**9.6000e-004**	**8.0000e-005**	**1.5266**

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	2.8200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0628	1.2300e-003	0.0775	1.4000e-004		0.0109	0.0109		0.0109	0.0109	1.0330	0.4332	1.4662	9.5000e-004	8.0000e-005	1.5142
Landscaping	2.3000e-004	9.0000e-005	7.4600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
Total	**0.0728**	**1.3200e-003**	**0.0849**	**1.4000e-004**		**0.0109**	**0.0109**		**0.0109**	**0.0109**	**1.0330**	**0.4453**	**1.4783**	**9.6000e-004**	**8.0000e-005**	**1.5266**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.1651	2.1300e-003	5.0000e-005	0.2336
Unmitigated	0.1651	2.1300e-003	5.0000e-005	0.2336

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.065154 / 0.0410754	0.1651	2.1300e-003	5.0000e-005	0.2336
Total		**0.1651**	**2.1300e-003**	**5.0000e-005**	**0.2336**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.065154 / 0.0410754	0.1651	2.1300e-003	5.0000e-005	0.2336
Total		**0.1651**	**2.1300e-003**	**5.0000e-005**	**0.2336**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1522	9.0000e-003	0.0000	0.3772
Unmitigated	0.1522	9.0000e-003	0.0000	0.3772

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	0.75	0.1522	9.0000e-003	0.0000	0.3772
Total		**0.1522**	**9.0000e-003**	**0.0000**	**0.3772**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	0.75	0.1522	9.0000e-003	0.0000	0.3772
Total		**0.1522**	**9.0000e-003**	**0.0000**	**0.3772**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Alignment_Demo

El Dorado-Lake Tahoe County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	0.32	1,800.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Run is used to estimate emissions from Demolition ONLY, so entered land use is irrelevent- no operational emissions.

Construction Phase - __

Off-road Equipment - Caleemod Defaults

Demolition - based on calulations of area to be demo from aerial imagery

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	42.00
tblConstructionPhase	PhaseEndDate	1/4/2017	3/3/2017
tblProjectCharacteristics	OperationalYear	2018	2019

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	1.5354	17.7206	10.6122	0.0273	4.1095	0.8056	4.9151	0.6672	0.7684	1.4356	0.0000	2,772.1740	2,772.1740	0.2642	0.0000	2,778.7783
Maximum	**1.5354**	**17.7206**	**10.6122**	**0.0273**	**4.1095**	**0.8056**	**4.9151**	**0.6672**	**0.7684**	**1.4356**	**0.0000**	**2,772.1740**	**2,772.1740**	**0.2642**	**0.0000**	**2,778.7783**

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	1.5354	17.7206	10.6122	0.0273	4.1095	0.8056	4.9151	0.6672	0.7684	1.4356	0.0000	2,772.1740	2,772.1740	0.2642	0.0000	2,778.7783
Maximum	**1.5354**	**17.7206**	**10.6122**	**0.0273**	**4.1095**	**0.8056**	**4.9151**	**0.6672**	**0.7684**	**1.4356**	**0.0000**	**2,772.1740**	**2,772.1740**	**0.2642**	**0.0000**	**2,778.7783**

	ROG	**NOx**	**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	1.5869	0.0309	1.9720	3.4300e-003		0.2653	0.2653		0.2653	0.2653	27.7717	11.7956	39.5673	0.0258	2.1800e-003	40.8627
Energy	4.4000e-004	3.7700e-003	1.6000e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.8065	4.8065	9.0000e-005	9.0000e-005	4.8351
Mobile	0.0276	0.0829	0.2981	7.6000e-004	0.0602	1.0000e-003	0.0612	0.0161	9.4000e-004	0.0170		75.7610	75.7610	2.8500e-003		75.8322
Total	**1.6149**	**0.1175**	**2.2717**	**4.2100e-003**	**0.0602**	**0.2666**	**0.3268**	**0.0161**	**0.2666**	**0.2827**	**27.7717**	**92.3631**	**120.1349**	**0.0287**	**2.2700e-003**	**121.5299**

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	1.5869	0.0309	1.9720	3.4300e-003		0.2653	0.2653		0.2653	0.2653	27.7717	11.7956	39.5673	0.0258	2.1800e-003	40.8627
Energy	4.4000e-004	3.7700e-003	1.6000e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.8065	4.8065	9.0000e-005	9.0000e-005	4.8351
Mobile	0.0276	0.0829	0.2981	7.6000e-004	0.0602	1.0000e-003	0.0612	0.0161	9.4000e-004	0.0170		75.7610	75.7610	2.8500e-003		75.8322
Total	**1.6149**	**0.1175**	**2.2717**	**4.2100e-003**	**0.0602**	**0.2666**	**0.3268**	**0.0161**	**0.2666**	**0.2827**	**27.7717**	**92.3631**	**120.1349**	**0.0287**	**2.2700e-003**	**121.5299**

	ROG	NOx	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	1/5/2017	3/3/2017	5	42	

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; Striped Parking Area: 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	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

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	4	10.00	0.00	714.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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					
Fugitive Dust					3.7344	0.0000	3.7344	0.5655	0.0000	0.5655			0.0000			0.0000
Off-Road	1.2100	10.4978	7.9182	0.0120		0.7318	0.7318		0.6978	0.6978		1,179.3075	1,179.3075	0.2319		1,185.1047
Total	**1.2100**	**10.4978**	**7.9182**	**0.0120**	**3.7344**	**0.7318**	**4.4661**	**0.5655**	**0.6978**	**1.2632**		**1,179.3075**	**1,179.3075**	**0.2319**		**1,185.1047**

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	0.2548	7.1834	2.1820	0.0144	0.2930	0.0731	0.3661	0.0800	0.0700	0.1499		1,499.9296	1,499.9296	0.0284		1,500.6384
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0706	0.0394	0.5120	9.4000e-004	0.0822	7.1000e-004	0.0829	0.0218	6.5000e-004	0.0224		92.9370	92.9370	3.9300e-003		93.0352
Total	**0.3254**	**7.2228**	**2.6940**	**0.0153**	**0.3751**	**0.0739**	**0.4490**	**0.1018**	**0.0706**	**0.1724**		**1,592.8665**	**1,592.8665**	**0.0323**		**1,593.6736**

3.2 Demolition - 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					
Fugitive Dust					3.7344	0.0000	3.7344	0.5655	0.0000	0.5655			0.0000			0.0000
Off-Road	1.2100	10.4978	7.9182	0.0120		0.7318	0.7318		0.6978	0.6978	0.0000	1,179.3075	1,179.3075	0.2319		1,185.1047
Total	**1.2100**	**10.4978**	**7.9182**	**0.0120**	**3.7344**	**0.7318**	**4.4661**	**0.5655**	**0.6978**	**1.2632**	**0.0000**	**1,179.3075**	**1,179.3075**	**0.2319**		**1,185.1047**

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	0.2548	7.1834	2.1820	0.0144	0.2930	0.0731	0.3661	0.0800	0.0700	0.1499		1,499.9296	1,499.9296	0.0284		1,500.6384
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0706	0.0394	0.5120	9.4000e-004	0.0822	7.1000e-004	0.0829	0.0218	6.5000e-004	0.0224		92.9370	92.9370	3.9300e-003		93.0352
Total	**0.3254**	**7.2228**	**2.6940**	**0.0153**	**0.3751**	**0.0739**	**0.4490**	**0.1018**	**0.0706**	**0.1724**		**1,592.8665**	**1,592.8665**	**0.0323**		**1,593.6736**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0276	0.0829	0.2981	7.6000e-004	0.0602	1.0000e-003	0.0612	0.0161	9.4000e-004	0.0170		75.7610	75.7610	2.8500e-003		75.8322
Unmitigated	0.0276	0.0829	0.2981	7.6000e-004	0.0602	1.0000e-003	0.0612	0.0161	9.4000e-004	0.0170		75.7610	75.7610	2.8500e-003		75.8322

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	9.52	9.91	8.62	27,062	27,062
Total	9.52	9.91	8.62	27,062	27,062

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
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.503470	0.043416	0.226017	0.144790	0.038824	0.007695	0.015319	0.009013	0.001565	0.001250	0.005814	0.000843	0.001986

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	4.4000e-004	3.7700e-003	1.6000e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.8065	4.8065	9.0000e-005	9.0000e-005	4.8351
NaturalGas Unmitigated	4.4000e-004	3.7700e-003	1.6000e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.8065	4.8065	9.0000e-005	9.0000e-005	4.8351

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					
Single Family Housing	40.8556	4.4000e-004	3.7700e-003	1.6000e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.8065	4.8065	9.0000e-005	9.0000e-005	4.8351
Total		**4.4000e-004**	**3.7700e-003**	**1.6000e-003**	**2.0000e-005**		**3.0000e-004**	**3.0000e-004**		**3.0000e-004**	**3.0000e-004**		**4.8065**	**4.8065**	**9.0000e-005**	**9.0000e-005**	**4.8351**

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					
Single Family Housing	0.0408556	4.4000e-004	3.7700e-003	1.6000e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.8065	4.8065	9.0000e-005	9.0000e-005	4.8351
Total		**4.4000e-004**	**3.7700e-003**	**1.6000e-003**	**2.0000e-005**		**3.0000e-004**	**3.0000e-004**		**3.0000e-004**	**3.0000e-004**		**4.8065**	**4.8065**	**9.0000e-005**	**9.0000e-005**	**4.8351**

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	1.5869	0.0309	1.9720	3.4300e-003		0.2653	0.2653		0.2653	0.2653	27.7717	11.7956	39.5673	0.0258	2.1800e-003	40.8627
Unmitigated	1.5869	0.0309	1.9720	3.4300e-003		0.2653	0.2653		0.2653	0.2653	27.7717	11.7956	39.5673	0.0258	2.1800e-003	40.8627

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0385					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.5304	0.0299	1.8891	3.4200e-003		0.2649	0.2649		0.2649	0.2649	27.7717	11.6471	39.4188	0.0256	2.1800e-003	40.7105
Landscaping	2.5400e-003	9.6000e-004	0.0829	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004		0.1486	0.1486	1.5000e-004		0.1522
Total	**1.5869**	**0.0309**	**1.9720**	**3.4200e-003**		**0.2653**	**0.2653**		**0.2653**	**0.2653**	**27.7717**	**11.7956**	**39.5673**	**0.0258**	**2.1800e-003**	**40.8627**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0385					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.5304	0.0299	1.8891	3.4200e-003		0.2649	0.2649		0.2649	0.2649	27.7717	11.6471	39.4188	0.0256	2.1800e-003	40.7105
Landscaping	2.5400e-003	9.6000e-004	0.0829	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004		0.1486	0.1486	1.5000e-004		0.1522
Total	**1.5869**	**0.0309**	**1.9720**	**3.4200e-003**		**0.2653**	**0.2653**		**0.2653**	**0.2653**	**27.7717**	**11.7956**	**39.5673**	**0.0258**	**2.1800e-003**	**40.8627**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Carbon Monoxide (CO) Hot Spots

The project is located in a maintenance area for the federal CO standards. Therefore, a local hot spot analyses for conformity purposes is required.

Caltrans has developed a Transportation Project-Level Carbon Monoxide Protocol (Protocol) for assessing CO impacts of transportation projects.[1] The protocol methodology determines if a project has the potential to exceed State or federal CO standards. Using this methodology, if a project is determined to not have a significant CO impact under these guidelines it would also not be considered to have a significant impact under State of Nevada standards. The procedures and guidelines comply with the following regulations without imposing additional requirements: Section 176(c) of the 1990 CAA Amendments, federal conformity rules, State and local adoptions of the federal conformity rules, the National Environmental Policy Act (NEPA), and the CEQA requirements [California Code of Regulations Title 21 Section 1509.3(25)].

An explanatory discussion of the steps (as identified in Figure 1 of the Protocol, Requirements for New Projects) used to determine the conformity requirements that apply to new projects is provided below.

3.1.1 Is the project exempt from all emissions analyses? (See Table 1 of Protocol.) **No.** The proposed project is not exempt from all emissions analyses.

3.1.2 Is the project exempt from regional emissions analysis? (See Table 2 of Protocol.) **No.** The proposed project includes the rerouting of U.S. 50. A regional emissions analysis was conducted by the TRPA as part of the Air Quality Conformity Analysis and demonstrated that the emissions are consistent with the motor vehicle emissions budgets and goals of the relevant State Implementation Plans. The proposed project is not exempt from regional emissions analysis.

3.1.3 Is the project locally defined as regionally significant? **YES.** As mentioned above, the proposed project includes the rerouting of U.S. 50. Therefore, the project is potentially significant.

3.1.4 Is the project in a federal attainment area? **NO.** The project is located within an attainment/maintenance area for the federal CO standard; therefore, the project is subject to a regional conformity determination.

3.1.5 Are there a currently conforming Regional Transportation Plan [RTP] and transportation improvement program [TIP]? **YES.**

3.1.6 Is the project included in the regional emissions analysis supporting the currently conforming Regional Transportation Plan [RTP] and transportation improvement program [TIP]? **YES.** The project is included in the TRPA 2012 RTP and the 2013 FTIP. Project ID: TMC0403, Description: US 50 South Shore Community Revitalization Project (US 50/SR 207 intersection south to Pioneer Trail intersection – realign roadway, reduce lanes, and transit-bike pedestrian lane).

[1] California, State of, 1997. Department of Transportation. Transportation Project-Level Carbon Monoxide Protocol.

3.1.7 Has the project design concept and/or scope changed significantly from that in the regional analysis? **NO.**

3.1.9 Examine local impacts. (Proceed to Section 4.)

Section 4 of the Protocol assesses local analysis. Assessment of the project's effect on localized ambient air quality is based on analysis of CO and PM_{10} emissions, with the focus on CO. Localized emissions of CO may increase with implementation of the proposed project. CO is used as an indicator of a project's direct and indirect impact on local air quality, because CO does not readily disperse in the local environment in cool weather when the wind is fairly still. As stated in the Protocol, the determination of project-level CO impacts should be carried out according to the Local Analysis flow chart shown in Figure 2 of the Protocol. The following discussion provides explanatory remarks for every step of the local analysis in Figure 2 of the protocol.

Level 1:

4.1.1 Is the project in a CO nonattainment area? **NO.** The project site is located in an area that has demonstrated attainment with the federal CO standard.

4.1.2 Was the area redesignated as "attainment" after the 1990 Clean Air Act? **YES.** EPA proposed approved the maintenance plans and redesignation request in 1998. (Proceed to Section 4.1.3)

4.1.3 Has "continued attainment" been verified with the local Air District, if appropriate? **YES.** The Tahoe Air Basin continues to be in attainment for CO. (Proceed to Section 4.7 – Level 7).

Level 7:

4.7.1 Does the project worsen air quality? **NO.** The following criteria were used to determine whether the project is likely to worsen air quality:

a. Project does not significantly increase the percentage of vehicles operating in cold start mode. Increasing the number of vehicles operating in cold start mode by as little as 2% should be considered potentially significant.

The percentage of vehicles operating in cold start mode is the same as compared to those used for the roadway in the attainment plan. It is anticipated that all vehicles operating on the new roadway are in a fully warmed-up mode. Therefore, this condition is met.

b. Project does not significantly increase traffic volumes. Increases in traffic volumes in excess of 5% should be considered potentially significant. Increasing the traffic volume by less than 5% may still be potentially significant if there is a corresponding reduction in average speeds.

The proposed project would reroute traffic so that it does not increase the average daily traffic (ADT). Refer to analysis in Chapter 3.6 Traffic and Transportation for further details. In addition, there is no reduction in average speeds; the project alternatives generally increase average speeds and reduce delay (see response to c. below for further details on delay). Therefore, this condition is met.

c. *Project improves traffic flow. For uninterrupted roadway segments, higher average speeds (up to 50 mph) should be regarded as an improvement in traffic flow. For intersection segments, higher average speeds and a decrease in average delay should be considered an improvement in traffic flow.*

The project would not generate additional 2020 (Opening Day) vehicle trips that could affect intersection operations; rather, it would implement improvements to existing transportation infrastructure and change circulation patterns within the study area. For Alternatives B, C, and D, US 50 would be realigned to connect to and approximately follow the existing Lake Parkway East alignment. Under Alternatives A and E, the existing US 50 roadway alignment would remain the same as existing conditions. The implementation of Alternative C would result in unacceptable intersection LOS at the New US 50/Pioneer Trail/Old US 50, Old US 50/Park Avenue/Heavenly Village Way, and New US 50/Lake Parkway/Old US 50 (roundabout option) intersections during summer peak-hour conditions. Thus, this criterion is not met for all project alternatives.

4.7.2 Is the project suspected of resulting in higher CO concentrations than those existing within the region at the time of attainment demonstration? **NO.** To demonstrate that the proposed project would not result in any new exceedances, the CO concentrations at the most congested intersections in the project area were modeled. Table 1 lists the peak 1-hour and 8-hour CO concentrations under the with-project conditions. As shown, none of the intersections would result in any concentrations exceeding the 1-hour or 8-hour CO standards.

The CO Protocol indicates that further analysis is not necessary. Therefore, a detailed hotspot analysis is not required and CO concentrations would not be expected to exceed federal or State standards.

Table 1: 2018 Peak Intersection CO Concentrations (ppm)

Intersection	Alternative 1		Alternative 2		Alternative 3		Alternative 4		Exceeds State Standards?	
	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr (20.0 ppm)	8-Hr (6.0 ppm)
U.S. 50/Pioneer Trail	9.4	5.0	9.4	5.0	9.4	5.0	9.1	4.8	No	No
U.S. 50/Park Ave	8.0	4.0	8.2	4.2	9.5	5.1	8.7	4.5	No	No
U.S. 50/Lake Parkway	9.4	5.0	9.7	5.2	9.4	5.0	8.5	4.4	No	No
Park Ave/Heavenly Village/Lake Parkway	8.6	4.5	8.6	4.5	8.4	4.3	7.7	3.8	No	No

Source: LSA Associates, Inc., March 2014.

1 Modeling includes ambient background levels of 6.8 ppm (1-hour) and 3.2 ppm (eight-hour) as measured at the 18 US HWY 50, Stateline Nevada monitoring station and therefore represents existing plus project conditions. Actual project contributions would be less than reported values.

2 Alternative naming is based on previous (2014) alternatives descriptions and therefore Alternative 1 through 4 do not match up with current alternative descriptions of A through E. Further, a new alternative has been added. In addition CO modeling was conducted in 2014 based on previous traffic studies conducted at that time. However, all peak- hour traffic used in the 2014 CO hot spot modeling was compared to opening year (2016) traffic conditions, future year without mixed-use development, and future year with mixed-use development (2038) for the same intersections across all alternatives. In all cases, the 2014 traffic volumes were higher than current (2016 ad 2038) traffic volumes. Modeling used worst-case meteorological conditions and modeling inputs. As such, the CO concentrations in this table is considered conservative and would over-estimate CO concentrations in comparison to actual project CO levels.
ppm = parts per million

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Project Name
RUN: 2018-A1-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. U.S. 50 NBA	12	-150	12	0	AG	845	3.7	0.0	13.5
B. U.S. 50 NBD	12	0	12	150	AG	567	1.9	0.0	10.0
C. U.S. 50 NBL	9	-150	0	0	AG	64	5.3	0.0	10.0
D. U.S. 50 SBA	-12	150	-12	0	AG	1251	4.2	0.0	13.5
E. U.S. 50 SBD	-12	0	-12	-150	AG	713	1.9	0.0	10.0
F. U.S. 50 SBL	-9	150	0	0	AG	2	5.3	0.0	10.0
G. Pioneer EBA	-150	-9	0	-9	AG	993	5.3	0.0	13.5
H. Pioneer EBD	0	-9	150	-9	AG	1631	5.3	0.0	10.0
I. Pioneer EBL	-150	-5	0	0	AG	375	5.3	0.0	10.0
J. Pioneer WBA	150	7	0	7	AG	849	5.3	0.0	10.0
K. Pioneer WBD	0	7	-150	7	AG	2044	5.3	0.0	10.0
L. Pioneer WBL	150	5	0	0	AG	576	5.3	0.0	10.0
M. U.S. 50 NBAX	12	-750	12	-150	AG	909	1.9	0.0	13.5
N. U.S. 50 NBDX	12	150	12	750	AG	567	1.9	0.0	10.0
O. U.S. 50 SBAX	-12	750	-12	150	AG	1253	1.9	0.0	13.5
P. U.S. 50 SBDX	-12	-150	-12	-750	AG	713	1.9	0.0	10.0
Q. Pioneer EBAX	-750	-9	-150	-9	AG	1368	1.9	0.0	13.5
R. Pioneer EBDX	150	-9	750	-9	AG	1631	1.9	0.0	10.0
S. Pioneer WBAX	750	7	150	7	AG	1425	1.9	0.0	10.0
T. Pioneer WBDX	-150	7	-750	7	AG	2044	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A1-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	21	-15	1.8
2. NW	-21	14	1.8
3. SW	-19	-17	1.8
4. NE	19	14	1.8
5. ES mdblk	150	-15	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	21	-150	1.8
10. NW mdblk	-21	150	1.8
11. SW mdblk	-19	-150	1.8
12. NE mdblk	19	150	1.8
13. ES blk	600	-15	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	14	1.8
17. SE blk	21	-600	1.8
18. NW blk	-21	600	1.8
19. SW blk	-19	-600	1.8
20. NE blk	19	600	1.8

JOB: Project Name
RUN: 2018-A1-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	283.	2.3	0.2	0.0	0.0	0.0	0.0	0.0	0.5	0.6
2. NW	108.	2.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5
3. SW	79.	2.0	0.1	0.0	0.0	0.0	0.1	0.0	0.3	0.9
4. NE	261.	2.3	0.0	0.1	0.0	0.2	0.0	0.0	0.3	0.0
5. ES mdblk	279.	2.3	0.0	0.0	0.0	0.1	0.0	0.0	0.1	1.4
6. WN mdblk	99.	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
7. WS mdblk	80.	1.9	0.0	0.0	0.0	0.1	0.0	0.0	0.9	0.1
8. EN mdblk	261.	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
9. SE mdblk	351.	1.1	0.5	0.0	0.0	0.2	0.0	0.0	0.1	0.1
10. NW mdblk	171.	1.3	0.1	0.0	0.0	0.8	0.0	0.0	0.0	0.1
11. SW mdblk	6.	0.8	0.0	0.0	0.0	0.1	0.2	0.0	0.1	0.1
12. NE mdblk	190.	0.7	0.0	0.2	0.0	0.1	0.0	0.0	0.1	0.0
13. ES blk	276.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	84.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	264.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	354.	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	174.	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
19. SW blk	6.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
20. NE blk	187.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

JOB: Project Name
RUN: 2018-A1-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.2	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. NW	0.0	0.3	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3.	SW	*	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
4.	NE	*	0.2	0.2	1.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
5.	ES mdblk	*	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	WN mdblk	*	0.1	0.1	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.	WS mdblk	*	0.2	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.	EN mdblk	*	0.0	0.8	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.6
15.	WS blk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.2
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.0
17.	SE blk	*	0.0	0.0	0.1	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Project Name
RUN: 2018-A1-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. U.S. 50 NBA	11	-150	11	0	AG	137	4.7	0.0	10.0
B. U.S. 50 NBD	11	0	11	150	AG	320	2.7	0.0	10.0
C. U.S. 50 NBL	9	-150	0	0	AG	204	5.3	0.0	10.0
D. U.S. 50 SBA	-7	150	-7	0	AG	837	5.3	0.0	10.0
E. U.S. 50 SBD	-7	0	-7	-150	AG	374	2.7	0.0	10.0
F. U.S. 50 SBL	-5	150	0	0	AG	57	5.3	0.0	10.0
G. Park EBA	-150	-7	0	-7	AG	402	3.3	0.0	10.0
H. Park EBD	0	-7	150	-7	AG	385	1.9	0.0	10.0
I. Park EBL	-150	-5	0	0	AG	195	5.3	0.0	10.0
J. Park WBA	150	7	0	7	AG	291	3.3	0.0	10.0
K. Park WBD	0	7	-150	7	AG	1219	3.3	0.0	10.0
L. Park WBL	150	5	0	0	AG	175	5.3	0.0	10.0
M. U.S. 50 NBAX	11	-750	11	-150	AG	341	1.9	0.0	10.0
N. U.S. 50 NBDX	11	150	11	750	AG	320	1.9	0.0	10.0
O. U.S. 50 SBAX	-7	750	-7	150	AG	894	1.9	0.0	10.0
P. U.S. 50 SBDX	-7	-150	-7	-750	AG	374	1.9	0.0	10.0
Q. Park EBAX	-750	-7	-150	-7	AG	597	1.9	0.0	10.0
R. Park EBDX	150	-7	750	-7	AG	385	1.9	0.0	10.0
S. Park WBAX	750	7	150	7	AG	466	1.9	0.0	10.0
T. Park WBDX	-150	7	-750	7	AG	1219	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A1-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	17	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	17	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	17	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	17	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	17	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	17	600	1.8

JOB: Project Name
RUN: 2018-A1-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	279.	0.8	0.1	0.0	0.1	0.0	0.0	0.0	0.2	0.0
2. NW	140.	1.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0	0.0
3. SW	7.	1.2	0.0	0.0	0.0	0.6	0.0	0.0	0.1	0.0
4. NE	262.	1.1	0.0	0.1	0.0	0.2	0.0	0.0	0.1	0.0
5. ES mdblk	277.	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
6. WN mdblk	98.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
7. WS mdblk	78.	0.8	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0
8. EN mdblk	265.	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9. SE mdblk	352.	0.6	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
10. NW mdblk	172.	1.1	0.0	0.0	0.0	0.8	0.0	0.1	0.0	0.0
11. SW mdblk	5.	0.6	0.0	0.0	0.1	0.1	0.2	0.0	0.0	0.0
12. NE mdblk	194.	0.6	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.0
13. ES blk	276.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	83.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	265.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	354.	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	174.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19. SW blk	5.	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20. NE blk	187.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Project Name
RUN: 2018-A1-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2. NW	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3.	SW	*	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
4.	NE	*	0.1	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
5.	ES mdblk	*	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
6.	WN mdblk	*	0.1	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.	WS mdblk	*	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.	EN mdblk	*	0.0	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.4
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0
17.	SE blk	*	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Project Name
RUN: 2018-A1-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. U.S. 50 NBA	9	-150	9	0	AG	1441	5.3	0.0	13.5
B. U.S. 50 NBD	9	0	9	150	AG	512	2.1	0.0	10.0
C. U.S. 50 NBL	5	-150	0	0	AG	156	5.3	0.0	10.0
D. U.S. 50 SBA	-9	150	-9	0	AG	86	3.8	0.0	13.5
E. U.S. 50 SBD	-9	0	-9	-150	AG	1327	4.9	0.0	10.0
F. U.S. 50 SBL	-5	150	0	0	AG	290	5.3	0.0	10.0
G. Lake Par EBA	-150	-9	0	-9	AG	276	3.9	0.0	13.5
H. Lake Par EBD	0	-9	150	-9	AG	1769	4.9	0.0	10.0
I. Lake Par EBL	-150	-5	0	0	AG	24	5.3	0.0	10.0
J. Lake Par WBA	150	9	0	9	AG	618	5.2	0.0	13.5
K. Lake Par WBD	0	9	-150	9	AG	505	2.1	0.0	10.0
L. Lake Par WBL	150	5	0	0	AG	1222	5.3	0.0	10.0
M. U.S. 50 NBAX	9	-750	9	-150	AG	1597	1.9	0.0	13.5
N. U.S. 50 NBDX	9	150	9	750	AG	512	1.9	0.0	10.0
O. U.S. 50 SBAX	-9	750	-9	150	AG	376	1.9	0.0	13.5
P. U.S. 50 SBDX	-9	-150	-9	-750	AG	1327	1.9	0.0	10.0
Q. Lake Pa EBAX	-750	-9	-150	-9	AG	300	1.9	0.0	13.5
R. Lake Pa EBDX	150	-9	750	-9	AG	1769	1.9	0.0	10.0
S. Lake Pa WBAX	750	9	150	9	AG	1840	1.9	0.0	13.5
T. Lake Pa WBDX	-150	9	-750	9	AG	505	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A1-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	17	-15	1.8
2. NW	-17	15	1.8
3. SW	-15	-17	1.8
4. NE	15	17	1.8
5. ES mdblk	150	-15	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	17	-150	1.8
10. NW mdblk	-17	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	15	150	1.8
13. ES blk	600	-15	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	17	1.8
17. SE blk	17	-600	1.8
18. NW blk	-17	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	15	600	1.8

JOB: Project Name
RUN: 2018-A1-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	77.	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
2. NW	100.	1.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3
3. SW	79.	2.6	0.3	0.0	0.0	0.0	0.5	0.0	0.0	1.0
4. NE	187.	2.4	1.0	0.0	0.1	0.0	0.2	0.0	0.0	0.3
5. ES mdblk	282.	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
6. WN mdblk	96.	1.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.2
7. WS mdblk	85.	1.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.2
8. EN mdblk	255.	1.8	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.4
9. SE mdblk	350.	1.7	1.2	0.0	0.1	0.0	0.2	0.0	0.0	0.0
10. NW mdblk	172.	0.9	0.2	0.0	0.0	0.1	0.1	0.1	0.0	0.1
11. SW mdblk	14.	1.9	0.4	0.0	0.1	0.0	1.1	0.0	0.0	0.1
12. NE mdblk	185.	1.0	0.2	0.2	0.0	0.0	0.2	0.1	0.0	0.1
13. ES blk	277.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	0.5	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
15. WS blk	88.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	263.	1.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
17. SE blk	354.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	174.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
19. SW blk	7.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
20. NE blk	183.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
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JOB: Project Name
RUN: 2018-A1-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
2. NW	0.0	0.4	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

3.	SW	*	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
4.	NE	*	0.0	0.2	0.0	0.3	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
5.	ES mdblk	*	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	WN mdblk	*	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
7.	WS mdblk	*	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
8.	EN mdblk	*	0.0	0.5	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.0
17.	SE blk	*	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Project Name
RUN: 2018-A1-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Park NBA	2	-150	2	0	AG	20	4.7	0.0	10.0
B. Park NBD	2	0	2	150	AG	458	4.3	0.0	10.0
C. Park NBL	2	-150	0	0	AG	3	5.3	0.0	10.0
D. Park SBA	-9	150	-9	0	AG	247	5.0	0.0	10.0
E. Park SBD	-9	0	-9	-150	AG	21	2.1	0.0	10.0
F. Park SBL	-9	150	0	0	AG	160	5.3	0.0	10.0
G. Heavenly EBA	-150	-7	0	-7	AG	1466	4.7	0.0	10.0
H. Heavenly EBD	0	-7	150	-7	AG	1624	2.5	0.0	10.0
I. Heavenly EBL	-150	-5	0	0	AG	179	5.3	0.0	10.0
J. Heavenly WBA	150	9	0	9	AG	1458	4.7	0.0	13.5
K. Heavenly WBD	0	9	-150	9	AG	1431	2.1	0.0	10.0
L. Heavenly WBL	150	5	0	0	AG	1	5.3	0.0	10.0
M. Park NBAX	2	-750	2	-150	AG	23	1.9	0.0	10.0
N. Park NBDX	2	150	2	750	AG	458	1.9	0.0	10.0
O. Park SBAX	-9	750	-9	150	AG	407	1.9	0.0	10.0
P. Park SBDX	-9	-150	-9	-750	AG	21	1.9	0.0	10.0
Q. Heavenl EBAX	-750	-7	-150	-7	AG	1645	1.9	0.0	10.0
R. Heavenl EBDX	150	-7	750	-7	AG	1624	1.9	0.0	10.0
S. Heavenl WBAX	750	9	150	9	AG	1459	1.9	0.0	13.5
T. Heavenl WBDX	-150	9	-750	9	AG	1431	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A1-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-15	15	1.8
3. SW	-15	-14	1.8
4. NE	8	17	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-15	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	17	1.8
17. SE blk	8	-600	1.8
18. NW blk	-15	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	8	600	1.8

JOB: Project Name
RUN: 2018-A1-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
2. NW	97.	1.6	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
3. SW	279.	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
4. NE	99.	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
5. ES mdblk	279.	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7
6. WN mdblk	98.	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1
7. WS mdblk	81.	1.8	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
8. EN mdblk	262.	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1
9. SE mdblk	357.	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
10. NW mdblk	168.	0.8	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.1
11. SW mdblk	3.	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
12. NE mdblk	191.	0.7	0.0	0.4	0.0	0.1	0.0	0.1	0.1	0.0
13. ES blk	277.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	83.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	264.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	358.	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	174.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19. SW blk	2.	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20. NE blk	186.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
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JOB: Project Name
RUN: 2018-A1-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
2. NW	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0

3.	SW	*	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
4.	NE	*	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
5.	ES mdblk	*	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	WN mdblk	*	0.1	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
7.	WS mdblk	*	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.	EN mdblk	*	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.5
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.2
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.0
17.	SE blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
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JOB: Project Name
RUN: 2018-A2-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. U.S. 50 NBA	12	-150	12	0	AG	845	3.7	0.0	13.5
B. U.S. 50 NBD	12	0	12	150	AG	567	1.9	0.0	10.0
C. U.S. 50 NBL	9	-150	0	0	AG	64	5.3	0.0	10.0
D. U.S. 50 SBA	-12	150	-12	0	AG	1251	4.2	0.0	13.5
E. U.S. 50 SBD	-12	0	-12	-150	AG	713	1.9	0.0	10.0
F. U.S. 50 SBL	-9	150	0	0	AG	2	5.3	0.0	10.0
G. Pioneer EBA	-150	-7	0	-7	AG	993	5.3	0.0	10.0
H. Pioneer EBD	0	-7	150	-7	AG	1631	5.3	0.0	10.0
I. Pioneer EBL	-150	-5	0	0	AG	375	5.3	0.0	10.0
J. Pioneer WBA	150	7	0	7	AG	849	5.3	0.0	10.0
K. Pioneer WBD	0	7	-150	7	AG	2044	5.3	0.0	10.0
L. Pioneer WBL	150	5	0	0	AG	576	5.3	0.0	10.0
M. U.S. 50 NBAX	12	-750	12	-150	AG	909	1.9	0.0	13.5
N. U.S. 50 NBDX	12	150	12	750	AG	567	1.9	0.0	10.0
O. U.S. 50 SBAX	-12	750	-12	150	AG	1253	1.9	0.0	13.5
P. U.S. 50 SBDX	-12	-150	-12	-750	AG	713	1.9	0.0	10.0
Q. Pioneer EBAX	-750	-7	-150	-7	AG	1368	1.9	0.0	10.0
R. Pioneer EBDX	150	-7	750	-7	AG	1631	1.9	0.0	10.0
S. Pioneer WBAX	750	7	150	7	AG	1425	1.9	0.0	10.0
T. Pioneer WBDX	-150	7	-750	7	AG	2044	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A2-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	21	-14	1.8
2. NW	-21	14	1.8
3. SW	-19	-14	1.8
4. NE	19	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	21	-150	1.8
10. NW mdblk	-21	150	1.8
11. SW mdblk	-19	-150	1.8
12. NE mdblk	19	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	21	-600	1.8
18. NW blk	-21	600	1.8
19. SW blk	-19	-600	1.8
20. NE blk	19	600	1.8

JOB: Project Name
RUN: 2018-A2-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	283.	2.3	0.2	0.0	0.0	0.0	0.0	0.0	0.5	0.6
2. NW	107.	2.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5
3. SW	81.	2.2	0.1	0.0	0.0	0.0	0.1	0.0	0.3	1.0
4. NE	261.	2.3	0.0	0.1	0.0	0.2	0.0	0.0	0.3	0.0
5. ES mdblk	278.	2.4	0.0	0.0	0.0	0.1	0.0	0.0	0.1	1.4
6. WN mdblk	98.	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
7. WS mdblk	81.	2.1	0.0	0.0	0.0	0.1	0.0	0.0	0.9	0.1
8. EN mdblk	261.	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
9. SE mdblk	351.	1.1	0.5	0.0	0.0	0.2	0.0	0.0	0.1	0.1
10. NW mdblk	171.	1.3	0.1	0.0	0.0	0.8	0.0	0.0	0.0	0.1
11. SW mdblk	6.	0.8	0.0	0.0	0.0	0.1	0.2	0.0	0.1	0.1
12. NE mdblk	190.	0.7	0.0	0.2	0.0	0.1	0.0	0.0	0.1	0.0
13. ES blk	276.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	84.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	264.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	354.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	174.	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
19. SW blk	6.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
20. NE blk	187.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
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JOB: Project Name
RUN: 2018-A2-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.2	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. NW	0.0	0.3	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3.	SW	*	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
4.	NE	*	0.2	0.2	1.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
5.	ES mdblk	*	0.1	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
6.	WN mdblk	*	0.1	0.1	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
7.	WS mdblk	*	0.3	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.	EN mdblk	*	0.0	0.8	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.6
15.	WS blk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.2
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.0
17.	SE blk	*	0.0	0.0	0.1	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
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JOB: Project Name
RUN: 2018-A2-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. U.S. 50 NBA	7	-150	7	0	AG	137	3.8	0.0	10.0
B. U.S. 50 NBD	7	0	7	150	AG	320	1.9	0.0	10.0
C. U.S. 50 NBL	5	-150	0	0	AG	204	5.3	0.0	10.0
D. U.S. 50 SBA	-7	150	-7	0	AG	837	5.3	0.0	10.0
E. U.S. 50 SBD	-7	0	-7	-150	AG	374	2.0	0.0	10.0
F. U.S. 50 SBL	-5	150	0	0	AG	57	5.3	0.0	10.0
G. Park EBA	-150	-7	0	-7	AG	402	3.9	0.0	10.0
H. Park EBD	0	-7	150	-7	AG	385	1.9	0.0	10.0
I. Park EBL	-150	-5	0	0	AG	195	5.3	0.0	10.0
J. Park WBA	150	7	0	7	AG	291	3.9	0.0	10.0
K. Park WBD	0	7	-150	7	AG	1219	4.9	0.0	10.0
L. Park WBL	150	5	0	0	AG	175	5.3	0.0	10.0
M. U.S. 50 NBAX	7	-750	7	-150	AG	341	1.9	0.0	10.0
N. U.S. 50 NBDX	7	150	7	750	AG	320	1.9	0.0	10.0
O. U.S. 50 SBAX	-7	750	-7	150	AG	894	1.9	0.0	10.0
P. U.S. 50 SBDX	-7	-150	-7	-750	AG	374	1.9	0.0	10.0
Q. Park EBAX	-750	-7	-150	-7	AG	597	1.9	0.0	10.0
R. Park EBDX	150	-7	750	-7	AG	385	1.9	0.0	10.0
S. Park WBAX	750	7	150	7	AG	466	1.9	0.0	10.0
T. Park WBDX	-150	7	-750	7	AG	1219	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A2-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	14	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

JOB: Project Name
RUN: 2018-A2-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	281.	0.9	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0
2. NW	260.	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3. SW	7.	1.3	0.0	0.0	0.0	0.6	0.0	0.0	0.1	0.0
4. NE	262.	1.4	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0
5. ES mdblk	276.	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
6. WN mdblk	99.	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
7. WS mdblk	78.	1.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0
8. EN mdblk	265.	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
9. SE mdblk	352.	0.6	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.0
10. NW mdblk	172.	1.1	0.0	0.0	0.0	0.8	0.0	0.1	0.0	0.0
11. SW mdblk	4.	0.5	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
12. NE mdblk	194.	0.6	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0
13. ES blk	276.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	83.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	265.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	354.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	175.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19. SW blk	5.	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20. NE blk	187.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

JOB: Project Name
RUN: 2018-A2-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2. NW	0.1	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3.	SW	*	0.1	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
4.	NE	*	0.1	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
5.	ES mdblk	*	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
6.	WN mdblk	*	0.1	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.	WS mdblk	*	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.	EN mdblk	*	0.0	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.4
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0
17.	SE blk	*	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
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JOB: Project Name
RUN: 2018-A2-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. U.S. 50 NBA	9	-150	9	0	AG	1441	5.3	0.0	13.5
B. U.S. 50 NBD	9	0	9	150	AG	512	2.1	0.0	10.0
C. U.S. 50 NBL	5	-150	0	0	AG	156	5.3	0.0	10.0
D. U.S. 50 SBA	-9	150	-9	0	AG	86	3.8	0.0	10.0
E. U.S. 50 SBD	-9	0	-9	-150	AG	1327	4.9	0.0	10.0
F. U.S. 50 SBL	-9	150	0	0	AG	290	5.3	0.0	10.0
G. Lake Par EBA	-150	-5	0	-5	AG	276	3.9	0.0	10.0
H. Lake Par EBD	0	-5	150	-5	AG	1769	4.9	0.0	10.0
I. Lake Par EBL	-150	-5	0	0	AG	24	5.3	0.0	10.0
J. Lake Par WBA	150	11	0	11	AG	618	5.2	0.0	10.0
K. Lake Par WBD	0	11	-150	11	AG	505	2.1	0.0	10.0
L. Lake Par WBL	150	9	0	0	AG	1222	5.3	0.0	10.0
M. U.S. 50 NBAX	9	-750	9	-150	AG	1597	1.9	0.0	13.5
N. U.S. 50 NBDX	9	150	9	750	AG	512	1.9	0.0	10.0
O. U.S. 50 SBAX	-9	750	-9	150	AG	376	1.9	0.0	10.0
P. U.S. 50 SBDX	-9	-150	-9	-750	AG	1327	1.9	0.0	10.0
Q. Lake Pa EBAX	-750	-5	-150	-5	AG	300	1.9	0.0	10.0
R. Lake Pa EBDX	150	-5	750	-5	AG	1769	1.9	0.0	10.0
S. Lake Pa WBAX	750	11	150	11	AG	1840	1.9	0.0	10.0
T. Lake Pa WBDX	-150	11	-750	11	AG	505	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A2-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	17	-12	1.8
2. NW	-15	17	1.8
3. SW	-15	-12	1.8
4. NE	15	17	1.8
5. ES mdblk	150	-12	1.8
6. WN mdblk	-150	17	1.8
7. WS mdblk	-150	-12	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	17	-150	1.8
10. NW mdblk	-15	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	15	150	1.8
13. ES blk	600	-12	1.8
14. WN blk	-600	17	1.8
15. WS blk	-600	-12	1.8
16. EN blk	600	17	1.8
17. SE blk	17	-600	1.8
18. NW blk	-15	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	15	600	1.8

JOB: Project Name
RUN: 2018-A2-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	77.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
2. NW	100.	1.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4
3. SW	80.	2.9	0.3	0.0	0.0	0.0	0.5	0.0	0.1	1.0
4. NE	187.	2.4	1.0	0.0	0.1	0.0	0.2	0.0	0.0	0.3
5. ES mdblk	282.	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
6. WN mdblk	96.	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
7. WS mdblk	87.	1.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.2
8. EN mdblk	255.	2.2	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.5
9. SE mdblk	350.	1.7	1.2	0.0	0.1	0.0	0.2	0.0	0.0	0.0
10. NW mdblk	173.	1.0	0.2	0.0	0.0	0.1	0.1	0.3	0.0	0.1
11. SW mdblk	14.	1.9	0.4	0.0	0.1	0.0	1.1	0.0	0.0	0.1
12. NE mdblk	185.	1.0	0.2	0.2	0.0	0.0	0.2	0.1	0.0	0.1
13. ES blk	276.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	0.5	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
15. WS blk	88.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	263.	1.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
17. SE blk	354.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	174.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
19. SW blk	7.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
20. NE blk	183.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
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JOB: Project Name
RUN: 2018-A2-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.0	0.2	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
2. NW	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

3.	SW	*	0.0	0.2	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
4.	NE	*	0.0	0.3	0.0	0.3	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
5.	ES mdblk	*	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	WN mdblk	*	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
7.	WS mdblk	*	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
8.	EN mdblk	*	0.0	0.6	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.0
17.	SE blk	*	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Project Name
RUN: 2018-A2-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Park NBA	2	-150	2	0	AG	20	4.7	0.0	10.0
B. Park NBD	2	0	2	150	AG	458	4.3	0.0	10.0
C. Park NBL	2	-150	0	0	AG	3	5.3	0.0	10.0
D. Park SBA	-9	150	-9	0	AG	247	5.0	0.0	10.0
E. Park SBD	-9	0	-9	-150	AG	21	2.1	0.0	10.0
F. Park SBL	-9	150	0	0	AG	160	5.3	0.0	10.0
G. Heavenly EBA	-150	-7	0	-7	AG	1466	4.7	0.0	10.0
H. Heavenly EBD	0	-7	150	-7	AG	1624	2.5	0.0	10.0
I. Heavenly EBL	-150	-5	0	0	AG	179	5.3	0.0	10.0
J. Heavenly WBA	150	9	0	9	AG	1458	4.7	0.0	13.5
K. Heavenly WBD	0	9	-150	9	AG	1431	2.1	0.0	10.0
L. Heavenly WBL	150	5	0	0	AG	1	5.3	0.0	10.0
M. Park NBAX	2	-750	2	-150	AG	23	1.9	0.0	10.0
N. Park NBDX	2	150	2	750	AG	458	1.9	0.0	10.0
O. Park SBAX	-9	750	-9	150	AG	407	1.9	0.0	10.0
P. Park SBDX	-9	-150	-9	-750	AG	21	1.9	0.0	10.0
Q. Heavenl EBAX	-750	-7	-150	-7	AG	1645	1.9	0.0	10.0
R. Heavenl EBDX	150	-7	750	-7	AG	1624	1.9	0.0	10.0
S. Heavenl WBAX	750	9	150	9	AG	1459	1.9	0.0	13.5
T. Heavenl WBDX	-150	9	-750	9	AG	1431	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A2-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-15	15	1.8
3. SW	-15	-14	1.8
4. NE	8	17	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-15	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	17	1.8
17. SE blk	8	-600	1.8
18. NW blk	-15	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	8	600	1.8

JOB: Project Name
RUN: 2018-A2-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
2. NW	97.	1.6	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
3. SW	279.	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
4. NE	99.	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
5. ES mdblk	279.	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7
6. WN mdblk	98.	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1
7. WS mdblk	81.	1.8	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
8. EN mdblk	262.	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1
9. SE mdblk	357.	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
10. NW mdblk	168.	0.8	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.1
11. SW mdblk	3.	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
12. NE mdblk	191.	0.7	0.0	0.4	0.0	0.1	0.0	0.1	0.1	0.0
13. ES blk	277.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	83.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	264.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	358.	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	174.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19. SW blk	2.	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20. NE blk	186.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
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JOB: Project Name
RUN: 2018-A2-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
2. NW	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0

3.	SW	*	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
4.	NE	*	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
5.	ES mdblk	*	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	WN mdblk	*	0.1	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
7.	WS mdblk	*	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.	EN mdblk	*	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.5
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.2
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.0
17.	SE blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
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JOB: Project Name
RUN: 2018-A3-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. U.S. 50 NBA	7	-150	7	0	AG	845	5.3	0.0	10.0
B. U.S. 50 NBD	7	0	7	150	AG	2196	5.3	0.0	10.0
C. U.S. 50 NBL	5	-150	0	0	AG	64	5.3	0.0	10.0
D. U.S. 50 SBA	-4	150	-4	0	AG	1222	5.3	0.0	10.0
E. U.S. 50 SBD	-4	0	-4	-150	AG	713	5.3	0.0	10.0
F. U.S. 50 SBL	-2	150	0	0	AG	0	1.9	0.0	10.0
G. Pioneer EBA	-150	-9	0	-9	AG	25	3.2	0.0	10.0
H. Pioneer EBD	0	-9	150	-9	AG	0	1.9	0.0	10.0
I. Pioneer EBL	-150	-9	0	0	AG	1343	5.3	0.0	10.0
J. Pioneer WBA	150	12	0	12	AG	875	3.7	0.0	13.5
K. Pioneer WBD	0	12	-150	12	AG	2044	3.3	0.0	10.0
L. Pioneer WBL	150	9	0	0	AG	579	5.3	0.0	10.0
M. U.S. 50 NBAX	7	-750	7	-150	AG	909	1.9	0.0	10.0
N. U.S. 50 NBDX	7	150	7	750	AG	2196	1.9	0.0	10.0
O. U.S. 50 SBAX	-4	750	-4	150	AG	1222	1.9	0.0	10.0
P. U.S. 50 SBDX	-4	-150	-4	-750	AG	713	1.9	0.0	10.0
Q. Pioneer EBAX	-750	-9	-150	-9	AG	1368	1.9	0.0	10.0
R. Pioneer EBDX	150	-9	750	-9	AG	0	1.9	0.0	10.0
S. Pioneer WBAX	750	12	150	12	AG	1454	1.9	0.0	13.5
T. Pioneer WBDX	-150	12	-750	12	AG	2044	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A3-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-15	1.8
2. NW	-10	19	1.8
3. SW	-10	-15	1.8
4. NE	14	21	1.8
5. ES mdblk	150	-15	1.8
6. WN mdblk	-150	19	1.8
7. WS mdblk	-150	-15	1.8
8. EN mdblk	150	21	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-15	1.8
14. WN blk	-600	19	1.8
15. WS blk	-600	-15	1.8
16. EN blk	600	21	1.8
17. SE blk	14	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	14	600	1.8

JOB: Project Name
RUN: 2018-A3-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	351.	2.4	0.2	1.3	0.0	0.4	0.0	0.0	0.0	0.0
2. NW	168.	2.2	0.4	0.0	0.1	0.4	0.4	0.0	0.0	0.0
3. SW	9.	2.4	0.0	0.6	0.0	0.9	0.2	0.0	0.0	0.0
4. NE	256.	2.6	0.0	0.9	0.0	0.3	0.0	0.0	0.0	0.0
5. ES mdblk	278.	0.9	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
6. WN mdblk	99.	1.7	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
7. WS mdblk	77.	1.9	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0
8. EN mdblk	263.	1.4	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
9. SE mdblk	353.	1.6	0.8	0.2	0.1	0.2	0.2	0.0	0.0	0.0
10. NW mdblk	170.	2.0	0.1	0.6	0.0	1.1	0.0	0.0	0.0	0.0
11. SW mdblk	7.	1.5	0.2	0.2	0.0	0.1	0.7	0.0	0.0	0.0
12. NE mdblk	190.	2.6	0.0	1.8	0.0	0.4	0.1	0.0	0.0	0.0
13. ES blk	276.	0.4	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
14. WN blk	97.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	83.	0.9	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
16. EN blk	265.	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	354.	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	174.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19. SW blk	5.	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20. NE blk	187.	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

JOB: Project Name
RUN: 2018-A3-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.0	0.1	0.0	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
2. NW	0.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3.	SW	*	0.4	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
4.	NE	*	0.4	0.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.	ES mdblk	*	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
6.	WN mdblk	*	0.3	0.0	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.	WS mdblk	*	1.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.	EN mdblk	*	0.2	0.5	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
9.	SE mdblk	*	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.7
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.2
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
17.	SE blk	*	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0
20.	NE blk	*	0.1	0.0	0.0	0.0	0.0	0.7	0.2	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Project Name
RUN: 2018-A3-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. U.S. 50 NBA	11	-150	11	0	AG	297	3.3	0.0	10.0
B. U.S. 50 NBD	11	0	11	150	AG	259	1.9	0.0	10.0
C. U.S. 50 NBL	9	-150	0	0	AG	204	5.3	0.0	10.0
D. U.S. 50 SBA	-7	150	-7	0	AG	1072	5.3	0.0	10.0
E. U.S. 50 SBD	-7	0	-7	-150	AG	334	1.9	0.0	10.0
F. U.S. 50 SBL	-5	150	0	0	AG	84	5.3	0.0	10.0
G. Park EBA	-150	-7	0	-7	AG	2031	5.3	0.0	10.0
H. Park EBD	0	-7	150	-7	AG	2066	5.3	0.0	10.0
I. Park EBL	-150	-5	0	0	AG	195	5.3	0.0	10.0
J. Park WBA	150	0	0	0	AG	0	1.9	0.0	10.0
K. Park WBD	0	0	-150	0	AG	1224	5.3	0.0	10.0
L. Park WBL	150	2	0	0	AG	0	1.9	0.0	10.0
M. U.S. 50 NBAX	11	-750	11	-150	AG	501	1.9	0.0	10.0
N. U.S. 50 NBDX	11	150	11	750	AG	259	1.9	0.0	10.0
O. U.S. 50 SBAX	-7	750	-7	150	AG	1156	1.9	0.0	10.0
P. U.S. 50 SBDX	-7	-150	-7	-750	AG	334	1.9	0.0	10.0
Q. Park EBAX	-750	-7	-150	-7	AG	2226	1.9	0.0	10.0
R. Park EBDX	150	-7	750	-7	AG	2066	1.9	0.0	10.0
S. Park WBAX	750	0	150	0	AG	0	1.9	0.0	10.0
T. Park WBDX	-150	0	-750	0	AG	1224	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A3-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	17	-14	1.8
2. NW	-14	7	1.8
3. SW	-14	-14	1.8
4. NE	17	7	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	17	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	17	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	7	1.8
17. SE blk	17	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	17	600	1.8

JOB: Project Name
RUN: 2018-A3-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	280.	2.7	0.1	0.0	0.1	0.0	0.0	0.0	1.2	0.6
2. NW	259.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0
3. SW	280.	2.4	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0
4. NE	262.	2.2	0.0	0.0	0.0	0.2	0.0	0.0	0.7	0.0
5. ES mdblk	277.	2.2	0.0	0.0	0.0	0.1	0.0	0.0	0.2	1.6
6. WN mdblk	100.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.1
7. WS mdblk	80.	2.6	0.0	0.0	0.0	0.1	0.0	0.0	1.7	0.1
8. EN mdblk	264.	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6
9. SE mdblk	351.	0.9	0.2	0.0	0.2	0.2	0.0	0.0	0.1	0.1
10. NW mdblk	172.	1.4	0.0	0.0	0.0	1.0	0.0	0.1	0.0	0.1
11. SW mdblk	3.	0.7	0.0	0.0	0.0	0.2	0.1	0.0	0.1	0.1
12. NE mdblk	199.	0.8	0.0	0.1	0.0	0.3	0.0	0.0	0.2	0.0
13. ES blk	276.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	84.	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	264.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	354.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
18. NW blk	175.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
19. SW blk	3.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
20. NE blk	187.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0

JOB: Project Name
RUN: 2018-A3-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. NW	0.2	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0

3.	SW	*	0.1	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
4.	NE	*	0.2	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
5.	ES mdblk	*	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	WN mdblk	*	0.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.	WS mdblk	*	0.2	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.	EN mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.4
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.2
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
17.	SE blk	*	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
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JOB: Project Name
RUN: 2018-A3-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. U.S. 50 NBA	0	-150	0	0	AG	0	1.9	0.0	10.0
B. U.S. 50 NBD	0	0	0	150	AG	514	5.3	0.0	10.0
C. U.S. 50 NBL	2	-150	0	0	AG	0	1.9	0.0	10.0
D. U.S. 50 SBA	-5	150	-5	0	AG	86	4.7	0.0	10.0
E. U.S. 50 SBD	-5	0	-5	-150	AG	1604	5.3	0.0	10.0
F. U.S. 50 SBL	-5	150	0	0	AG	290	5.3	0.0	10.0
G. Lake Par EBA	-150	-7	0	-7	AG	1561	5.3	0.0	10.0
H. Lake Par EBD	0	-7	150	-7	AG	1769	3.3	0.0	10.0
I. Lake Par EBL	-150	-5	0	0	AG	110	5.3	0.0	10.0
J. Lake Par WBA	150	5	0	5	AG	404	3.7	0.0	10.0
K. Lake Par WBD	0	5	-150	5	AG	0	1.9	0.0	10.0
L. Lake Par WBL	150	5	0	0	AG	1436	5.3	0.0	10.0
M. U.S. 50 NBAX	0	-750	0	-150	AG	0	1.9	0.0	10.0
N. U.S. 50 NBDX	0	150	0	750	AG	514	1.9	0.0	10.0
O. U.S. 50 SBAX	-5	750	-5	150	AG	376	1.9	0.0	10.0
P. U.S. 50 SBDX	-5	-150	-5	-750	AG	1604	1.9	0.0	10.0
Q. Lake Pa EBAX	-750	-7	-150	-7	AG	1671	1.9	0.0	10.0
R. Lake Pa EBDX	150	-7	750	-7	AG	1769	1.9	0.0	10.0
S. Lake Pa WBAX	750	5	150	5	AG	1840	1.9	0.0	10.0
T. Lake Pa WBDX	-150	5	-750	5	AG	0	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A3-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-14	1.8
2. NW	-12	12	1.8
3. SW	-12	-14	1.8
4. NE	7	12	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	12	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	12	1.8
17. SE blk	7	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	7	600	1.8

JOB: Project Name
RUN: 2018-A3-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.9	0.0	0.0	0.0	0.0	0.5	0.0	1.3	0.0
2. NW	99.	1.7	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.3
3. SW	78.	2.6	0.0	0.0	0.0	0.0	0.7	0.0	0.3	0.7
4. NE	197.	1.9	0.0	0.1	0.0	0.0	0.8	0.1	0.2	0.2
5. ES mdblk	280.	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9
6. WN mdblk	97.	0.9	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.1
7. WS mdblk	83.	1.9	0.0	0.0	0.0	0.0	0.1	0.0	1.3	0.1
8. EN mdblk	260.	2.2	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.3
9. SE mdblk	350.	1.0	0.0	0.0	0.0	0.0	0.8	0.0	0.1	0.0
10. NW mdblk	172.	1.0	0.0	0.3	0.0	0.1	0.1	0.3	0.0	0.1
11. SW mdblk	8.	1.7	0.0	0.1	0.0	0.0	1.4	0.0	0.0	0.1
12. NE mdblk	186.	1.1	0.0	0.5	0.0	0.0	0.2	0.2	0.1	0.0
13. ES blk	277.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
15. WS blk	85.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	263.	1.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
17. SE blk	354.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
18. NW blk	174.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19. SW blk	6.	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20. NE blk	183.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0

JOB: Project Name
RUN: 2018-A3-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
2. NW	0.0	0.2	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0

3.	SW	*	0.0	0.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
4.	NE	*	0.0	0.1	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.	ES mdblk	*	0.0	0.1	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	WN mdblk	*	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
7.	WS mdblk	*	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
8.	EN mdblk	*	0.0	0.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.0
17.	SE blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Project Name
RUN: 2018-A3-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Park NBA	2	-150	2	0	AG	19	3.8	0.0	10.0
B. Park NBD	2	0	2	150	AG	498	2.0	0.0	10.0
C. Park NBL	2	-150	0	0	AG	3	5.3	0.0	10.0
D. Park SBA	-4	150	-4	0	AG	247	3.9	0.0	10.0
E. Park SBD	-4	0	-4	-150	AG	18	1.9	0.0	10.0
F. Park SBL	-2	150	0	0	AG	0	1.9	0.0	10.0
G. Heavenly EBA	-150	0	0	0	AG	0	1.9	0.0	10.0
H. Heavenly EBD	0	0	150	0	AG	0	1.9	0.0	10.0
I. Heavenly EBL	-150	-2	0	0	AG	0	1.9	0.0	10.0
J. Heavenly WBA	150	9	0	9	AG	1706	5.3	0.0	13.5
K. Heavenly WBD	0	9	-150	9	AG	1460	3.1	0.0	10.0
L. Heavenly WBL	150	5	0	0	AG	1	5.3	0.0	10.0
M. Park NBAX	2	-750	2	-150	AG	22	1.9	0.0	10.0
N. Park NBDX	2	150	2	750	AG	498	1.9	0.0	10.0
O. Park SBAX	-4	750	-4	150	AG	247	1.9	0.0	10.0
P. Park SBDX	-4	-150	-4	-750	AG	18	1.9	0.0	10.0
Q. Heavenl EBAX	-750	0	-150	0	AG	0	1.9	0.0	10.0
R. Heavenl EBDX	150	0	750	0	AG	0	1.9	0.0	10.0
S. Heavenl WBAX	750	9	150	9	AG	1707	1.9	0.0	13.5
T. Heavenl WBDX	-150	9	-750	9	AG	1460	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A3-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-7	1.8
2. NW	-10	15	1.8
3. SW	-10	-7	1.8
4. NE	8	17	1.8
5. ES mdblk	150	-7	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-7	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-7	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-7	1.8
16. EN blk	600	17	1.8
17. SE blk	8	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	8	600	1.8

JOB: Project Name
RUN: 2018-A3-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	0.8	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0
2. NW	97.	1.6	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
3. SW	78.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. NE	99.	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. ES mdblk	282.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6. WN mdblk	95.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7. WS mdblk	83.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8. EN mdblk	262.	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9. SE mdblk	359.	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10. NW mdblk	169.	0.4	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0
11. SW mdblk	5.	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12. NE mdblk	189.	0.4	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0
13. ES blk	277.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	83.	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	264.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	360.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	174.	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19. SW blk	5.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20. NE blk	186.	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
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JOB: Project Name
RUN: 2018-A3-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. NW	0.0	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0

3.	SW	*	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.	NE	*	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
5.	ES mdblk	*	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	WN mdblk	*	0.0	0.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
7.	WS mdblk	*	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
8.	EN mdblk	*	0.0	1.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
17.	SE blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Project Name
RUN: 2018-A4-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. U.S. 50 NBA	5	-150	5	0	AG	395	5.3	0.0	10.0
B. U.S. 50 NBD	5	0	5	150	AG	18	2.1	0.0	10.0
C. U.S. 50 NBL	5	-150	0	0	AG	90	5.3	0.0	10.0
D. U.S. 50 SBA	-2	150	-2	0	AG	8	4.7	0.0	10.0
E. U.S. 50 SBD	-2	0	-2	-150	AG	352	2.7	0.0	10.0
F. U.S. 50 SBL	-2	150	0	0	AG	8	5.3	0.0	10.0
G. Pioneer EBA	-150	-9	0	-9	AG	1353	4.2	0.0	13.5
H. Pioneer EBD	0	-9	150	-9	AG	1730	2.5	0.0	10.0
I. Pioneer EBL	-150	-5	0	0	AG	15	5.3	0.0	10.0
J. Pioneer WBA	150	9	0	9	AG	2053	5.3	0.0	13.5
K. Pioneer WBD	0	9	-150	9	AG	2146	3.3	0.0	10.0
L. Pioneer WBL	150	5	0	0	AG	324	5.3	0.0	10.0
M. U.S. 50 NBAX	5	-750	5	-150	AG	485	1.9	0.0	10.0
N. U.S. 50 NBDX	5	150	5	750	AG	18	1.9	0.0	10.0
O. U.S. 50 SBAX	-2	750	-2	150	AG	16	1.9	0.0	10.0
P. U.S. 50 SBDX	-2	-150	-2	-750	AG	352	1.9	0.0	10.0
Q. Pioneer EBAX	-750	-9	-150	-9	AG	1368	1.9	0.0	13.5
R. Pioneer EBDX	150	-9	750	-9	AG	1730	1.9	0.0	10.0
S. Pioneer WBAX	750	9	150	9	AG	2377	1.9	0.0	13.5
T. Pioneer WBDX	-150	9	-750	9	AG	2146	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A4-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	12	-15	1.8
2. NW	-8	15	1.8
3. SW	-8	-17	1.8
4. NE	12	17	1.8
5. ES mdblk	150	-15	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	12	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-15	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	17	1.8
17. SE blk	12	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	12	600	1.8

JOB: Project Name
RUN: 2018-A4-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.6	0.2	0.0	0.0	0.0	0.1	0.0	0.8	0.1
2. NW	97.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3. SW	74.	1.6	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.5
4. NE	100.	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
5. ES mdblk	280.	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7
6. WN mdblk	98.	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1
7. WS mdblk	82.	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.1
8. EN mdblk	260.	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1
9. SE mdblk	350.	0.8	0.4	0.0	0.1	0.0	0.1	0.0	0.1	0.0
10. NW mdblk	176.	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11. SW mdblk	12.	0.7	0.2	0.0	0.1	0.0	0.2	0.0	0.0	0.1
12. NE mdblk	182.	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13. ES blk	277.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	97.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	84.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	263.	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	355.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	177.	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19. SW blk	6.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20. NE blk	180.	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
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JOB: Project Name
RUN: 2018-A4-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
2. NW	0.0	1.6	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0

3.	SW	*	0.0	0.6	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.	NE	*	0.0	1.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
5.	ES mdblk	*	0.0	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	WN mdblk	*	0.0	0.1	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
7.	WS mdblk	*	0.0	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
8.	EN mdblk	*	0.0	1.6	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.3	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.7
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.2
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.0
17.	SE blk	*	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
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JOB: Project Name
RUN: 2018-A4-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. U.S. 50 NBA	7	-150	7	0	AG	217	5.0	0.0	10.0
B. U.S. 50 NBD	7	0	7	150	AG	351	2.7	0.0	10.0
C. U.S. 50 NBL	5	-150	0	0	AG	324	5.3	0.0	10.0
D. U.S. 50 SBA	-7	150	-7	0	AG	743	5.3	0.0	10.0
E. U.S. 50 SBD	-7	0	-7	-150	AG	485	4.3	0.0	10.0
F. U.S. 50 SBL	-5	150	0	0	AG	65	5.3	0.0	10.0
G. Park EBA	-150	-9	0	-9	AG	1479	4.7	0.0	13.5
H. Park EBD	0	-9	150	-9	AG	1439	2.1	0.0	10.0
I. Park EBL	-150	-5	0	0	AG	221	5.3	0.0	10.0
J. Park WBA	150	9	0	9	AG	1338	4.2	0.0	13.5
K. Park WBD	0	9	-150	9	AG	2287	3.3	0.0	10.0
L. Park WBL	150	5	0	0	AG	175	5.3	0.0	10.0
M. U.S. 50 NBAX	7	-750	7	-150	AG	541	1.9	0.0	10.0
N. U.S. 50 NBDX	7	150	7	750	AG	351	1.9	0.0	10.0
O. U.S. 50 SBAX	-7	750	-7	150	AG	808	1.9	0.0	10.0
P. U.S. 50 SBDX	-7	-150	-7	-750	AG	485	1.9	0.0	10.0
Q. Park EBAX	-750	-9	-150	-9	AG	1700	1.9	0.0	13.5
R. Park EBDX	150	-9	750	-9	AG	1439	1.9	0.0	10.0
S. Park WBAX	750	9	150	9	AG	1513	1.9	0.0	13.5
T. Park WBDX	-150	9	-750	9	AG	2287	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A4-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-15	1.8
2. NW	-14	15	1.8
3. SW	-14	-17	1.8
4. NE	14	17	1.8
5. ES mdblk	150	-15	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-15	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	17	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

JOB: Project Name
RUN: 2018-A4-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.9	0.1	0.0	0.1	0.0	0.1	0.0	0.9	0.1
2. NW	98.	1.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1
3. SW	8.	1.7	0.0	0.1	0.0	0.5	0.1	0.0	0.5	0.0
4. NE	257.	1.8	0.0	0.1	0.0	0.2	0.0	0.0	0.4	0.0
5. ES mdblk	277.	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
6. WN mdblk	100.	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1
7. WS mdblk	80.	1.8	0.0	0.0	0.0	0.1	0.0	0.0	1.1	0.0
8. EN mdblk	262.	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1
9. SE mdblk	351.	1.0	0.2	0.0	0.3	0.1	0.1	0.0	0.1	0.0
10. NW mdblk	173.	1.2	0.0	0.0	0.1	0.7	0.0	0.1	0.0	0.0
11. SW mdblk	7.	0.9	0.1	0.0	0.1	0.1	0.4	0.0	0.0	0.0
12. NE mdblk	190.	0.8	0.0	0.2	0.0	0.2	0.1	0.0	0.1	0.0
13. ES blk	276.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	97.	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	83.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	264.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	354.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
18. NW blk	175.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19. SW blk	5.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20. NE blk	186.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0

JOB: Project Name
RUN: 2018-A4-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
2. NW	0.0	0.8	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0

3.	SW	*	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.	NE	*	0.1	0.2	0.8	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
5.	ES mdblk	*	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
6.	WN mdblk	*	0.1	0.1	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.	WS mdblk	*	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.	EN mdblk	*	0.0	0.9	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.7
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.2
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.0
17.	SE blk	*	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
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JOB: Project Name
RUN: 2018-A4-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. U.S. 50 NBA	7	-150	7	0	AG	479	5.3	0.0	10.0
B. U.S. 50 NBD	7	0	7	150	AG	380	2.7	0.0	10.0
C. U.S. 50 NBL	5	-150	0	0	AG	106	5.3	0.0	10.0
D. U.S. 50 SBA	-7	150	-7	0	AG	86	4.7	0.0	10.0
E. U.S. 50 SBD	-7	0	-7	-150	AG	394	2.7	0.0	10.0
F. U.S. 50 SBL	-5	150	0	0	AG	290	5.3	0.0	10.0
G. Lake Par EBA	-150	-9	0	-9	AG	1141	3.9	0.0	13.5
H. Lake Par EBD	0	-9	150	-9	AG	1769	2.5	0.0	10.0
I. Lake Par EBL	-150	-5	0	0	AG	38	5.3	0.0	10.0
J. Lake Par WBA	150	9	0	9	AG	1544	4.7	0.0	13.5
K. Lake Par WBD	0	9	-150	9	AG	1437	2.1	0.0	10.0
L. Lake Par WBL	150	5	0	0	AG	296	5.3	0.0	10.0
M. U.S. 50 NBAX	7	-750	7	-150	AG	585	1.9	0.0	10.0
N. U.S. 50 NBDX	7	150	7	750	AG	380	1.9	0.0	10.0
O. U.S. 50 SBAX	-7	750	-7	150	AG	376	1.9	0.0	10.0
P. U.S. 50 SBDX	-7	-150	-7	-750	AG	394	1.9	0.0	10.0
Q. Lake Pa EBAX	-750	-9	-150	-9	AG	1179	1.9	0.0	13.5
R. Lake Pa EBDX	150	-9	750	-9	AG	1769	1.9	0.0	10.0
S. Lake Pa WBAX	750	9	150	9	AG	1840	1.9	0.0	13.5
T. Lake Pa WBDX	-150	9	-750	9	AG	1437	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A4-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-15	1.8
2. NW	-14	15	1.8
3. SW	-14	-17	1.8
4. NE	14	17	1.8
5. ES mdblk	150	-15	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-15	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	17	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

JOB: Project Name
RUN: 2018-A4-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.6	0.1
2. NW	97.	1.7	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
3. SW	77.	1.5	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.5
4. NE	100.	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
5. ES mdblk	280.	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
6. WN mdblk	97.	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
7. WS mdblk	82.	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.1
8. EN mdblk	260.	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
9. SE mdblk	352.	0.9	0.5	0.0	0.1	0.0	0.1	0.0	0.1	0.0
10. NW mdblk	172.	0.7	0.1	0.1	0.0	0.1	0.0	0.2	0.0	0.0
11. SW mdblk	10.	0.7	0.1	0.0	0.1	0.0	0.2	0.0	0.0	0.1
12. NE mdblk	186.	0.7	0.1	0.2	0.0	0.0	0.0	0.1	0.0	0.0
13. ES blk	277.	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	84.	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	263.	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	355.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	174.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19. SW blk	6.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20. NE blk	185.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

JOB: Project Name
RUN: 2018-A4-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
2. NW	0.0	1.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0

3.	SW	*	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
4.	NE	*	0.0	1.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
5.	ES mdblk	*	0.0	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	WN mdblk	*	0.0	0.1	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
7.	WS mdblk	*	0.0	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
8.	EN mdblk	*	0.0	1.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.5
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.1
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.0
17.	SE blk	*	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0

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JOB: Project Name
RUN: 2018-A4-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 1897. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Park NBA	7	-150	7	0	AG	20	3.8	0.0	10.0
B. Park NBD	7	0	7	150	AG	473	2.0	0.0	10.0
C. Park NBL	5	-150	0	0	AG	3	5.3	0.0	10.0
D. Park SBA	-7	150	-7	0	AG	159	3.8	0.0	10.0
E. Park SBD	-7	0	-7	-150	AG	21	1.9	0.0	10.0
F. Park SBL	-5	150	0	0	AG	240	5.3	0.0	10.0
G. Heavenly EBA	-150	-7	0	-7	AG	428	4.3	0.0	10.0
H. Heavenly EBD	0	-7	150	-7	AG	666	2.4	0.0	10.0
I. Heavenly EBL	-150	-5	0	0	AG	134	5.3	0.0	10.0
J. Heavenly WBA	150	7	0	7	AG	652	5.2	0.0	10.0
K. Heavenly WBD	0	7	-150	7	AG	477	2.0	0.0	10.0
L. Heavenly WBL	150	5	0	0	AG	1	5.3	0.0	10.0
M. Park NBAX	7	-750	7	-150	AG	23	1.9	0.0	10.0
N. Park NBDX	7	150	7	750	AG	473	1.9	0.0	10.0
O. Park SBAX	-7	750	-7	150	AG	399	1.9	0.0	10.0
P. Park SBDX	-7	-150	-7	-750	AG	21	1.9	0.0	10.0
Q. Heavenl EBAX	-750	-7	-150	-7	AG	562	1.9	0.0	10.0
R. Heavenl EBDX	150	-7	750	-7	AG	666	1.9	0.0	10.0
S. Heavenl WBAX	750	7	150	7	AG	653	1.9	0.0	10.0
T. Heavenl WBDX	-150	7	-750	7	AG	477	1.9	0.0	10.0

JOB: Project Name
RUN: 2018-A4-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	14	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

JOB: Project Name
RUN: 2018-A4-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	351.	0.7	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
2. NW	97.	0.9	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
3. SW	79.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
4. NE	98.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
5. ES mdblk	280.	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
6. WN mdblk	96.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
7. WS mdblk	82.	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
8. EN mdblk	262.	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
9. SE mdblk	357.	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10. NW mdblk	168.	0.5	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.0
11. SW mdblk	4.	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
12. NE mdblk	192.	0.4	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
13. ES blk	276.	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. WN blk	96.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. WS blk	84.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. EN blk	264.	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. SE blk	358.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. NW blk	173.	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19. SW blk	3.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20. NE blk	186.	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

JOB: Project Name
RUN: 2018-A4-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. NW	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

3.	SW	*	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.	NE	*	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
5.	ES mdblk	*	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.	WN mdblk	*	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.	WS mdblk	*	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.	EN mdblk	*	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.	SE mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.	NW mdblk	*	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.	SW mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.	NE mdblk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.	ES blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0
14.	WN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2
15.	WS blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1
16.	EN blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0
17.	SE blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.	NW blk	*	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
19.	SW blk	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.	NE blk	*	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0

Comparison of 2014 CO Hot Spot Modeling to 2016 (Revised) Traffic Numbers

2014 Analysis

2018 Intersection Volumes used for CO Hot Spot Analysis

		ALT 1	ALT 2	ALT 3	ALT 4	MAX
US 50	Pioneer	4955	4955	4953	4246	**4955**
US 50	Park	2298	2298	3883	4562	**4562**
US 50	Lake Pky	4113	4113	3887	3980	**4113**
Park	Heavenly	3534	3534	1976	1637	**3534**

2016 Analysis

2018

		ALT A	ALT B	ALT C	ALT D	ALT E	MAX
US 50	Pioneer	3282	3804	3807	3804	3282	3807
US 50	Park	3282	1263	2473	1263	3282	3282
US 50	Lake Pky	3049	3120	2989	3120	3049	3120
Park	Heavenly	889	2916	1702	2916	889	2916

2038

US 50	Pioneer	3594	4188	4113	4119	3584	4188
US 50	Park	3608	1427	2758	1395	3578	3608
US 50	Lake Pky	3344	3446	3288	3446	3344	3446
Park	Heavenly	978	3196	1822	3196	978	3196

2038+Mixed Use

US 50	Pioneer	3594	4188	4180	4185	3584	4188
US 50	Park	3608	1427	2830	1400	3578	3608
US 50	Lake Pky	3344	3509	3350	3496	3344	3509
Park	Heavenly	978	3271	1872	3283	978	3283

		2014 MAX	2018 MAX	2038 MAX	038 MU MAX
US 50	Pioneer	4955	3807	4188	4188
US 50	Park	4562	3282	3608	3608
US 50	Lake Pky	4113	3120	3446	3509
Park	Heavenly	3534	2916	3196	3283

Conclusion: Volumes used in the 2014 LSA Hot Spot Analysis for study intersections were greater than volumes for the same intersections in the 2016 Traffic Sudy. Thus, because CO Hot Spot analysis did not result in an exceedence of applicable CO thresholds/standards with higher volumes, CO emissions would be less than previously anticipated.

ALT A

2016 Peak Data

Intersection #			N App	N Dep	S App	S Dep	E App	E Dep	W App	W Dep	Intersection Total
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1180	1612	1617	1305	13	352	472	13	3282
4	US 50	Park Avenue	1470	1367	1226	1592	172	202	414	121	3282
5	US 50	Stateline Avenue	1318	1202	1100	1207	184	44	0	149	2602
6	US 50	Loop Road/Lake Parkway	1048	1464	1382	1155	215	243	404	187	3049
7	Montreal Road	Park Avenue	247	337	420	300	197	25	25	227	889
8	n\a	n\a	1348	1336	1189	1203	71	0	0	69	2608
9	n\a	n\a									

2012 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	234	187	417	510	131	0	0	85	782
2	Pine Boulevard	Stateline Avenue	196	321	453	417	72	126	215	72	936
3	US 50	Pioneer Trail	1368	1730	2377	2146	16	352	485	18	4246
4	US 50	Park Avenue	1700	1439	1513	2287	808	485	541	351	4562
5	US 50	Stateline Avenue	1384	1187	1408	1461	219	88	5	280	3016
6	US 50	Loop Road/Lake Parkway	1179	1769	1840	1437	376	394	585	380	3980
7	Montreal Road	Park Avenue	562	666	653	477	399	21	23	473	1637
8	n\a	n\a									
9	n\a	n\a									

ALT B

2016 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1300	1331	1243	1394	669	538	592	541	3804
4	US 50	Park Avenue	399	362	428	644	172	136	264	121	1263
5	US 50	Stateline Avenue	350	297	307	414	184	44	0	86	841
6	US 50	Loop Road/Lake Parkway	220	1472	1382	362	215	1036	1303	250	3120
7	New US 50	Park Avenue	1331	1355	1213	1243	347	25	25	293	2916
8	US 50	Friday Avenue	362	350	414	428	71	0	0	69	847
9	New US 50	Harrah's Road	1355	1303	1159	1184	100	0	0	127	2614

2012 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	218	182	388	470	131	0	0	85	737
2	Pine Boulevard	Stateline Avenue	191	229	515	420	72	252	195	72	973
3	US 50	Pioneer Trail	1368	1631	1425	2044	1253	713	909	567	4955
4	US 50	Park Avenue	597	385	466	1219	894	374	341	320	2298
5	US 50	Stateline Avenue	339	286	450	450	263	88	0	228	1052
6	US 50	Loop Road/Lake Parkway	300	1769	1840	505	376	1327	1597	512	4113
7	New US 50	Park Avenue	1332	1346	1182	1203	407	20	23	375	2944
8	US 50	Friday Avenue	385	382	408	466	159	0	0	104	952
9	New US 50	Harrah's Road	1651	1528	1268	1485	442	0	0	348	3361

ALT C

2016 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1304	0	1399	1398	508	534	596	1875	3807
4	US 50	Park Avenue	1733	1710	0	483	353	167	387	113	2473
5	US 50	Stateline Avenue	1698	1557	0	0	44	59	0	126	1742
6	US 50	Loop Road/Lake Parkway	1392	1465	1382	0	215	1279	0	245	2989
7	New US 50	Park Avenue	0	0	1446	1398	231	25	25	279	1702
8	US 50	Friday Avenue	1710	1698	0	0	30	0	0	42	1740
9	New US 50	Harrah's Road	0	0	1402	1417	50	0	0	35	1452

2012 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	218	182	533	615	131	0	0	85	882
2	Pine Boulevard	Stateline Avenue	191	239	527	565	72	119	205	72	995
3	US 50	Pioneer Trail	1108	0	1454	2044	1222	708	909	1941	4693
4	US 50	Park Avenue	2226	2066	0	1224	1156	334	501	259	3883
5	US 50	Stateline Avenue	1953	1813	0	0	111	78	0	173	2064
6	US 50	Loop Road/Lake Parkway	1671	1769	1840	0	376	1604	0	514	3887
7	New US 50	Park Avenue	0	0	1707	1460	247	18	22	498	1976
8	US 50	Friday Avenue	2039	1996	0	0	42	0	0	85	2081
9	New US 50	Harrah's Road	0	0	1542	1733	354	0	0	163	1896

ALT D

2016 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1300	1331	1243	1394	669	538	592	541	3804
4	US 50	Park Avenue	399	362	428	644	172	136	264	121	1263
5	US 50	Stateline Avenue	350	297	307	414	184	44	0	86	841
6	US 50	Loop Road/Lake Parkway	220	1472	1382	362	215	1036	1303	250	3120
7	New US 50	Park Avenue	1331	1355	1213	1243	347	25	25	293	2916
8	US 50	Friday Avenue	362	350	414	428	71	0	0	69	847
9	New US 50	Harrah's Road	1355	1303	1159	1184	100	0	0	127	2614

2012 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	218	182	388	470	131	0	0	85	737
2	Pine Boulevard	Stateline Avenue	191	229	515	420	72	252	195	72	973
3	US 50	Pioneer Trail	1368	1631	1425	2044	1253	713	909	567	4955
4	US 50	Park Avenue	597	385	466	1419	1094	374	341	320	2498
5	US 50	Stateline Avenue	339	286	450	450	263	88	0	228	1052
6	US 50	Loop Road/Lake Parkway	300	1769	1840	505	376	1327	1597	512	4113
7	New US 50	Park Avenue	1645	1624	1459	1431	407	21	23	458	3534
8	US 50	Friday Avenue	385	382	408	466	159	0	0	104	952
9	New US 50	Harrah's Road	1651	1528	1268	1485	442	0	0	348	3361

ALT E

2016 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1180	1612	1617	1305	13	352	472	13	3282
4	US 50	Park Avenue	1470	1367	1226	1592	172	202	414	121	3282
5	US 50	Stateline Avenue	1318	1202	1100	1207	184	44	0	149	2602
6	US 50	Loop Road/Lake Parkway	1048	1464	1382	1155	215	243	404	187	3049
7	New US 50	Park Avenue	247	337	420	300	197	25	25	227	889
8	US 50	Friday Avenue	1348	1336	1189	1203	71	0	0	69	2608
9	New US 50	Harrah's Road	364	389	366	391	100	0	0	50	830

2012 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	234	187	417	510	131	0	0	85	782
2	Pine Boulevard	Stateline Avenue	196	321	453	417	72	126	215	72	936
3	US 50	Pioneer Trail	1368	1730	2377	2146	16	352	485	18	4246
4	US 50	Park Avenue	1700	1439	1513	2287	808	485	541	351	4562
5	US 50	Stateline Avenue	1384	1187	1408	1461	219	88	5	280	3016
6	US 50	Loop Road/Lake Parkway	1179	1769	1840	1437	376	394	585	380	3980
7	New US 50	Park Avenue	562	666	653	477	399	21	23	473	1637
8	US 50	Friday Avenue									
9	New US 50	Harrah's Road									

ALT A

2038 Peak Data

Intersection #			N App	N Dep	S App	S Dep	E App	E Dep	W App	W Dep	Intersection Total
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1273	1752	1762	1411	30	401	529	30	3594
4	US 50	Park Avenue	1591	1475	1317	1732	218	248	482	153	3608
5	US 50	Stateline Avenue	1431	1303	1221	1317	222	70	0	184	2874
6	US 50	Loop Road/Lake Parkway	1155	1582	1537	1276	218	288	434	198	3344
7	Montreal Road	Park Avenue	262	375	452	313	224	40	40	250	978
8	n\a	n\a	1441	1449	1344	1334	128	0	0	130	2913
9	n\a	n\a									

ALT B

2038 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1429	1457	1381	1529	710	587	668	615	4188
4	US 50	Park Avenue	454	412	444	688	218	174	311	153	1427
5	US 50	Stateline Avenue	420	360	358	454	222	74	0	112	1000
6	US 50	Loop Road/Lake Parkway	271	1612	1537	400	218	1164	1420	270	3446
7	New US 50	Park Avenue	1433	1472	1328	1360	395	40	40	324	3196
8	US 50	Friday Avenue	393	401	341	331	128	0	0	130	862
9	New US 50	Harrah's Road	1472	1420	1248	1282	120	0	0	138	2840

ALT C

2038 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1404	0	1467	1506	582	573	660	2034	4113
4	US 50	Park Avenue	1873	1850	0	552	431	213	454	143	2758
5	US 50	Stateline Avenue	1858	1696	0	0	66	84	0	144	1924
6	US 50	Loop Road/Lake Parkway	1533	1597	1537	0	218	1376	0	315	3288
7	New US 50	Park Avenue	0	0	1520	1467	262	40	40	315	1822
8	US 50	Friday Avenue	1850	1858	0	0	71	0	0	63	1921
9	New US 50	Harrah's Road	0	0	1460	1474	64	0	0	50	1524

ALT D

2038 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1399	1433	1360	1510	705	580	655	596	4119
4	US 50	Park Avenue	435	393	431	675	218	174	311	153	1395
5	US 50	Stateline Avenue	401	345	345	441	222	70	0	112	968
6	US 50	Loop Road/Lake Parkway	271	1612	1537	400	218	1164	1420	270	3446
7	New US 50	Park Avenue	1433	1472	1328	1360	395	40	40	324	3196
8	US 50	Friday Avenue	393	401	441	431	128	0	0	130	962
9	New US 50	Harrah's Road	1472	1420	1248	1282	120	0	0	138	2840

ALT E

2038 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1273	1752	1762	1401	30	401	519	30	3584
4	US 50	Park Avenue	1591	1475	1317	1732	188	218	482	153	3578
5	US 50	Stateline Avenue	1431	1303	1221	1317	222	70	0	184	2874
6	US 50	Loop Road/Lake Parkway	1155	1582	1537	1276	218	288	434	198	3344
7	New US 50	Park Avenue	262	375	452	313	224	40	40	250	978
8	US 50	Friday Avenue	1441	1449	1344	1334	128	0	0	130	2913
9	New US 50	Harrah's Road	384	406	372	406	120	0	0	64	876

ALT B
2038 Peak Data

Intersection #			N App	N Dep	S App	S Dep	E App	E Dep	W App	W Dep	Intersection Total
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1429	1457	1381	1529	710	587	668	615	4188
4	US 50	Park Avenue	454	412	444	688	218	174	311	153	1427
5	US 50	Stateline Avenue	420	360	358	454	222	74	0	112	1000
6	US 50	Loop Road/Lake Parkway	286	1641	1571	409	218	1189	1434	270	3509
7	New US 50	Park Avenue	1452	1489	1358	1375	421	40	40	367	3271
8	US 50	Friday Avenue	412	420	454	444	128	0	0	130	994
9	New US 50	Harrah's Road	1489	1434	1273	1312	125	0	0	141	2887

ALT C

2038 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1433	0	1488	1525	587	580	672	2075	4180
4	US 50	Park Avenue	1916	1886	0	564	431	237	483	143	2830
5	US 50	Stateline Avenue	1894	1725	0	0	66	91	0	144	1960
6	US 50	Loop Road/Lake Parkway	1562	1626	1570	0	218	1409	0	315	3350
7	New US 50	Park Avenue	0	0	1561	1481	271	40	40	351	1872
8	US 50	Friday Avenue	1886	1894	0	0	71	0	0	63	1957
9	New US 50	Harrah's Road	0	0	1493	1515	72	0	0	50	1565

ALT D
2038 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1421	1460	1387	1527	705	595	672	603	4185
4	US 50	Park Avenue	440	398	431	675	218	174	311	153	1400
5	US 50	Stateline Avenue	406	349	345	441	222	71	0	112	973
6	US 50	Loop Road/Lake Parkway	275	1633	1566	400	218	1193	1437	270	3496
7	New US 50	Park Avenue	1460	1493	1364	1382	419	40	40	368	3283
8	US 50	Friday Avenue	398	406	441	431	128	0	0	130	967
9	New US 50	Harrah's Road	1493	1437	1277	1318	127	0	0	142	2897

ALT E
2038 Peak Data

Intersection #											
1	Park Avenue	Pine Boulevard	128	106	147	190	60	0	0	39	335
2	Pine Boulevard	Stateline Avenue	135	163	177	166	42	45	62	42	416
3	US 50	Pioneer Trail	1273	1752	1762	1401	30	401	519	30	3584
4	US 50	Park Avenue	1591	1475	1317	1732	188	218	482	153	3578
5	US 50	Stateline Avenue	1431	1303	1221	1317	222	70	0	184	2874
6	US 50	Loop Road/Lake Parkway	1155	1582	1537	1276	218	288	434	198	3344
7	New US 50	Park Avenue	262	375	452	313	224	40	40	250	978
8	US 50	Friday Avenue	1441	1449	1344	1334	128	0	0	130	2913
9	New US 50	Harrah's Road	384	406	372	406	120	0	0	64	876

Title 24 Energy Effeciency Improvement from 2005 Calculation

CalEEMod 2013 Land Use **Residential - Single Family**

El Dorado County	Title 24	Title 24 Electricity Energy Intensity (KWh/size/yr)	Title 24 Natural Gas Energy Intensity (KBTU/size/yr)
	2005	686.47	12959.09
	2008	530.64	11663.18
	2013	337.49	10905.07
	2016	242.99	7851.65
Percent change between 2005 and 2016		-65%	-39%

CalEEMod 2013 Land Use **Residential - Apartment Low Rise**

El Dorado County	Title 24	Title 24 Electricity Energy Intensity (KWh/size/yr)	Title 24 Natural Gas Energy Intensity (KBTU/size/yr)
	2005	186.93	11634.15
	2008	150.10	10819.76
	2013	95.46	10116.48
	2016	68.73	7283.86
Percent change between 2005 and 2016		-63%	-37%

CalEEMod 2013 Land Use **Commercial - Office Park**

El Dorado County	Title 24	Title 24 Electricity Energy Intensity (KWh/size/yr)	Title 24 Natural Gas Energy Intensity (KBTU/size/yr)
	2005	1.78	21.35
	2008	1.69	18.16
	2013	1.32	15.11
	2016	1.26	14.35
Percent change between 2005 and 2016		-29%	-33%

Notes

These calculations reflect the energy efficiency improvements between several versions of Title 24 Standards. According to CEC (2007 and 2013), the 2008 Title 24 Standards achieve an electricity energy savings of 22.7% and a natural gas savings of 10.0% for single-family residences over the 2005 Title 24 Standards. Nonresidential newly constructed buildings under 2008 Title 24 achieved a 4.9% electricity energy savings and a 9.4% natural gas savings compared with the 2005 Title 24 Standards. The 2013 Title 24 Standards achieved a 36.4% electricity energy reduction and a 6.5% natural gas reduction for single-family residences over the 2008 Title 24 Standards. Nonresidential newly constructed buildings under 2013 Title 24 achieved a 21.8% electricity energy savings and a 16.8% natural gas savings compared with the 2008 Title 24 Standards. The lastest adopted standards are the 2016 Title 24 Standards, which achieved a 28% energy efficiency for residential and a 5% energy efficiency for nonresidential over 2013 Title 24. For the purposes of this analysis, the percent change between the newest (2016) Title 24 standards and the historical data used from CalEEEMod (2005 Title 24 Standards) were calculated using the percent reductions described above for a CalEEMod run for a residential and nonresidential project in El Dorado County.

References:

http://www.energy.ca.gov/2013publications/CEC-400-2013-008/CEC-400-2013-008.pdf
http://www.energy.ca.gov/title24/2008standards/rulemaking/documents/2007-11-07_IMPACT_ANA