

APPENDIX B-1

CalEEMod Model Outputs for Project Operation

McKinley Village
Sacramento Valley Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	11.70	Acre	11.70	509,652.00	0
Parking Lot	40.00	Space	0.36	16,000.00	0
City Park	4.00	Acre	4.00	174,240.00	0
Recreational Swimming Pool	2.00	1000sqft	0.05	2,000.00	0
Single Family Housing	336.00	Dwelling Unit	30.10	604,800.00	961
User Defined Residential	40.00	Dwelling Unit	0.00	16,480.00	40

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	65
Climate Zone	6			Operational Year	2018
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MW hr)	590.31	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - lot acreage, sq ft, and population per Project Description

Construction Phase - phases and schedule per applicant construction data

Off-road Equipment - applicant construction data

Off-road Equipment - applicant construction data

Trips and VMT - vendor trips added to represent water trucks, worker trips modified to match applicant estimates

Grading - project site size

Vehicle Trips - per project traffic study

Woodstoves - per Project Description

Consumer Products - consumer products emissions to be calculated by hand, off-model. The model applies the emission factor to all land uses, even parking and paving, which should not generate any consumer product emissions

Water And Wastewater - all wastewater treated at WWTP

Land Use Change -

Construction Off-road Equipment Mitigation - 20% NOx reduction for construction fleet applied using oxidation catalyst. basic construction emission control practices implemented per SMAQMD CEQA Handbook

Mobile Land Use Mitigation -

Energy Mitigation - 30% above 2013 Title 24. CEC estimated that 2013 Title 24 would result in 25% energy savings over 2008 Title 24. 30% above 2013 Title 24 is calculated as:

$1 - [(1-.25) * (1-0.3)] \times 100 = 47.5\%$ improvement over 2008 Title 24

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	184.80	168.00
tblFireplaces	NumberGas	22.00	20.00
tblFireplaces	NumberNoFireplace	33.60	168.00
tblFireplaces	NumberNoFireplace	4.00	20.00
tblFireplaces	NumberWood	117.60	0.00
tblFireplaces	NumberWood	14.00	0.00
tblLandUse	LandUseSquareFeet	0.00	16,480.00
tblLandUse	LotAcreage	109.09	30.10
tblLandUse	Population	114.00	40.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblWoodstoves	NumberCatalytic	16.80	0.00
tblWoodstoves	NumberCatalytic	2.00	0.00
tblWoodstoves	NumberNoncatalytic	16.80	0.00
tblWoodstoves	NumberNoncatalytic	2.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

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	39.3277	0.3627	31.2657	1.6400e-003		0.4227	0.4227		0.4200	0.4200	0.0000	4,037.0448	4,037.0448	0.1317	0.0730	4,062.4367
Energy	0.3192	2.7276	1.1607	0.0174		0.2205	0.2205		0.2205	0.2205		3,482.0289	3,482.0289	0.0667	0.0638	3,503.2200
Mobile	36.3889	33.7551	142.4175	0.3236	20.1887	0.4926	20.6814	5.4001	0.4534	5.8536		26,763.4544	26,763.4544	0.9382		26,783.1558
Total	76.0359	36.8454	174.8439	0.3426	20.1887	1.1358	21.3246	5.4001	1.0940	6.4941	0.0000	34,282.5281	34,282.5281	1.1366	0.1368	34,348.8125

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	39.3277	0.3627	31.2657	1.6400e-003		0.4227	0.4227		0.4200	0.4200	0.0000	4,037.0448	4,037.0448	0.1317	0.0730	4,062.4367
Energy	0.1956	1.6711	0.7111	0.0107		0.1351	0.1351		0.1351	0.1351		2,133.3120	2,133.3120	0.0409	0.0391	2,146.2949
Mobile	34.3922	31.8946	135.5060	0.3028	18.8473	0.4620	19.3093	5.0413	0.4253	5.4666		25,039.4976	25,039.4976	0.8827		25,058.0349
Total	73.9155	33.9283	167.4829	0.3151	18.8473	1.0198	19.8671	5.0413	0.9804	6.0217	0.0000	31,209.8543	31,209.8543	1.0553	0.1121	31,266.7666

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	2.79	7.92	4.21	8.05	6.64	10.21	6.83	6.64	10.38	7.27	0.00	8.96	8.96	7.15	18.07	8.97

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	1/1/2015	2/11/2015	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	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
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

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.744 4	4,111.744 4	1.2275		4,137.522 5
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.744 4	4,111.744 4	1.2275		4,137.522 5

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	0.3218	0.0862	1.1037	1.8900e-003	0.1479	1.1700e-003	0.1490	0.0392	1.0700e-003	0.0403		161.0313	161.0313	8.5300e-003		161.2103
Total	0.3218	0.0862	1.1037	1.8900e-003	0.1479	1.1700e-003	0.1490	0.0392	1.0700e-003	0.0403		161.0313	161.0313	8.5300e-003		161.2103

3.2 Site Preparation - 2015

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.744 4	4,111.744 4	1.2275		4,137.522 4
Total	5.2609	56.8897	42.6318	0.0391	8.1298	3.0883	11.2181	4.4688	2.8412	7.3100	0.0000	4,111.744 4	4,111.744 4	1.2275		4,137.522 4

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	0.3218	0.0862	1.1037	1.8900e-003	0.1479	1.1700e-003	0.1490	0.0392	1.0700e-003	0.0403		161.0313	161.0313	8.5300e-003		161.2103
Total	0.3218	0.0862	1.1037	1.8900e-003	0.1479	1.1700e-003	0.1490	0.0392	1.0700e-003	0.0403		161.0313	161.0313	8.5300e-003		161.2103

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	34.3922	31.8946	135.5060	0.3028	18.8473	0.4620	19.3093	5.0413	0.4253	5.4666		25,039.4976	25,039.4976	0.8827		25,058.0349
Unmitigated	36.3889	33.7551	142.4175	0.3236	20.1887	0.4926	20.6814	5.4001	0.4534	5.8536		26,763.4544	26,763.4544	0.9382		26,783.1558

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	6.36	6.36	6.36	13,578	12,675
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	65.86	41.74	53.46	109,599	102,316
Single Family Housing	3,215.52	3,386.88	2946.72	8,846,253	8,258,462
User Defined Residential	0.00	0.00	0.00		
Total	3,287.74	3,434.98	3,006.54	8,969,429	8,373,454

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9
Single Family Housing	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
User Defined Residential	10.80	7.30	7.50	32.90	18.00	49.10	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.462115	0.061823	0.181510	0.153742	0.057112	0.007288	0.019722	0.042680	0.001823	0.001665	0.006988	0.000686	0.002845

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
NaturalGas Mitigated	0.1956	1.6711	0.7111	0.0107		0.1351	0.1351		0.1351	0.1351		2,133.3120	2,133.3120	0.0409	0.0391	2,146.2949
NaturalGas Unmitigated	0.3192	2.7276	1.1607	0.0174		0.2205	0.2205		0.2205	0.2205		3,482.0289	3,482.0289	0.0667	0.0638	3,503.2200

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						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	29597.2	0.3192	2.7276	1.1607	0.0174		0.2205	0.2205		0.2205	0.2205		3,482.0289	3,482.0289	0.0667	0.0638	3,503.2200	
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.3192	2.7276	1.1607	0.0174		0.2205	0.2205		0.2205	0.2205		3,482.0289	3,482.0289	0.0667	0.0638	3,503.2200	

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						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	18.1332	0.1956	1.6711	0.7111	0.0107		0.1351	0.1351		0.1351	0.1351		2,133.3120	2,133.3120	0.0409	0.0391	2,146.2949	
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.1956	1.6711	0.7111	0.0107		0.1351	0.1351		0.1351	0.1351		2,133.3120	2,133.3120	0.0409	0.0391	2,146.2949	

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	39.3277	0.3627	31.2657	1.6400e-003		0.4227	0.4227		0.4200	0.4200	0.0000	4,037.0448	4,037.0448	0.1317	0.0730	4,062.4367
Unmitigated	39.3277	0.3627	31.2657	1.6400e-003		0.4227	0.4227		0.4200	0.4200	0.0000	4,037.0448	4,037.0448	0.1317	0.0730	4,062.4367

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	9.6833					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	28.3159					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.3649	2.0000e-005	0.0199	0.0000		0.2521	0.2521		0.2495	0.2495	0.0000	3,981.1765	3,981.1765	0.0763	0.0730	4,005.4053
Landscaping	0.9636	0.3627	31.2458	1.6400e-003		0.1705	0.1705		0.1705	0.1705		55.8683	55.8683	0.0554		57.0315
Total	39.3277	0.3627	31.2657	1.6400e-003		0.4227	0.4227		0.4200	0.4200	0.0000	4,037.0448	4,037.0448	0.1317	0.0730	4,062.4367

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	9.6833					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	28.3159					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.3649	2.0000e-005	0.0199	0.0000		0.2521	0.2521		0.2495	0.2495	0.0000	3,981.1765	3,981.1765	0.0763	0.0730	4,005.4053
Landscaping	0.9636	0.3627	31.2458	1.6400e-003		0.1705	0.1705		0.1705	0.1705		55.8683	55.8683	0.0554		57.0315
Total	39.3277	0.3627	31.2657	1.6400e-003		0.4227	0.4227		0.4200	0.4200	0.0000	4,037.0448	4,037.0448	0.1317	0.0730	4,062.4367

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

McKinley Village
Sacramento Valley Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
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City Park	4.00	Acre	4.00	174,240.00	0
Recreational Swimming Pool	2.00	1000sqft	0.05	2,000.00	0
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User Defined Residential	40.00	Dwelling Unit	0.00	16,480.00	40

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tblLandUse	LotAcreage	109.09	30.10
tblLandUse	Population	114.00	40.00
tblProjectCharacteristics	OperationalYear	2014	2018

2.0 Emissions Summary

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	614.3913	8.1697	740.1119	0.2785		99.7619	99.7619		99.7590	99.7590	10,442.1708	4,435.1624	14,877.3332	9.6918	0.8214	15,335.4808
Energy	0.3192	2.7276	1.1607	0.0174		0.2205	0.2205		0.2205	0.2205		3,482.0289	3,482.0289	0.0667	0.0638	3,503.2200
Mobile	39.8213	37.9391	156.3611	0.2953	20.1887	0.4956	20.6843	5.4001	0.4562	5.8563		24,545.4914	24,545.4914	0.9395		24,565.2210
Total	654.5318	48.8364	897.6337	0.5913	20.1887	100.4780	120.6667	5.4001	100.4357	105.8358	10,442.1708	32,462.6827	42,904.8535	10.6980	0.8852	43,403.9217

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	614.3913	8.1697	740.1119	0.2785		99.7619	99.7619		99.7590	99.7590	10,442.1708	4,435.1624	14,877.3332	9.6918	0.8214	15,335.4808
Energy	0.1956	1.6711	0.7111	0.0107		0.1351	0.1351		0.1351	0.1351		2,133.3120	2,133.3120	0.0409	0.0391	2,146.2949
Mobile	37.5255	35.8276	150.6487	0.2764	18.8473	0.4650	19.3123	5.0413	0.4280	5.4693		22,966.3008	22,966.3008	0.8841		22,984.8664
Total	652.1124	45.6684	891.4718	0.5656	18.8473	100.3620	119.2093	5.0413	100.3221	105.3634	10,442.1708	29,534.7752	39,976.9460	10.6167	0.8605	40,466.6421

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.37	6.49	0.69	4.34	6.64	0.12	1.21	6.64	0.11	0.45	0.00	9.02	6.82	0.76	2.79	6.77

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	1/1/2015	2/11/2015	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	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
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

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.744 4	4,111.744 4	1.2275		4,137.522 5
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.744 4	4,111.744 4	1.2275		4,137.522 5

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	0.3597	0.1076	1.0086	1.6600e-003	0.1479	1.1700e-003	0.1490	0.0392	1.0700e-003	0.0403		141.7124	141.7124	8.5300e-003		141.8914
Total	0.3597	0.1076	1.0086	1.6600e-003	0.1479	1.1700e-003	0.1490	0.0392	1.0700e-003	0.0403		141.7124	141.7124	8.5300e-003		141.8914

3.2 Site Preparation - 2015

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.744 4	4,111.744 4	1.2275		4,137.522 4
Total	5.2609	56.8897	42.6318	0.0391	8.1298	3.0883	11.2181	4.4688	2.8412	7.3100	0.0000	4,111.744 4	4,111.744 4	1.2275		4,137.522 4

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	0.3597	0.1076	1.0086	1.6600e-003	0.1479	1.1700e-003	0.1490	0.0392	1.0700e-003	0.0403		141.7124	141.7124	8.5300e-003		141.8914
Total	0.3597	0.1076	1.0086	1.6600e-003	0.1479	1.1700e-003	0.1490	0.0392	1.0700e-003	0.0403		141.7124	141.7124	8.5300e-003		141.8914

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	37.5255	35.8276	150.6487	0.2764	18.8473	0.4650	19.3123	5.0413	0.4280	5.4693		22,966.3008	22,966.3008	0.8841		22,984.8664
Unmitigated	39.8213	37.9391	156.3611	0.2953	20.1887	0.4956	20.6843	5.4001	0.4562	5.8563		24,545.4914	24,545.4914	0.9395		24,565.2210

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	6.36	6.36	6.36	13,578	12,675
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	65.86	41.74	53.46	109,599	102,316
Single Family Housing	3,215.52	3,386.88	2946.72	8,846,253	8,258,462
User Defined Residential	0.00	0.00	0.00		
Total	3,287.74	3,434.98	3,006.54	8,969,429	8,373,454

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9
Single Family Housing	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
User Defined Residential	10.80	7.30	7.50	32.90	18.00	49.10	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.462115	0.061823	0.181510	0.153742	0.057112	0.007288	0.019722	0.042680	0.001823	0.001665	0.006988	0.000686	0.002845

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
NaturalGas Mitigated	0.1956	1.6711	0.7111	0.0107		0.1351	0.1351		0.1351	0.1351		2,133.3120	2,133.3120	0.0409	0.0391	2,146.2949
NaturalGas Unmitigated	0.3192	2.7276	1.1607	0.0174		0.2205	0.2205		0.2205	0.2205		3,482.0289	3,482.0289	0.0667	0.0638	3,503.2200

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						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	29597.2	0.3192	2.7276	1.1607	0.0174		0.2205	0.2205		0.2205	0.2205		3,482.0289	3,482.0289	0.0667	0.0638	3,503.2200	
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.3192	2.7276	1.1607	0.0174		0.2205	0.2205		0.2205	0.2205		3,482.0289	3,482.0289	0.0667	0.0638	3,503.2200	

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	18.1332	0.1956	1.6711	0.7111	0.0107		0.1351	0.1351		0.1351	0.1351		2,133.3120	2,133.3120	0.0409	0.0391	2,146.2949
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.1956	1.6711	0.7111	0.0107		0.1351	0.1351		0.1351	0.1351		2,133.3120	2,133.3120	0.0409	0.0391	2,146.2949

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	614.3913	8.1697	740.1119	0.2785		99.7619	99.7619		99.7590	99.7590	10,442.1708	4,435.1624	14,877.3332	9.6918	0.8214	15,335.4808
Unmitigated	614.3913	8.1697	740.1119	0.2785		99.7619	99.7619		99.7590	99.7590	10,442.1708	4,435.1624	14,877.3332	9.6918	0.8214	15,335.4808

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	9.6833					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	28.3159					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	575.4285	7.8070	708.8661	0.2769		99.5914	99.5914		99.5885	99.5885	10,442.1708	4,379.2941	14,821.4649	9.6364	0.8214	15,278.4493
Landscaping	0.9636	0.3627	31.2458	1.6400e-003		0.1705	0.1705		0.1705	0.1705		55.8683	55.8683	0.0554		57.0315
Total	614.3913	8.1697	740.1119	0.2785		99.7619	99.7619		99.7590	99.7590	10,442.1708	4,435.1624	14,877.3332	9.6918	0.8214	15,335.4808

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	9.6833					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	28.3159					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	575.4285	7.8070	708.8661	0.2769		99.5914	99.5914		99.5885	99.5885	10,442.1708	4,379.2941	14,821.4649	9.6364	0.8214	15,278.4493
Landscaping	0.9636	0.3627	31.2458	1.6400e-003		0.1705	0.1705		0.1705	0.1705		55.8683	55.8683	0.0554		57.0315
Total	614.3913	8.1697	740.1119	0.2785		99.7619	99.7619		99.7590	99.7590	10,442.1708	4,435.1624	14,877.3332	9.6918	0.8214	15,335.4808

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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