

Appendix E

Greenhouse Gas Emissions Modeling Data

CADA R St. Garage - Sacramento Metropolitan AQMD Air District, Annual

CADA R St. Garage
Sacramento Metropolitan AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	850.00	Space	7.65	265,000.00	0
Strip Mall	13.00	1000sqft	0.30	13,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2019
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MW hr)	529	CH4 Intensity (lb/MW hr)	0.027	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SMUD Emissions Factor calculated using utility specific power mix data from the California Energy Comissions.

Land Use - Project land use characteristics taken from Project Description.

Demolition - 500 Cubic Yards are expected to be removed from the project site. (Project description) This was converted into tonnage using Cal-Recycle Construction assumptions. <http://www.calrecycle.ca.gov/swfacilities/cdi/tools/Calculations.htm>(<http://www.calrecycle.ca.gov/swfacilities/cdi/tools/Calculations.htm>)

Trips and VMT - Estimates for the maximum number of workers during the Building Construction phase. Assumed to be 100 Trips/Day.

Energy Use - Energy use adjusted for 2016 Title 24 Energy Use standards.

Construction Off-road Equipment Mitigation - Tier 3 equipment requirements were retrieved from Project Description.

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Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblLandUse	BuildingSpaceSquareFeet	340,000.00	265,000.00
tblLandUse	LandUseSquareFeet	340,000.00	265,000.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.027
tblProjectCharacteristics	CO2IntensityFactor	590.31	529
tblProjectCharacteristics	OperationalYear	2018	2019

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2018	5-31-2018	1.2918	1.2918
2	6-1-2018	8-31-2018	1.0865	1.0865
3	9-1-2018	11-30-2018	1.0791	1.0791
4	12-1-2018	2-28-2019	1.0042	1.0042
5	3-1-2019	5-31-2019	0.5788	0.5788
		Highest	1.2918	1.2918

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	0.0787	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229
Energy	3.8000e-004	3.4700e-003	2.9100e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	220.0843	220.0843	0.0111	2.5200e-003	221.1139
Mobile	0.1619	0.5685	1.4496	3.2200e-003	0.2421	4.2100e-003	0.2464	0.0650	3.9600e-003	0.0689	0.0000	294.9747	294.9747	0.0185	0.0000	295.4363
Waste						0.0000	0.0000		0.0000	0.0000	2.7708	0.0000	2.7708	0.1638	0.0000	6.8646
Water						0.0000	0.0000		0.0000	0.0000	0.3407	1.6469	1.9876	1.2600e-003	7.6000e-004	2.2454
Total	0.2409	0.5721	1.4637	3.2400e-003	0.2421	4.5100e-003	0.2467	0.0650	4.2600e-003	0.0692	3.1115	516.7274	519.8389	0.1947	3.2800e-003	525.6831

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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	0.0787	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229
Energy	3.8000e-004	3.4700e-003	2.9100e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	220.0843	220.0843	0.0111	2.5200e-003	221.1139
Mobile	0.1619	0.5685	1.4496	3.2200e-003	0.2421	4.2100e-003	0.2464	0.0650	3.9600e-003	0.0689	0.0000	294.9747	294.9747	0.0185	0.0000	295.4363
Waste						0.0000	0.0000		0.0000	0.0000	2.7708	0.0000	2.7708	0.1638	0.0000	6.8646
Water						0.0000	0.0000		0.0000	0.0000	0.3407	1.6469	1.9876	1.2600e-003	7.6000e-004	2.2454
Total	0.2409	0.5721	1.4637	3.2400e-003	0.2421	4.5100e-003	0.2467	0.0650	4.2600e-003	0.0692	3.1115	516.7274	519.8389	0.1947	3.2800e-003	525.6831

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/25/2019	5/22/2019	5	20	
2	Building Construction	Building Construction	5/10/2018	3/27/2019	5	230	
3	Demolition	Demolition	3/1/2018	3/28/2018	5	20	
4	Grading	Grading	4/12/2018	5/9/2018	5	20	
5	Paving	Paving	3/28/2019	4/24/2019	5	20	
6	Site Preparation	Site Preparation	3/29/2018	4/11/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 7.65

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 19,500; Non-Residential Outdoor: 6,500; Striped Parking Area: 15,900 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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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	23.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	115.00	46.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	59.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Clean Paved Roads

3.2 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0971					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total	0.0998	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

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3.2 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	6.5000e-004	7.0600e-003	2.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5442	1.5442	5.0000e-005	0.0000	1.5454
Total	9.3000e-004	6.5000e-004	7.0600e-003	2.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5442	1.5442	5.0000e-005	0.0000	1.5454

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0971					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total	0.0998	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

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3.2 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	6.5000e-004	7.0600e-003	2.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5442	1.5442	5.0000e-005	0.0000	1.5454
Total	9.3000e-004	6.5000e-004	7.0600e-003	2.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5442	1.5442	5.0000e-005	0.0000	1.5454

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2251	1.9648	1.4768	2.2600e-003		0.1260	0.1260		0.1184	0.1184	0.0000	199.7245	199.7245	0.0489	0.0000	200.9478
Total	0.2251	1.9648	1.4768	2.2600e-003		0.1260	0.1260		0.1184	0.1184	0.0000	199.7245	199.7245	0.0489	0.0000	200.9478

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3.3 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0210	0.5016	0.1661	9.7000e-004	0.0226	3.9500e-003	0.0266	6.5300e-003	3.7800e-003	0.0103	0.0000	92.6456	92.6456	5.9800e-003	0.0000	92.7952
Worker	0.0430	0.0312	0.3311	7.4000e-004	0.0710	5.4000e-004	0.0715	0.0189	5.0000e-004	0.0194	0.0000	67.1355	67.1355	2.2900e-003	0.0000	67.1927
Total	0.0640	0.5328	0.4972	1.7100e-003	0.0936	4.4900e-003	0.0980	0.0254	4.2800e-003	0.0297	0.0000	159.7810	159.7810	8.2700e-003	0.0000	159.9879

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	0.2251	1.9648	1.4768	2.2600e-003		0.1260	0.1260		0.1184	0.1184	0.0000	199.7242	199.7242	0.0489	0.0000	200.9475
Total	0.2251	1.9648	1.4768	2.2600e-003		0.1260	0.1260		0.1184	0.1184	0.0000	199.7242	199.7242	0.0489	0.0000	200.9475

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3.3 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0210	0.5016	0.1661	9.7000e-004	0.0226	3.9500e-003	0.0266	6.5300e-003	3.7800e-003	0.0103	0.0000	92.6456	92.6456	5.9800e-003	0.0000	92.7952
Worker	0.0430	0.0312	0.3311	7.4000e-004	0.0710	5.4000e-004	0.0715	0.0189	5.0000e-004	0.0194	0.0000	67.1355	67.1355	2.2900e-003	0.0000	67.1927
Total	0.0640	0.5328	0.4972	1.7100e-003	0.0936	4.4900e-003	0.0980	0.0254	4.2800e-003	0.0297	0.0000	159.7810	159.7810	8.2700e-003	0.0000	159.9879

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0732	0.6534	0.5321	8.3000e-004		0.0400	0.0400		0.0376	0.0376	0.0000	72.8823	72.8823	0.0178	0.0000	73.3262
Total	0.0732	0.6534	0.5321	8.3000e-004		0.0400	0.0400		0.0376	0.0376	0.0000	72.8823	72.8823	0.0178	0.0000	73.3262

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3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	6.8300e-003	0.1749	0.0535	3.5000e-004	8.3400e-003	1.2500e-003	9.5900e-003	2.4100e-003	1.1900e-003	3.6000e-003	0.0000	33.9517	33.9517	2.1300e-003	0.0000	34.0049
Worker	0.0144	0.0101	0.1094	2.7000e-004	0.0262	1.9000e-004	0.0264	6.9600e-003	1.8000e-004	7.1400e-003	0.0000	23.9345	23.9345	7.4000e-004	0.0000	23.9531
Total	0.0213	0.1851	0.1629	6.2000e-004	0.0345	1.4400e-003	0.0360	9.3700e-003	1.3700e-003	0.0107	0.0000	57.8862	57.8862	2.8700e-003	0.0000	57.9580

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	0.0732	0.6534	0.5321	8.3000e-004		0.0400	0.0400		0.0376	0.0376	0.0000	72.8822	72.8822	0.0178	0.0000	73.3261
Total	0.0732	0.6534	0.5321	8.3000e-004		0.0400	0.0400		0.0376	0.0376	0.0000	72.8822	72.8822	0.0178	0.0000	73.3261

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3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	6.8300e-003	0.1749	0.0535	3.5000e-004	8.3400e-003	1.2500e-003	9.5900e-003	2.4100e-003	1.1900e-003	3.6000e-003	0.0000	33.9517	33.9517	2.1300e-003	0.0000	34.0049
Worker	0.0144	0.0101	0.1094	2.7000e-004	0.0262	1.9000e-004	0.0264	6.9600e-003	1.8000e-004	7.1400e-003	0.0000	23.9345	23.9345	7.4000e-004	0.0000	23.9531
Total	0.0213	0.1851	0.1629	6.2000e-004	0.0345	1.4400e-003	0.0360	9.3700e-003	1.3700e-003	0.0107	0.0000	57.8862	57.8862	2.8700e-003	0.0000	57.9580

3.4 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.6900e-003	0.0000	6.6900e-003	1.0100e-003	0.0000	1.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1241	35.1241	9.6800e-003	0.0000	35.3660
Total	0.0372	0.3832	0.2230	3.9000e-004	6.6900e-003	0.0194	0.0261	1.0100e-003	0.0181	0.0191	0.0000	35.1241	35.1241	9.6800e-003	0.0000	35.3660

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3.4 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	9.7600e-003	2.4700e-003	2.0000e-005	5.0000e-004	4.0000e-005	5.4000e-004	1.4000e-004	4.0000e-005	1.8000e-004	0.0000	2.3062	2.3062	1.4000e-004	0.0000	2.3096
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	4.8000e-004	5.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0425	1.0425	4.0000e-005	0.0000	1.0434
Total	9.5000e-004	0.0102	7.6100e-003	3.0000e-005	1.6000e-003	5.0000e-005	1.6500e-003	4.3000e-004	5.0000e-005	4.8000e-004	0.0000	3.3486	3.3486	1.8000e-004	0.0000	3.3530

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.6900e-003	0.0000	6.6900e-003	1.0100e-003	0.0000	1.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1240	35.1240	9.6800e-003	0.0000	35.3660
Total	0.0372	0.3832	0.2230	3.9000e-004	6.6900e-003	0.0194	0.0261	1.0100e-003	0.0181	0.0191	0.0000	35.1240	35.1240	9.6800e-003	0.0000	35.3660

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3.4 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	9.7600e-003	2.4700e-003	2.0000e-005	5.0000e-004	4.0000e-005	5.4000e-004	1.4000e-004	4.0000e-005	1.8000e-004	0.0000	2.3062	2.3062	1.4000e-004	0.0000	2.3096
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	4.8000e-004	5.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0425	1.0425	4.0000e-005	0.0000	1.0434
Total	9.5000e-004	0.0102	7.6100e-003	3.0000e-005	1.6000e-003	5.0000e-005	1.6500e-003	4.3000e-004	5.0000e-005	4.8000e-004	0.0000	3.3486	3.3486	1.8000e-004	0.0000	3.3530

3.5 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.3067	0.1658	3.0000e-004		0.0155	0.0155		0.0143	0.0143	0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178
Total	0.0277	0.3067	0.1658	3.0000e-004	0.0655	0.0155	0.0810	0.0337	0.0143	0.0479	0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178

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3.5 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	4.8000e-004	5.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0425	1.0425	4.0000e-005	0.0000	1.0434
Total	6.7000e-004	4.8000e-004	5.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0425	1.0425	4.0000e-005	0.0000	1.0434

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					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.3067	0.1658	3.0000e-004		0.0155	0.0155		0.0143	0.0143	0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178
Total	0.0277	0.3067	0.1658	3.0000e-004	0.0655	0.0155	0.0810	0.0337	0.0143	0.0479	0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178

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3.5 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	4.8000e-004	5.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0425	1.0425	4.0000e-005	0.0000	1.0434
Total	6.7000e-004	4.8000e-004	5.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0425	1.0425	4.0000e-005	0.0000	1.0434

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	6.1000e-004	4.3000e-004	4.6000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0071	1.0071	3.0000e-005	0.0000	1.0078
Total	6.1000e-004	4.3000e-004	4.6000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0071	1.0071	3.0000e-005	0.0000	1.0078

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	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	6.1000e-004	4.3000e-004	4.6000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0071	1.0071	3.0000e-005	0.0000	1.0078
Total	6.1000e-004	4.3000e-004	4.6000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0071	1.0071	3.0000e-005	0.0000	1.0078

3.7 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total	0.0228	0.2410	0.1124	1.9000e-004	0.0903	0.0129	0.1032	0.0497	0.0119	0.0615	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

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3.7 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.9000e-004	3.0800e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6255	0.6255	2.0000e-005	0.0000	0.6260
Total	4.0000e-004	2.9000e-004	3.0800e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6255	0.6255	2.0000e-005	0.0000	0.6260

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total	0.0228	0.2410	0.1124	1.9000e-004	0.0903	0.0129	0.1032	0.0497	0.0119	0.0615	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

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3.7 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.9000e-004	3.0800e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6255	0.6255	2.0000e-005	0.0000	0.6260
Total	4.0000e-004	2.9000e-004	3.0800e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6255	0.6255	2.0000e-005	0.0000	0.6260

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1619	0.5685	1.4496	3.2200e-003	0.2421	4.2100e-003	0.2464	0.0650	3.9600e-003	0.0689	0.0000	294.9747	294.9747	0.0185	0.0000	295.4363
Unmitigated	0.1619	0.5685	1.4496	3.2200e-003	0.2421	4.2100e-003	0.2464	0.0650	3.9600e-003	0.0689	0.0000	294.9747	294.9747	0.0185	0.0000	295.4363

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	576.16	546.52	265.59	648,730	648,730
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	576.16	546.52	265.59	648,730	648,730

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
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	10.00	5.00	6.50	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
Unenclosed Parking with Elevator	0.547085	0.042365	0.202414	0.127049	0.023381	0.005779	0.018348	0.021363	0.002103	0.002394	0.006067	0.000620	0.001032
Strip Mall	0.547085	0.042365	0.202414	0.127049	0.023381	0.005779	0.018348	0.021363	0.002103	0.002394	0.006067	0.000620	0.001032

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	216.3105	216.3105	0.0110	2.4500e-003	217.3176
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	216.3105	216.3105	0.0110	2.4500e-003	217.3176
NaturalGas Mitigated	3.8000e-004	3.4700e-003	2.9100e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7739	3.7739	7.0000e-005	7.0000e-005	3.7963
NaturalGas Unmitigated	3.8000e-004	3.4700e-003	2.9100e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7739	3.7739	7.0000e-005	7.0000e-005	3.7963

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	70720	3.8000e-004	3.4700e-003	2.9100e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7739	3.7739	7.0000e-005	7.0000e-005	3.7963
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.8000e-004	3.4700e-003	2.9100e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7739	3.7739	7.0000e-005	7.0000e-005	3.7963

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					
Strip Mall	70720	3.8000e-004	3.4700e-003	2.9100e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7739	3.7739	7.0000e-005	7.0000e-005	3.7963
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.8000e-004	3.4700e-003	2.9100e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7739	3.7739	7.0000e-005	7.0000e-005	3.7963

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	154180	36.9956	1.8900e-003	4.2000e-004	37.1678
Unenclosed Parking with Elevator	747300	179.3149	9.1500e-003	2.0300e-003	180.1498
Total		216.3105	0.0110	2.4500e-003	217.3176

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	154180	36.9956	1.8900e-003	4.2000e-004	37.1678
Unenclosed Parking with Elevator	747300	179.3149	9.1500e-003	2.0300e-003	180.1498
Total		216.3105	0.0110	2.4500e-003	217.3176

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0787	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229
Unmitigated	0.0787	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229

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	9.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229
Total	0.0787	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229
Total	0.0787	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229

7.0 Water Detail

7.1 Mitigation Measures Water

CADA R St. Garage - Sacramento Metropolitan AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.9876	1.2600e-003	7.6000e-004	2.2454
Unmitigated	1.9876	1.2600e-003	7.6000e-004	2.2454

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	0.962943 / 0.590191	1.9876	1.2600e-003	7.6000e-004	2.2454
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.9876	1.2600e-003	7.6000e-004	2.2454

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	0.962943 / 0.590191	1.9876	1.2600e-003	7.6000e-004	2.2454
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.9876	1.2600e-003	7.6000e-004	2.2454

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.7708	0.1638	0.0000	6.8646
Unmitigated	2.7708	0.1638	0.0000	6.8646

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	13.65	2.7708	0.1638	0.0000	6.8646
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		2.7708	0.1638	0.0000	6.8646

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	13.65	2.7708	0.1638	0.0000	6.8646
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		2.7708	0.1638	0.0000	6.8646

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Cada R St. Garage - Sacramento Metropolitan AQMD Air District, Annual

Cada R St. Garage
Sacramento Metropolitan AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	850.00	Space	7.65	265,000.00	0
Strip Mall	13.00	1000sqft	0.30	13,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2019
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MW hr)	529	CH4 Intensity (lb/MW hr)	0.027	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SMUD Emissions Factor calculated using utility specific power mix data from the California Energy Comissions.

Land Use - Land use types taken from project site design documents to determine total area of each land use type.

Demolition -

Energy Use - Energy use rates adjusted to reflect Title 24 2016 updates

Energy Mitigation -

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Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	3.41	3.20
tblEnergyUse	T24NG	4.51	4.30
tblLandUse	BuildingSpaceSquareFeet	340,000.00	265,000.00
tblLandUse	LandUseSquareFeet	340,000.00	265,000.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.027
tblProjectCharacteristics	CO2IntensityFactor	590.31	529
tblProjectCharacteristics	OperationalYear	2018	2019

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-1-2018	4-30-2018	1.2760	1.2760
2	5-1-2018	7-31-2018	1.0865	1.0865
3	8-1-2018	10-31-2018	1.0887	1.0887
4	11-1-2018	1-31-2019	1.0589	1.0589
5	2-1-2019	4-30-2019	0.5789	0.5789
		Highest	1.2760	1.2760

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	0.0787	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229
Energy	3.7000e-004	3.3300e-003	2.8000e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	219.2836	219.2836	0.0111	2.5100e-003	220.3092
Mobile	0.1619	0.5685	1.4496	3.2200e-003	0.2421	4.2100e-003	0.2464	0.0650	3.9600e-003	0.0689	0.0000	294.9747	294.9747	0.0185	0.0000	295.4363
Waste						0.0000	0.0000		0.0000	0.0000	2.7708	0.0000	2.7708	0.1638	0.0000	6.8646
Water						0.0000	0.0000		0.0000	0.0000	0.3407	1.6469	1.9876	1.2600e-003	7.6000e-004	2.2454
Total	0.2409	0.5720	1.4636	3.2400e-003	0.2421	4.5000e-003	0.2466	0.0650	4.2500e-003	0.0692	3.1115	515.9266	519.0381	0.1946	3.2700e-003	524.8784

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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	0.0787	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229
Energy	3.7000e-004	3.3300e-003	2.8000e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	219.2836	219.2836	0.0111	2.5100e-003	220.3092
Mobile	0.1619	0.5685	1.4496	3.2200e-003	0.2421	4.2100e-003	0.2464	0.0650	3.9600e-003	0.0689	0.0000	294.9747	294.9747	0.0185	0.0000	295.4363
Waste						0.0000	0.0000		0.0000	0.0000	2.7708	0.0000	2.7708	0.1638	0.0000	6.8646
Water						0.0000	0.0000		0.0000	0.0000	0.3407	1.6469	1.9876	1.2600e-003	7.6000e-004	2.2454
Total	0.2409	0.5720	1.4636	3.2400e-003	0.2421	4.5000e-003	0.2466	0.0650	4.2500e-003	0.0692	3.1115	515.9266	519.0381	0.1946	3.2700e-003	524.8784

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2018	2/28/2018	5	20	
2	Site Preparation	Site Preparation	3/1/2018	3/14/2018	5	10	
3	Grading	Grading	3/15/2018	4/11/2018	5	20	
4	Building Construction	Building Construction	4/12/2018	2/27/2019	5	230	
5	Paving	Paving	2/28/2019	3/27/2019	5	20	
6	Architectural Coating	Architectural Coating	3/28/2019	4/24/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 7.65

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 19,500; Non-Residential Outdoor: 6,500; Striped Parking Area: 15,900 (Architectural Coating – sqft)

OffRoad Equipment

Cada R St. Garage - Sacramento Metropolitan AQMD Air District, 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

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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	173.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	115.00	46.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0195	0.0000	0.0195	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1241	35.1241	9.6800e-003	0.0000	35.3660
Total	0.0372	0.3832	0.2230	3.9000e-004	0.0195	0.0194	0.0389	2.9500e-003	0.0181	0.0210	0.0000	35.1241	35.1241	9.6800e-003	0.0000	35.3660

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3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.3000e-004	0.0286	7.2400e-003	7.0000e-005	1.4600e-003	1.3000e-004	1.5900e-003	4.0000e-004	1.2000e-004	5.2000e-004	0.0000	6.7621	6.7621	4.1000e-004	0.0000	6.7723
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	4.8000e-004	5.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0425	1.0425	4.0000e-005	0.0000	1.0434
Total	1.5000e-003	0.0291	0.0124	8.0000e-005	2.5600e-003	1.4000e-004	2.7000e-003	6.9000e-004	1.3000e-004	8.2000e-004	0.0000	7.8046	7.8046	4.5000e-004	0.0000	7.8156

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					0.0195	0.0000	0.0195	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1240	35.1240	9.6800e-003	0.0000	35.3660
Total	0.0372	0.3832	0.2230	3.9000e-004	0.0195	0.0194	0.0389	2.9500e-003	0.0181	0.0210	0.0000	35.1240	35.1240	9.6800e-003	0.0000	35.3660

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3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.3000e-004	0.0286	7.2400e-003	7.0000e-005	1.4600e-003	1.3000e-004	1.5900e-003	4.0000e-004	1.2000e-004	5.2000e-004	0.0000	6.7621	6.7621	4.1000e-004	0.0000	6.7723
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	4.8000e-004	5.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0425	1.0425	4.0000e-005	0.0000	1.0434
Total	1.5000e-003	0.0291	0.0124	8.0000e-005	2.5600e-003	1.4000e-004	2.7000e-003	6.9000e-004	1.3000e-004	8.2000e-004	0.0000	7.8046	7.8046	4.5000e-004	0.0000	7.8156

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total	0.0228	0.2410	0.1124	1.9000e-004	0.0903	0.0129	0.1032	0.0497	0.0119	0.0615	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

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3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.9000e-004	3.0800e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6255	0.6255	2.0000e-005	0.0000	0.6260
Total	4.0000e-004	2.9000e-004	3.0800e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6255	0.6255	2.0000e-005	0.0000	0.6260

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total	0.0228	0.2410	0.1124	1.9000e-004	0.0903	0.0129	0.1032	0.0497	0.0119	0.0615	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

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3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.9000e-004	3.0800e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6255	0.6255	2.0000e-005	0.0000	0.6260
Total	4.0000e-004	2.9000e-004	3.0800e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6255	0.6255	2.0000e-005	0.0000	0.6260

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.3067	0.1658	3.0000e-004		0.0155	0.0155		0.0143	0.0143	0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178
Total	0.0277	0.3067	0.1658	3.0000e-004	0.0655	0.0155	0.0810	0.0337	0.0143	0.0479	0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178

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3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	4.8000e-004	5.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0425	1.0425	4.0000e-005	0.0000	1.0434
Total	6.7000e-004	4.8000e-004	5.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0425	1.0425	4.0000e-005	0.0000	1.0434

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					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.3067	0.1658	3.0000e-004		0.0155	0.0155		0.0143	0.0143	0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178
Total	0.0277	0.3067	0.1658	3.0000e-004	0.0655	0.0155	0.0810	0.0337	0.0143	0.0479	0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178

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3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	4.8000e-004	5.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0425	1.0425	4.0000e-005	0.0000	1.0434
Total	6.7000e-004	4.8000e-004	5.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0425	1.0425	4.0000e-005	0.0000	1.0434

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2519	2.1987	1.6526	2.5300e-003		0.1410	0.1410		0.1325	0.1325	0.0000	223.5012	223.5012	0.0548	0.0000	224.8701
Total	0.2519	2.1987	1.6526	2.5300e-003		0.1410	0.1410		0.1325	0.1325	0.0000	223.5012	223.5012	0.0548	0.0000	224.8701

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3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0235	0.5613	0.1859	1.0800e-003	0.0253	4.4200e-003	0.0297	7.3100e-003	4.2300e-003	0.0115	0.0000	103.6748	103.6748	6.7000e-003	0.0000	103.8422
Worker	0.0481	0.0349	0.3705	8.3000e-004	0.0794	6.0000e-004	0.0800	0.0211	5.6000e-004	0.0217	0.0000	75.1278	75.1278	2.5600e-003	0.0000	75.1918
Total	0.0716	0.5962	0.5564	1.9100e-003	0.1047	5.0200e-003	0.1097	0.0284	4.7900e-003	0.0332	0.0000	178.8026	178.8026	9.2600e-003	0.0000	179.0340

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	0.2519	2.1987	1.6526	2.5300e-003		0.1410	0.1410		0.1325	0.1325	0.0000	223.5009	223.5009	0.0548	0.0000	224.8699
Total	0.2519	2.1987	1.6526	2.5300e-003		0.1410	0.1410		0.1325	0.1325	0.0000	223.5009	223.5009	0.0548	0.0000	224.8699

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3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0235	0.5613	0.1859	1.0800e-003	0.0253	4.4200e-003	0.0297	7.3100e-003	4.2300e-003	0.0115	0.0000	103.6748	103.6748	6.7000e-003	0.0000	103.8422
Worker	0.0481	0.0349	0.3705	8.3000e-004	0.0794	6.0000e-004	0.0800	0.0211	5.6000e-004	0.0217	0.0000	75.1278	75.1278	2.5600e-003	0.0000	75.1918
Total	0.0716	0.5962	0.5564	1.9100e-003	0.1047	5.0200e-003	0.1097	0.0284	4.7900e-003	0.0332	0.0000	178.8026	178.8026	9.2600e-003	0.0000	179.0340

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0496	0.4427	0.3604	5.7000e-004		0.0271	0.0271		0.0255	0.0255	0.0000	49.3719	49.3719	0.0120	0.0000	49.6726
Total	0.0496	0.4427	0.3604	5.7000e-004		0.0271	0.0271		0.0255	0.0255	0.0000	49.3719	49.3719	0.0120	0.0000	49.6726

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3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6300e-003	0.1185	0.0362	2.4000e-004	5.6500e-003	8.4000e-004	6.4900e-003	1.6300e-003	8.1000e-004	2.4400e-003	0.0000	22.9995	22.9995	1.4400e-003	0.0000	23.0356
Worker	9.7700e-003	6.8600e-003	0.0741	1.8000e-004	0.0177	1.3000e-004	0.0179	4.7200e-003	1.2000e-004	4.8400e-003	0.0000	16.2137	16.2137	5.0000e-004	0.0000	16.2263
Total	0.0144	0.1254	0.1103	4.2000e-004	0.0234	9.7000e-004	0.0244	6.3500e-003	9.3000e-004	7.2800e-003	0.0000	39.2132	39.2132	1.9400e-003	0.0000	39.2619

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	0.0496	0.4427	0.3604	5.7000e-004		0.0271	0.0271		0.0255	0.0255	0.0000	49.3718	49.3718	0.0120	0.0000	49.6725
Total	0.0496	0.4427	0.3604	5.7000e-004		0.0271	0.0271		0.0255	0.0255	0.0000	49.3718	49.3718	0.0120	0.0000	49.6725

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3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6300e-003	0.1185	0.0362	2.4000e-004	5.6500e-003	8.4000e-004	6.4900e-003	1.6300e-003	8.1000e-004	2.4400e-003	0.0000	22.9995	22.9995	1.4400e-003	0.0000	23.0356
Worker	9.7700e-003	6.8600e-003	0.0741	1.8000e-004	0.0177	1.3000e-004	0.0179	4.7200e-003	1.2000e-004	4.8400e-003	0.0000	16.2137	16.2137	5.0000e-004	0.0000	16.2263
Total	0.0144	0.1254	0.1103	4.2000e-004	0.0234	9.7000e-004	0.0244	6.3500e-003	9.3000e-004	7.2800e-003	0.0000	39.2132	39.2132	1.9400e-003	0.0000	39.2619

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	6.1000e-004	4.3000e-004	4.6000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0071	1.0071	3.0000e-005	0.0000	1.0078
Total	6.1000e-004	4.3000e-004	4.6000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0071	1.0071	3.0000e-005	0.0000	1.0078

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	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	6.1000e-004	4.3000e-004	4.6000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0071	1.0071	3.0000e-005	0.0000	1.0078
Total	6.1000e-004	4.3000e-004	4.6000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0071	1.0071	3.0000e-005	0.0000	1.0078

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0971					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total	0.0998	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

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3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	6.5000e-004	7.0600e-003	2.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5442	1.5442	5.0000e-005	0.0000	1.5454
Total	9.3000e-004	6.5000e-004	7.0600e-003	2.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5442	1.5442	5.0000e-005	0.0000	1.5454

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0971					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total	0.0998	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

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3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	6.5000e-004	7.0600e-003	2.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5442	1.5442	5.0000e-005	0.0000	1.5454
Total	9.3000e-004	6.5000e-004	7.0600e-003	2.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5442	1.5442	5.0000e-005	0.0000	1.5454

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1619	0.5685	1.4496	3.2200e-003	0.2421	4.2100e-003	0.2464	0.0650	3.9600e-003	0.0689	0.0000	294.9747	294.9747	0.0185	0.0000	295.4363
Unmitigated	0.1619	0.5685	1.4496	3.2200e-003	0.2421	4.2100e-003	0.2464	0.0650	3.9600e-003	0.0689	0.0000	294.9747	294.9747	0.0185	0.0000	295.4363

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	576.16	546.52	265.59	648,730	648,730
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	576.16	546.52	265.59	648,730	648,730

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
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	10.00	5.00	6.50	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
Unenclosed Parking with Elevator	0.547085	0.042365	0.202414	0.127049	0.023381	0.005779	0.018348	0.021363	0.002103	0.002394	0.006067	0.000620	0.001032
Strip Mall	0.547085	0.042365	0.202414	0.127049	0.023381	0.005779	0.018348	0.021363	0.002103	0.002394	0.006067	0.000620	0.001032

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	215.6554	215.6554	0.0110	2.4500e-003	216.6595
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	215.6554	215.6554	0.0110	2.4500e-003	216.6595
NaturalGas Mitigated	3.7000e-004	3.3300e-003	2.8000e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6282	3.6282	7.0000e-005	7.0000e-005	3.6498
NaturalGas Unmitigated	3.7000e-004	3.3300e-003	2.8000e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6282	3.6282	7.0000e-005	7.0000e-005	3.6498

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Strip Mall	67990	3.7000e-004	3.3300e-003	2.8000e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6282	3.6282	7.0000e-005	7.0000e-005	3.6498
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.7000e-004	3.3300e-003	2.8000e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6282	3.6282	7.0000e-005	7.0000e-005	3.6498

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					
Strip Mall	67990	3.7000e-004	3.3300e-003	2.8000e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6282	3.6282	7.0000e-005	7.0000e-005	3.6498
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.7000e-004	3.3300e-003	2.8000e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6282	3.6282	7.0000e-005	7.0000e-005	3.6498

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	151450	36.3405	1.8500e-003	4.1000e-004	36.5097
Unenclosed Parking with Elevator	747300	179.3149	9.1500e-003	2.0300e-003	180.1498
Total		215.6554	0.0110	2.4400e-003	216.6595

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	151450	36.3405	1.8500e-003	4.1000e-004	36.5097
Unenclosed Parking with Elevator	747300	179.3149	9.1500e-003	2.0300e-003	180.1498
Total		215.6554	0.0110	2.4400e-003	216.6595

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0787	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229
Unmitigated	0.0787	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229

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	9.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229
Total	0.0787	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229
Total	0.0787	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0214	0.0214	6.0000e-005	0.0000	0.0229

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.9876	1.2600e-003	7.6000e-004	2.2454
Unmitigated	1.9876	1.2600e-003	7.6000e-004	2.2454

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	0.962943 / 0.590191	1.9876	1.2600e-003	7.6000e-004	2.2454
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.9876	1.2600e-003	7.6000e-004	2.2454

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	0.962943 / 0.590191	1.9876	1.2600e-003	7.6000e-004	2.2454
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.9876	1.2600e-003	7.6000e-004	2.2454

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.7708	0.1638	0.0000	6.8646
Unmitigated	2.7708	0.1638	0.0000	6.8646

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	13.65	2.7708	0.1638	0.0000	6.8646
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		2.7708	0.1638	0.0000	6.8646

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	13.65	2.7708	0.1638	0.0000	6.8646
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		2.7708	0.1638	0.0000	6.8646

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

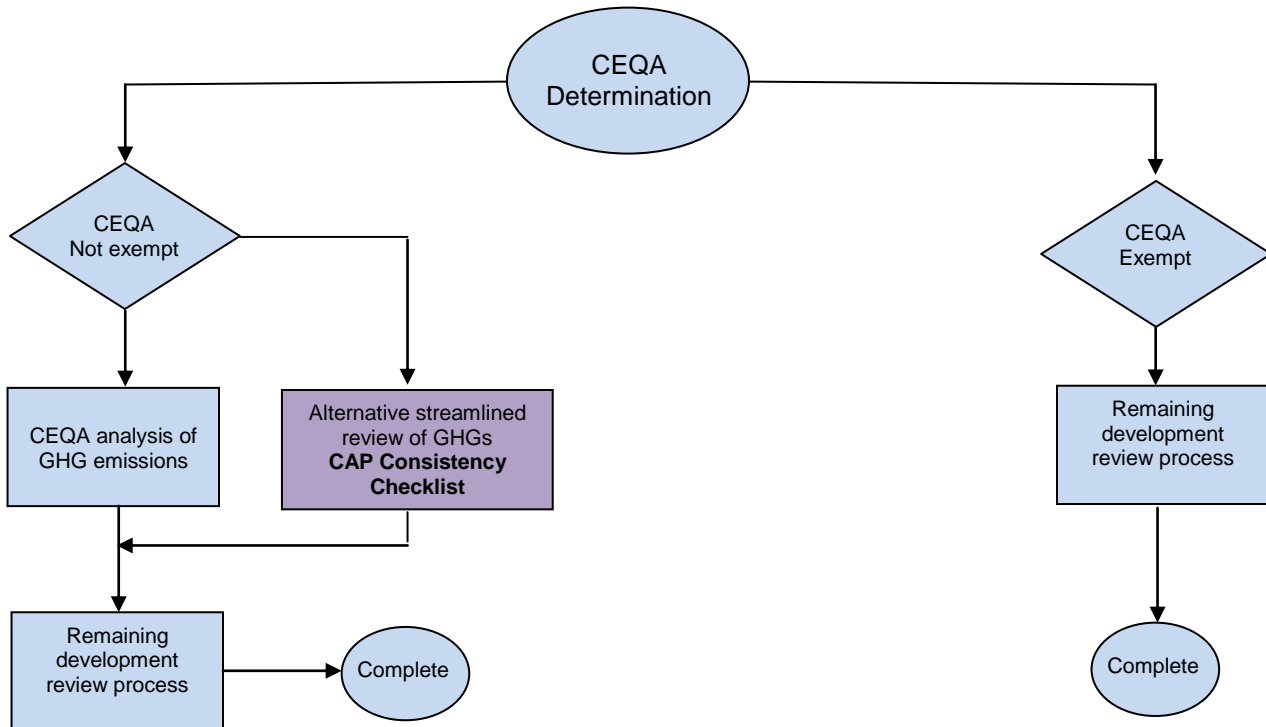
CLIMATE ACTION PLAN – CONSISTENCY REVIEW CHECKLIST

The purpose of the Climate Action Plan Consistency Review Checklist (CAP Consistency Review Checklist) is to provide a streamlined review process for proposed new development projects which are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA)..

CEQA Guidelines require the analysis of greenhouse gas (GHG) emissions and potential climate change impacts from new development. The Sacramento Climate Action Plan qualifies under section 15183.5 of the CEQA Guidelines as a plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects. This allows projects that demonstrate consistency with the CAP to be eligible for this streamlining procedure. Projects that demonstrate consistency with the CAP and the Sacramento 2030 General Plan may be able to answer “No additional significant environmental effect” in the City’s initial study checklist. Projects that do not demonstrate consistency may, at the City’s discretion, prepare a more comprehensive project-specific analysis of GHG emissions consistent with CEQA requirements. (See FAQ about the CAP Consistency Review Checklist for more details.)

The diagram below shows the context for the CAP Consistency Review Checklist within the planning review process framework.

Streamlined Review of GHG Emissions in Development Projects



CLIMATE ACTION PLAN – CONSISTENCY REVIEW CHECKLIST

Application Submittal Requirements

1. The CAP Consistency Review Checklist is required only for proposed new development projects which are subject to CEQA review (non-exempt projects)
2. If required, the CAP Consistency Review Checklist must be submitted in addition to the basic set of requirements set forth in the Universal Application and the Planning Application Submittal Matrix.
3. The applicant shall work with staff to meet the requirements of this checklist. These requirements will be reflected in the conditions of approval and/or mitigation measures.
4. All conditions of approval and mitigation measures from this checklist shall be shown on full-size sheets for building plan check submittals.

Application Information

Project Number: _____

Address of Property: _____

Was a special consultant retained to complete this checklist? Yes No. If yes, complete following

Consultant Name*: _____

Company: _____

Phone: _____ E-Mail: _____

CAP Consistency Checklist Form for Projects that are Not Exempt from CEQA

Checklist Item (Check the appropriate box, and provide explanation for your answer).	Yes	No*
1. Is the proposed project substantially consistent with the City's over-all goals for land use and urban form, allowable floor area ratio (FAR) and/or density standards in the City's 2035 General Plan, as it currently exists?	YES	
<p>Please explain how proposed project compares to 2035 General Plan with respect to density standards, FAR, land use and urban form. (See directions for filling out CAP Checklist)</p> <p>The City of Sacramento General Plan designates the project site as Residential Mixed Use and the block is zoned RMX-SPD (Residential Mixed Use-Special Planning District, City Code 17.212.110). The RMX district permits multifamily residential, commercial, and institutional uses in a mixture established for the area through a special planning district or adopted locational standards (City of Sacramento 2017). The project would include both institutional and commercial uses and would remain in compliance with the standards in the RMX-SPD. Additionally, the project would remain in compliance with the City's 2035, Land Use , Urban Form Designation and Development Standards (P. 2-29). The parking structure consist of seven levels and occupy the majority of the project site aside from the retail land use, therefore the project will exceed the minimum 3.0 FAR designated for the Central Business District area the project lies within.</p>		

2. Would the project incorporate traffic calming measures? (<i>Examples of traffic calming measures include, but are not limited to: curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers.</i>)	Yes	NA
		N/A
<p>Please explain how the proposed project meets this requirement (list traffic calming measures). If "not applicable" (NA), explain why traffic calming measures were not required.</p> <p>The project is located with an existing urban area and does not include any major roadway infrastructure construction or roadway improvements. The project would include pedestrian improvements as well as traffic calming measures along R Street adjacent to the retail portion of the project. Further, the project would include traffic calming measures that would be consistent the design policies and guidelines included in the R Street Corridor Community Plan (as part of the Sacramento Central City Community Plan [City of Sacramento 2015]) and the Central City Urban Design Guidelines for the R Street Corridor (City of Sacramento 1999).</p>		

*If "No", equivalent or better GHG reduction must be demonstrated as part of the project and incorporated into the conditions of approval.

Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.

Checklist Item (Check the appropriate box, and provide explanation for your answer).	Yes	NA
3. Would the project incorporate pedestrian facilities and connections to public transportation consistent with the City's Pedestrian Master Plan?		N/A
<p>Please explain how the proposed project meets this requirement. If "not applicable" (NA), explain why this was not required.</p> <p>The project is located within an existing urban area that includes existing sidewalks and pedestrian facilities. The project would include new pedestrian facilities along R Street adjacent to the retail portion of the project. Existing public transportation facilities are located near the project site and the site includes access points to the facilities through the existing sidewalk network. The project design would be guided by the City's Pedestrian Review Process as included in the Pedestrian Master Plan, using the Pedestrian Level of Improvement (Pedestrian Master Plan Figure 4.2) to establish pedestrian improvement requirements.</p>		

4. Would the project incorporate bicycle facilities consistent with the City's Bikeway Master Plan, and meet or exceed minimum standards for bicycle facilities in the Zoning Code and CALGreen?	Yes	NA
		Yes
<p>Please explain how the proposed project meets this requirement. If "not applicable" (NA), explain why this was not required.</p> <p>The project would include bicycle parking outside of the parking garage and along R Street for the retail portion of the project. The project site would also include long-term indoor bicycle parking within the parking garage. The bicycle facilities will be consistent with City's Bikeway Master Plan and meet or exceed the minimum Zoning and CALGreen Requirements</p>		

*If "No", equivalent or better GHG reduction must be demonstrated as part of the project and incorporated into the conditions of approval.

Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.

Checklist Item (Check the appropriate box, and provide explanation for your answer).	Yes	No*	NA
<p>5. For residential projects of 10 or more units, commercial projects greater than 25,000 square feet, or industrial projects greater than 100,000 square feet, would the project include on-site renewable energy systems (e.g., photovoltaic systems) that would generate at least a minimum of 15% of the project's total energy demand on-site? (CAP Actions: 3.4.1 and 3.4.2)</p>			N/A
<p>Please explain how the proposed project meets this requirement. If "not applicable" (NA), explain why this was not required. If project does not meet requirements, see DIRECTIONS FOR FILLING OUT CAP CONSISTENCY REVIEW CHECKLIST re: alternatives to meeting checklist requirements.</p> <p>The project land uses would not trigger any of the project size criteria specified in CAP Consistency Review Checklist and therefore would not be applicable to this project. The project includes 13,000 square feet of retail space but would remain under the 25,000 square foot criteria for the renewable energy requirement.</p> <p>Attach a copy of the CalEEMod input and output. Record the model and version here _____. Do NOT select the "use historical" box in CalEEMod for energy demand analysis related to this requirement.</p>			
<p>6. Would the project (if constructed on or after January 1, 2014) comply with minimum CALGreen Tier I water efficiency standards?</p>	Yes	NA	
<p>Please explain how the proposed project meets this requirement. If "not applicable" (NA), explain why this was not required.</p> <p>The project will meet Title 24 2016 Building Code Standards and meet the minimum CALGreen Tier I water efficiency standards. All structures would comply with California Building and City Building Codes, including CALGreen Tier I water efficiency standards and supporting documentation will be provided to City staff as a condition of approval to ensure the standards are being met.</p>			

*If "No", equivalent or better GHG reduction must be demonstrated as part and incorporated into the conditions of approval.

Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.

Certification

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

Signature: _____ Date: _____

DIRECTIONS FOR FILLING OUT CAP CONSISTENCY REVIEW CHECKLIST

General Plan Consistency & Sustainable Land Use

1. Is the proposed project substantially consistent with the land use and urban form designation, allowable floor area ratio (FAR) and/or density standards in the City's [2035 General Plan](#)?

Consistency with the General Plan land use and urban form designation, FAR and/or density standards is a key determining factor in whether or not the CAP Consistency Review procedure can be used. This is because future growth and development consistent with the General Plan was used to estimate business as usual emission forecasts, as well as emission reductions from actions that would be applicable to new development.

Refer to the 2035 General Plan, Land Use and Urban Form Designations and Development Standards starting on page 2-29. If a project is not fully consistent with the General Plan, the project still may qualify for consistency with the CAP, but this determination will need to be closely coordinated with the City. The City will determine whether the proposed land uses under consideration could be found consistent with the growth projections and assumptions used to develop the GHG emissions inventory and projections in the CAP.

Mobility

2. Would the project incorporate traffic calming measures? (Applicable CAP Action: 2.1.1)

List the traffic calming measures that have been incorporated into the project. These may include, but are not limited to: curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers.

The project proponent and City staff should consult with staff in the Department of Public Works-Transportation Division to verify that traffic calming measures are adequate and in compliance with the City's Street Design Standards.

If the proposed project does not include any roadway or facility improvements, traffic calming measures may not apply. For example, certain infill projects may not result in on-street or transportation facility improvements because sufficient infrastructure already exists.

3. Would the project incorporate pedestrian facilities and connections to public transportation consistent with the City's Pedestrian Master Plan? (Applicable CAP Action: 2.2.1)

List the pedestrian facilities and connections to public transportation that have been included in the proposed project on the Checklist. These may include, but are not limited to: sidewalks on both sides of streets, marked crosswalks, count-down signal timers, curb extensions, median islands, transit shelters, street lighting.

The project proponent and City staff should consult with Department of Public Works-Transportation Division staff to verify that pedestrian facilities are consistent with the [Pedestrian Master Plan](#). As in the previous example, if "not applicable", an explanation shall be documented in the Checklist. For example, certain infill projects may not require on-street or transportation facility improvements because sufficient infrastructure already exists.

The “Pedestrian Review Process Guide” ([Appendix A to the Master Plan](#)) will be used to determine consistency, as follows:

- For typical infill development projects where existing streets will serve the site (no new streets are proposed): the level of pedestrian improvements necessary to determine Pedestrian Master Plan consistency will be measured according to the “Basic, Upgrade or Premium” categories defined in Appendix A to the Pedestrian Master Plan, which are based on project location, surrounding land uses, proximity to transit, etc. If the proposed project does not include the minimum level of improvements per the assigned category for the project’s location, the project will be required as a condition of approval to include appropriate features, per the approval of the Department of Public Works-Transportation Division.
- For new “greenfield” projects and/or larger infill development projects where new streets are proposed as part of the project, the following will apply:
 - “Basic, Upgrade or Premium” levels of improvement will be required based on the proposed project’s location and context, where applicable, consistent with the criteria defined in the Master Plan. If the proposed project does not include the minimum level of improvements per the assigned category, the project will be required as a condition of approval to include appropriate features, per the approval of the Department of Public Works-Transportation Division.
 - The “Pedestrian Smart Growth Scorecard” (Appendix A to the Master Plan) will be required to be completed for the project, and a minimum score of 3 or better will need to be achieved. If the proposed project cannot achieve the minimum score, changes to the proposed project may be required, and/or the project may be required as a condition of approval to include certain improvements such that the average score will meet 3 or better. (Note: an Excel version of the Pedestrian Smart Growth Scorecard is available, to assist in automating the rating & scoring process)

4. Would the project incorporate bicycle facilities consistent with the City’s Bikeway Master Plan, and meet or exceed minimum standards for bicycle facilities in the Zoning Code and CALGreen? (Applicable CAP Action: 2.3.1)

List the bicycle facilities that are incorporated into the proposed project on the Checklist. These include, but are not limited to: Class I bike trails and Class II bike lanes connecting the project site to an existing bike network and transit stations, bike parking [bike racks, indoor secure bike parking, bike lockers], end-of-trip facilities at non-residential land uses [showers, lockers]).

The project proponent and City staff should consult with staff in the Transportation Division of the Department of Public Works to verify that such facilities are consistent with the [Bikeway Master Plan](#) and meet or exceed Zoning Code and CALGreen standards. Generally, the following guidelines will be used:

- If existing on-street and off-street bikeways are already present and determined to be consistent with the Bikeway Master Plan, no additional on-street bikeways will be required. Check the “not applicable” box if appropriate. However, on-site facilities shall still be required to meet or exceed minimum Zoning and CALGreen requirements.
- If not applicable, fully document the reasons why using the Checklist.

- If on-street bicycle facilities are not present or are only partially consistent with the Master Plan, the project will be required as a condition of approval to construct or pay for its fair-share of on-street and/or off-street bikeways described in the Master Plan, in addition to meeting or exceeding minimum on-site facilities.
- In some cases, a combination of new or upgraded on-street and off-street bikeways may be used to determine consistency with the Master Plan, at the discretion of the Department of Public Works-Transportation Division staff.

Energy Efficiency and Renewable Energy

- 5. For residential projects of 10 or more units, commercial projects greater than 25,000 square feet, or industrial projects greater than 100,000 square feet, would the project include on-site renewable energy systems (e.g., solar photovoltaic, solar water heating etc.) that would generate at least 15% of the project's total energy demand? (CAP Actions: 3.4.1 and 3.4.2)**

For projects of the minimum size specified in this measure, a commitment in the project description or in a mitigation measure that the project shall generate a minimum of 15% of the project's energy demand on-site is sufficient to demonstrate consistency with this measure. However, the project conditions of approval or mitigation measures should specify the intended renewable energy technology to be used (e.g. solar photovoltaic, solar water heating, wind, etc.) and estimated size of the systems to meet project demand based on the project description.

"Total energy demand" refers to the energy (electricity and natural gas) consumed by the built environment (including HVAC systems, water heating systems, and lighting systems) as well as uses that are independent of the construction of buildings, such as office equipment and other plug-ins.

Applicants may estimate the total energy demand of their projects using California Emissions Estimator Model (CalEEMod 2013.2), the same software used to estimate greenhouse gas emissions. **For CalEEMod estimates of energy demand to meet this specific requirement, the user should NOT select the "use historical" box, otherwise they will be "double-counting" emissions reductions that have already been counted.** CalEEMod outputs for electricity demand are provided in annual kWh, and natural gas demand is provided in annual kBtu.

The energy demand estimate by CalEEMod is based on two datasets:

- The California Commercial End Use Survey (CEUS);
- The Residential Appliance Saturation Survey (RASS)

CalEEMod takes energy use intensity data (above) and forecasts energy demand based on climate zone, land use subtype (such as "hospital", "arena", or "apartments, mid rise"), building area, and the number of buildings or units. This is an appropriate level of analysis for use at the planning submittal stage, but it may not provide an accurate picture of actual project energy demand because it does not factor project specifics such as building design.

Therefore, the applicant is advised (but not required) to run a more comprehensive energy simulation once project-specific details are known: basic building design, square-footage, building envelope, lighting design (at least rudimentary), and the mechanical system (at least minimally zoned). Some of the energy simulation programs that are appropriate for this level of analysis include: DOE 2.2, Trace 700, and Energy Pro.

The U.S. DOE maintains a list of energy simulation programs that are available.

http://apps1.eere.energy.gov/buildings/tools_directory/subjects.cfm/pagename=subjects/pagename_menu=whole_building_analysis/pagename_submenu=energy_simulation

The applicant may then revise the estimate and make a final determination regarding the size of the PV system that is required.

Substitutions: Projects may substitute a quantity of energy efficiency for renewable energy, as long as the substituted GHG reduction does not “double count” GHG reductions already taken by the CAP. In other words, substitutions must reduce GHG emissions from the project beyond what is already accounted for in the CAP (to avoid double-counting).

- Additional mitigation may include equivalent or better GHG reduction from individual measures or a combination of:
- In lieu of installing PV systems that would generate 15% of the projects total energy, the project may exceed energy efficiency standards of Title 24, part 6 of the California Building Code, such as building to CALGreen Tier 1 energy standards. (Residential projects shall exceed the 2013 Title 24 energy efficiency by a minimum of 10% and commercial projects shall exceed 2013 Title 24 energy efficiency by a minimum of 5%).

6. Would the project comply with minimum CALGreen Tier I water efficiency standards? (CAP Action: 5.1.1)

The [California Green Building Standards Code \(CALGreen\)](#) includes mandatory green building measures, as well as voluntary measures that local jurisdictions may choose to adopt to achieve higher performance tiers, at either Tier 1 or Tier 2 compliance levels. Sacramento has adopted Tier 1 Water Efficiency Standards to be required on or after January 1, 2014. Currently, in order to meet the Tier 1 Water Efficiency Standards, buildings are required to implement all mandatory water efficiency and conservation measures as well as certain Tier 1 specific measures that exceed minimum mandatory measures (e.g. 30% increase in indoor water efficiency). Specific Tier 1 provisions can be found in the CALGreen Code at <http://www.bsc.ca.gov/Home/CALGreen.aspx>.

The City recognizes that project construction details are often not known at the environmental review stage, and it may be premature for a project proponent to identify compliance with precise requirements of CALGreen. A condition of approval requiring the project to comply with minimum CALGreen Tier 1 water efficiency and conservation standards is sufficient to demonstrate consistency with this criterion.

Planning approval of your project will include the following condition:

Project must meet CALGreen Tier 1 water efficiency and conservation standards. Copies of the appropriate CalGreen checklist (see FAQ) shall be included on the full-size sheets for building plan check submittals.

Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.