

Appendix F

GHG Emissions Appendix

F-1 Greenhouse Gas Emissions Worksheets

Mt. Etna Community Plan Amendment and Rezone Project

Unmitigated GHG Summary

CalEEMod 2016.3.2

Title: Mt. Etna Community Plan Amendment and Rezone Project - Statewide, Winter

7/29/2019

Mt. Etna Community Plan Amendment and Rezone Project - Statewide, Summer

7/29/2019

EMFAC2017 Crime Lab - EMFAC2017 Emissions and CalEEMod Input

8/5/2019

Unmitigated Construction Emissions - Max Annual

		lbs/day CO ₂ e				
		Onsite	Hauling	Vendor	Worker	MT CO ₂ e
Demolition	2021	25.68	54.64	0.00	0.79	81
Site Preparation	2021	57.47	6.95	0.00	1.39	66
Grading	2021	39.97	6.95	0.00	1.39	48
Drainage/Utilities/Trenching	2021	32.06	0.00	0.00	2.30	34
Foundations/ Concrete Pour	2021	20.94	7.95	0.00	6.67	36
Building Construction	2021	41.23	0.00	218.57	144.52	404
	2022	114.59				115
Architectural Coating	2021	4.77	0.00	0.00	38.11	43
	2022	36.14				36
Paving	2022	27.13	0.00	0.00	1.52	29
Max Project Total						892
Amortized						30

Mt. Etna Community Plan Amendment and Rezone Project

Total On-Road Emissions

Construction Phase	Daily One-Way Trips	Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)	Regional Emissions (MT/yr) Total CO2e
<u>Demolition</u>	2021					
Total Haul Trips	1639					
Hauling	110	15	8	20	15	54.64
Vendor	0	15	8	7.3	15	0.00
Worker	16	15	8	10.8	0	0.79
<u>Site Preparation</u>	2021					
Total Haul Trips	200					
Hauling	7	30	8	20	15	6.95
Vendor	0	30	8	7.3	15	0.00
Worker	14	30	8	10.8	0	1.39
<u>Grading</u>	2021					
Total Haul Trips	200					
Hauling	7	30	8	20	15	6.95
Vendor	0	30	8	7.3	15	0.00
Worker	14	30	8	10.8	0	1.39
<u>Building Construction</u>	2021					
Total Haul Trips	0					
Hauling	0	257	8	20	15	0.00
Vendor	79	257	8	7.3	15	218.57
Worker	170	257	8	10.8	0	144.52
<u>Paving</u>	2021					
Total Haul Trips	0					
Hauling	0	23	8	20	15	0.00
Vendor	0	23	8	7.3	15	0.00
Worker	20	23	8	10.8	0	1.52
<u>Architectural Coating</u>	2021					
Total Haul Trips	0					
Hauling	0	240	8	20	15	0.00
Vendor	0	240	8	7.3	15	0.00
Worker	48	240	8	10.8	0	38.11
<u>Drainage/Utilities/Trench</u>	2021					
Total Haul Trips	0					
Hauling	0	29	8	20	15	0.00
Vendor	0	29	8	7.3	15	0.00
Worker	24	29	8	10.8	0	2.30
<u>Foundations/Concrete</u>	2021					
Total Haul Trips	200					
Hauling	5	48	8	20	15	7.95
Vendor	0	48	8	7.3	15	0.00
Worker	42	48	8	10.8	0	6.67

Mt. Etna Community Plan Amendment and Rezone Project
Running Emissions

2021Hauling	Hauling
2021Vendor	Vendor
2021Worker	Worker

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)
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<u>Demolition</u>	<u>2021</u>			
Total Haul Trips	1639			
Hauling	110	15	8	20
Vendor	0	15	8	7.3
Worker	16	15	8	10.8

<u>Site Preparation</u>	<u>2021</u>			
Total Haul Trips	200			
Hauling	7	30	8	20
Vendor	0	30	8	7.3
Worker	14	30	8	10.8

<u>Grading</u>	<u>2021</u>			
Total Haul Trips	200			
Hauling	7	30	8	20
Vendor	0	30	8	7.3
Worker	14	30	8	10.8

<u>Building Construction</u>	<u>2021</u>			
Total Haul Trips	0			
Hauling	0	257	8	20
Vendor	79	257	8	7.3
Worker	170	257	8	10.8

<u>Paving</u>	<u>2021</u>			
Total Haul Trips	0			
Hauling	0	23	8	20
Vendor	0	23	8	7.3
Worker	20	23	8	10.8

<u>Architectural Coating</u>	<u>2021</u>			
Total Haul Trips	0			
Hauling	0	240	8	20
Vendor	0	240	8	7.3
Worker	48	240	8	10.8

<u>Drainage/Utilities/Trench</u>	<u>2021</u>			
Total Haul Trips	0			
Hauling	0	29	8	20
Vendor	0	29	8	7.3
Worker	24	29	8	10.8

<u>Foundations/Concrete</u>	<u>2021</u>			
Total Haul Trips	200			
Hauling	5	48	8	20
Vendor	0	48	8	7.3
Worker	42	48	8	10.8

Mt. Etna Community Plan Amendment and Rezone Project
Running Emissions

		Running Emissions Factor		
		(grams/mile)		
		CO2	CH4	N2O
2021Hauling	Hauling	1546.9631	0.0738889	0.2455704
2021Vendor	Vendor	1363.9486	0.0424745	0.1970464
2021Worker	Worker	304.23999	0.004311	0.0067033

Construction Phase	Daily One-Way Trips	Haul Days per Phase	Work Hours per Day	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)			
		(days)	(hours/day)		CO2	CH4	N2O	CO2e
<u>Demolition</u>								
Total Haul Trips	2021 1639							
Hauling	110	15	8	20	51.05	0.06	2.35	53.46
Vendor	0	15	8	7.3	0.00	0.00	0.00	0.00
Worker	16	15	8	10.8	0.79	0.00	0.01	0.79
<u>Site Preparation</u>								
Total Haul Trips	2021 200							
Hauling	7	30	8	20	6.50	0.01	0.30	6.80
Vendor	0	30	8	7.3	0.00	0.00	0.00	0.00
Worker	14	30	8	10.8	1.38	0.00	0.01	1.39
<u>Grading</u>								
Total Haul Trips	2021 200							
Hauling	7	30	8	20	6.50	0.01	0.30	6.80
Vendor	0	30	8	7.3	0.00	0.00	0.00	0.00
Worker	14	30	8	10.8	1.38	0.00	0.01	1.39
<u>Building Construction</u>								
Total Haul Trips	2021 0							
Hauling	0	257	8	20	0.00	0.00	0.00	0.00
Vendor	79	257	8	7.3	202.15	0.16	8.47	210.78
Worker	170	257	8	10.8	143.56	0.05	0.92	144.52
<u>Paving</u>								
Total Haul Trips	2021 0							
Hauling	0	23	8	20	0.00	0.00	0.00	0.00
Vendor	0	23	8	7.3	0.00	0.00	0.00	0.00
Worker	20	23	8	10.8	1.51	0.00	0.01	1.52
<u>Architectural Coating</u>								
Total Haul Trips	2021 0							
Hauling	0	240	8	20	0.00	0.00	0.00	0.00
Vendor	0	240	8	7.3	0.00	0.00	0.00	0.00
Worker	48	240	8	10.8	37.85	0.01	0.24	38.11
<u>Drainage/Utilities/Trench</u>								
Total Haul Trips	2021 0							
Hauling	0	29	8	20	0.00	0.00	0.00	0.00
Vendor	0	29	8	7.3	0.00	0.00	0.00	0.00
Worker	24	29	8	10.8	2.29	0.00	0.01	2.30
<u>Foundations/Concrete</u>								
Total Haul Trips	2021 200							
Hauling	5	48	8	20	7.43	0.01	0.34	7.78
Vendor	0	48	8	7.3	0.00	0.00	0.00	0.00
Worker	42	48	8	10.8	6.62	0.00	0.04	6.67

Mt. Etna Community Plan Amendment and Rezone Project
Idling Emissions

		Idling Emissions Factor (grams/minute)		
		CO2	CH4	N2O
2021Hauling	Hauling	45.505716	0.0011209	0.0071906
2021Vendor	Vendor	24.456023	0.0006411	0.0038412
2021Worker	Worker	0	0	0

Construction Phase	Daily One-Way Trips	Haul Days	Work Hours	Idling	Regional Emissions			
		per Phase	per Day	minutes	(MT/year)			
		(days)	(hours/day)	per Day	CO2	CH4	N2O	CO2e
				(miles)				
<u>Demolition</u>	<u>2021</u>							
Total Haul Trips	1639							
Hauling	110	15	8	15	1.13	0.00	0.05	1.18
Vendor	0	15	8	15	0.00	0.00	0.00	0.00
Worker	16	15	8	0	0.00	0.00	0.00	0.00
<u>Site Preparation</u>	<u>2021</u>							
Total Haul Trips	200							
Hauling	7	30	8	15	0.14	0.00	0.01	0.15
Vendor	0	30	8	15	0.00	0.00	0.00	0.00
Worker	14	30	8	0	0.00	0.00	0.00	0.00
<u>Grading</u>	<u>2021</u>							
Total Haul Trips	200							
Hauling	7	30	8	15	0.14	0.00	0.01	0.15
Vendor	0	30	8	15	0.00	0.00	0.00	0.00
Worker	14	30	8	0	0.00	0.00	0.00	0.00
<u>Building Construction</u>	<u>2021</u>							
Total Haul Trips	0							
Hauling	0	257	8	15	0.00	0.00	0.00	0.00
Vendor	79	257	8	15	7.45	0.00	0.34	7.79
Worker	170	257	8	0	0.00	0.00	0.00	0.00
<u>Paving</u>	<u>2021</u>							
Total Haul Trips	0							
Hauling	0	23	8	15	0.00	0.00	0.00	0.00
Vendor	0	23	8	15	0.00	0.00	0.00	0.00
Worker	20	23	8	0	0.00	0.00	0.00	0.00
<u>Architectural Coating</u>	<u>2021</u>							
Total Haul Trips	0							
Hauling	0	240	8	15	0.00	0.00	0.00	0.00
Vendor	0	240	8	15	0.00	0.00	0.00	0.00
Worker	48	240	8	0	0.00	0.00	0.00	0.00
<u>Drainage/Utilities/Trench</u>	<u>2021</u>							
Total Haul Trips	0							
Hauling	0	29	8	15	0.00	0.00	0.00	0.00
Vendor	0	29	8	15	0.00	0.00	0.00	0.00
Worker	24	29	8	0	0.00	0.00	0.00	0.00
<u>Foundations/Concrete</u>	<u>2021</u>							
Total Haul Trips	200							
Hauling	5	48	8	15	0.16	0.00	0.01	0.17
Vendor	0	48	8	15	0.00	0.00	0.00	0.00
Worker	42	48	8	0	0.00	0.00	0.00	0.00

Mt. Etna Community Plan Amendment and Rezone Project - Statewide , Annual

Mt. Etna Community Plan Amendment and Rezone Project
Statewide , Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	0.00	Space	0.00	0.00	0
Parking Lot	404.00	Space	1.21	161,600.00	0
Apartments Mid Rise	404.00	Dwelling Unit	2.88	404,000.00	1281

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	7			Operational Year	2022
Utility Company	San Diego Gas & Electric				

CO2 Intensity (lb/MW/hr)	720.49	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

Project Characteristics - Adjusted windspeed andprecipitation for SD APCD

Land Use - Acreage adjusted for site area

Construction Phase - Based on client given inputs

Off-road Equipment - Client given inputs

Off-road Equipment - Client given inputs

Off-road Equipment - Client given inputs

Off-road Equipment - Client given inputs

Off-road Equipment - Client given inputs

Off-road Equipment - Client given inputs

Off-road Equipment - Client given inputs

Trips and VMT - Based on truck size of 12 CY provided by client

Demolition -

Grading - Client given inputs

Architectural Coating - See construction assumptions

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4 Final Mitigation

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	240.00
tblConstructionPhase	NumDays	230.00	48.00
tblConstructionPhase	NumDays	230.00	257.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	10.00	30.00
tblGrading	AcresOfGrading	15.00	4.00
tblGrading	AcresOfGrading	45.00	4.00
tblGrading	MaterialExported	0.00	1,200.00
tblGrading	MaterialExported	0.00	1,200.00

tblLandUse	LotAcreage	3.64	1.21
tblLandUse	LotAcreage	10.63	2.88
tblLandUse	Population	1,155.00	1,281.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	PrecipitationFrequency	54	40
tblProjectCharacteristics	WindSpeed	2.2	2.6
tblTripsAndVMT	HaulingTripNumber	487.00	1,639.00
tblTripsAndVMT	HaulingTripNumber	150.00	200.00
tblTripsAndVMT	HaulingTripNumber	150.00	200.00
tblTripsAndVMT	HaulingTripNumber	0.00	200.00
tblTripsAndVMT	HaulingVehicleClass	HHDT	HDT_Mix
tblTripsAndVMT	VendorTripNumber	93.00	0.00

tblTripsAndVMT	VendorTripNumber	93.00	79.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	18.00	14.00
tblTripsAndVMT	WorkerTripNumber	30.00	14.00
tblTripsAndVMT	WorkerTripNumber	25.00	24.00
tblTripsAndVMT	WorkerTripNumber	418.00	42.00
tblTripsAndVMT	WorkerTripNumber	418.00	170.00
tblTripsAndVMT	WorkerTripNumber	84.00	48.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.9665	2.2633	1.6669	4.7800e-003	0.1618	0.0834	0.2452	0.0368	0.0782	0.1151	0.0000	431.4940	431.4940	0.0672	0.0000	433.1731
2022	5.9064	1.9952	1.8140	5.6400e-003	0.2211	0.0673	0.2884	0.0599	0.0639	0.1237	0.0000	513.6509	513.6509	0.0523	0.0000	514.9587
Maximum	5.9064	2.2633	1.8140	5.6400e-003	0.2211	0.0834	0.2884	0.0599	0.0782	0.1237	0.0000	513.6509	513.6509	0.0672	0.0000	514.9587

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.8255	0.7440	1.7941	4.7800e-003	0.1266	5.8400e-003	0.1324	0.0316	5.7400e-003	0.0373	0.0000	431.4938	431.4938	0.0672	0.0000	433.1729
2022	5.7963	1.0120	1.9193	5.6400e-003	0.2211	5.8100e-003	0.2269	0.0599	5.6500e-003	0.0655	0.0000	513.6507	513.6507	0.0523	0.0000	514.9585
Maximum	5.7963	1.0120	1.9193	5.6400e-003	0.2211	5.8400e-003	0.2269	0.0599	5.7400e-003	0.0655	0.0000	513.6507	513.6507	0.0672	0.0000	514.9585

	ROG	NOx	CO	SO2	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	3.65	58.77	-6.68	0.00	9.20	92.27	32.66	5.40	91.98	56.92	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)								Maximum Mitigated ROG + NOX (tons/quarter)					
1	3-1-2021	5-31-2021	1.2211								0.3383					
2	6-1-2021	8-31-2021	0.4298								0.0595					
3	9-1-2021	11-30-2021	0.6734								0.4113					
4	12-1-2021	2-28-2022	2.4249								2.0986					
5	3-1-2022	5-31-2022	2.4527								2.1360					
6	6-1-2022	8-31-2022	2.4513								2.1346					
7	9-1-2022	9-30-2022	0.7952								0.6741					
		Highest	2.4527								2.1360					

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2021	3/21/2021	5	15	
2	Site Preparation	Site Preparation	3/22/2021	4/30/2021	5	30	
3	Grading	Grading	5/1/2021	6/11/2021	5	30	
4	Drainage/Utilities/Trenching	Trenching	6/12/2021	7/22/2021	5	29	
5	Foundations/Concrete Pour	Building Construction	7/23/2021	9/28/2021	5	48	
6	Building Construction	Building Construction	9/29/2021	9/22/2022	5	257	
7	Architectural Coating	Architectural Coating	11/24/2021	10/25/2022	5	240	
8	Paving	Paving	9/23/2022	10/25/2022	5	23	

Acres of Grading (Site Preparation Phase): 4

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.21

Residential Indoor: 818,100; Residential Outdoor: 272,700; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Generator Sets	1	8.00	84	0.74
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rollers	1	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Dumpers/Tenders	4	8.00	16	0.38
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	2	8.00	8	0.43
Grading	Rollers	1	8.00	80	0.38
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Drainage/Utilities/Trenching	Air Compressors	1	8.00	78	0.48
Drainage/Utilities/Trenching	Dumpers/Tenders	2	8.00	16	0.38
Drainage/Utilities/Trenching	Excavators	1	8.00	158	0.38
Drainage/Utilities/Trenching	Forklifts	1	8.00	89	0.20
Drainage/Utilities/Trenching	Plate Compactors	2	8.00	8	0.43
Drainage/Utilities/Trenching	Rubber Tired Loaders	1	8.00	203	0.36
Drainage/Utilities/Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Foundations/Concrete Pour	Cranes	0	7.00	231	0.29
Foundations/Concrete Pour	Forklifts	0	8.00	89	0.20

Foundations/Concrete Pour	Generator Sets	0	8.00	84	0.74
Foundations/Concrete Pour	Plate Compactors	1	8.00	8	0.43
Foundations/Concrete Pour	Pumps	1	8.00	84	0.74
Foundations/Concrete Pour	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Foundations/Concrete Pour	Welders	0	8.00	46	0.45
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Sweepers/Scrubbers	1	8.00	64	0.46
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Sweepers/Scrubbers	1	8.00	64	0.46
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	16.00	0.00	1,639.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	14.00	0.00	200.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	12	14.00	0.00	200.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Drainage/Utilities/Trenching	10	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Foundations/Concrete	3	42.00	0.00	200.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HDT_Mix
Building Construction	4	170.00	79.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	48.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr															
Fugitive Dust					0.0533	0.0000	0.0533	8.0700e-003	0.0000	8.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.2358	0.1617	2.9000e-004		0.0116	0.0116		0.0108	0.0108	0.0000	25.5006	25.5006	7.1800e-003	0.0000	25.6800
Total	0.0237	0.2358	0.1617	2.9000e-004	0.0533	0.0116	0.0650	8.0700e-003	0.0108	0.0189	0.0000	25.5006	25.5006	7.1800e-003	0.0000	25.6800

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.9600e-003	0.2096	0.0392	6.4000e-004	0.0140	6.7000e-004	0.0147	3.8600e-003	6.4000e-004	4.4900e-003	0.0000	61.4422	61.4422	3.2300e-003	0.0000	61.5229
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.0000e-004	3.2200e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8312	0.8312	2.0000e-005	0.0000	0.8318
Total	6.3900e-003	0.2099	0.0424	6.5000e-004	0.0150	6.8000e-004	0.0157	4.1200e-003	6.5000e-004	4.7500e-003	0.0000	62.2734	62.2734	3.2500e-003	0.0000	62.3547

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					0.0208	0.0000	0.0208	3.1500e-003	0.0000	3.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4700e-003	0.0150	0.1746	2.9000e-004	4.6000e-004	4.6000e-004	4.6000e-004	4.6000e-004	4.6000e-004	4.6000e-004	0.0000	25.5006	25.5006	7.1800e-003	0.0000	25.6800
Total	3.4700e-003	0.0150	0.1746	2.9000e-004	0.0208	4.6000e-004	0.0213	3.1500e-003	4.6000e-004	3.6100e-003	0.0000	25.5006	25.5006	7.1800e-003	0.0000	25.6800

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.9600e-003	0.2096	0.0392	6.4000e-004	0.0140	6.7000e-004	0.0147	3.8600e-003	6.4000e-004	4.4900e-003	0.0000	61.4422	61.4422	3.2300e-003	0.0000	61.5229
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.0000e-004	3.2200e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8312	0.8312	2.0000e-005	0.0000	0.8318
Total	6.3900e-003	0.2099	0.0424	6.5000e-004	0.0150	6.8000e-004	0.0157	4.1200e-003	6.5000e-004	4.7500e-003	0.0000	62.2734	62.2734	3.2500e-003	0.0000	62.3547

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2100e-003	0.0000	2.2100e-003	2.4000e-004	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0397	0.4406	0.3068	6.5000e-004		0.0186	0.0186		0.0173	0.0173	0.0000	57.0675	57.0675	0.0162	0.0000	57.4712
Total	0.0397	0.4406	0.3068	6.5000e-004	2.2100e-003	0.0186	0.0208	2.4000e-004	0.0173	0.0176	0.0000	57.0675	57.0675	0.0162	0.0000	57.4712

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.3000e-004	0.0256	4.7800e-003	8.0000e-005	1.7100e-003	8.0000e-005	1.7900e-003	4.7000e-004	8.0000e-005	5.5000e-004	0.0000	7.4975	7.4975	3.9000e-004	0.0000	7.5074
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	5.3000e-004	5.6300e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.4546	1.4546	4.0000e-005	0.0000	1.4557
Total	1.4800e-003	0.0261	0.0104	1.0000e-004	3.3900e-003	9.0000e-005	3.4900e-003	9.2000e-004	9.0000e-005	1.0100e-003	0.0000	8.9522	8.9522	4.3000e-004	0.0000	8.9630

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					8.6000e-004	0.0000	8.6000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7800e-003	0.0337	0.3506	6.5000e-004		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003	0.0000	57.0675	57.0675	0.0162	0.0000	57.4712
Total	7.7800e-003	0.0337	0.3506	6.5000e-004	8.6000e-004	1.0400e-003	1.9000e-003	9.0000e-005	1.0400e-003	1.1300e-003	0.0000	57.0675	57.0675	0.0162	0.0000	57.4712

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.3000e-004	0.0256	4.7800e-003	8.0000e-005	1.7100e-003	8.0000e-005	1.7900e-003	4.7000e-004	8.0000e-005	5.5000e-004	0.0000	7.4975	7.4975	3.9000e-004	0.0000	7.5074
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	5.3000e-004	5.6300e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.4546	1.4546	4.0000e-005	0.0000	1.4557
Total	1.4800e-003	0.0261	0.0104	1.0000e-004	3.3900e-003	9.0000e-005	3.4900e-003	9.2000e-004	9.0000e-005	1.0100e-003	0.0000	8.9522	8.9522	4.3000e-004	0.0000	8.9630

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2100e-003	0.0000	2.2100e-003	2.4000e-004	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0295	0.3003	0.2169	4.6000e-004		0.0128	0.0128		0.0119	0.0119	0.0000	39.6763	39.6763	0.0119	0.0000	39.9741
Total	0.0295	0.3003	0.2169	4.6000e-004	2.2100e-003	0.0128	0.0150	2.4000e-004	0.0119	0.0121	0.0000	39.6763	39.6763	0.0119	0.0000	39.9741

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.3000e-004	0.0256	4.7800e-003	8.0000e-005	1.7100e-003	8.0000e-005	1.7900e-003	4.7000e-004	8.0000e-005	5.5000e-004	0.0000	7.4975	7.4975	3.9000e-004	0.0000	7.5074
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	5.3000e-004	5.6300e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.4546	1.4546	4.0000e-005	0.0000	1.4557
Total	1.4800e-003	0.0261	0.0104	1.0000e-004	3.3900e-003	9.0000e-005	3.4900e-003	9.2000e-004	9.0000e-005	1.0100e-003	0.0000	8.9522	8.9522	4.3000e-004	0.0000	8.9630

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					8.6000e-004	0.0000	8.6000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9500e-003	0.0215	0.2460	4.6000e-004		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	39.6763	39.6763	0.0119	0.0000	39.9740
Total	4.9500e-003	0.0215	0.2460	4.6000e-004	8.6000e-004	6.6000e-004	1.5200e-003	9.0000e-005	6.6000e-004	7.5000e-004	0.0000	39.6763	39.6763	0.0119	0.0000	39.9740

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.3000e-004	0.0256	4.7800e-003	8.0000e-005	1.7100e-003	8.0000e-005	1.7900e-003	4.7000e-004	8.0000e-005	5.5000e-004	0.0000	7.4975	7.4975	3.9000e-004	0.0000	7.5074
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	5.3000e-004	5.6300e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.4546	1.4546	4.0000e-005	0.0000	1.4557
Total	1.4800e-003	0.0261	0.0104	1.0000e-004	3.3900e-003	9.0000e-005	3.4900e-003	9.2000e-004	9.0000e-005	1.0100e-003	0.0000	8.9522	8.9522	4.3000e-004	0.0000	8.9630

3.5 Drainage/Utilities/Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0231	0.2096	0.2016	3.7000e-004		0.0105	0.0105		9.8200e-003	9.8200e-003	0.0000	31.8509	31.8509	8.5000e-003	0.0000	32.0634
Total	0.0231	0.2096	0.2016	3.7000e-004		0.0105	0.0105		9.8200e-003	9.8200e-003	0.0000	31.8509	31.8509	8.5000e-003	0.0000	32.0634

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	8.8000e-004	9.3300e-003	3.0000e-005	2.7900e-003	2.0000e-005	2.8100e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.4106	2.4106	7.0000e-005	0.0000	2.4123
Total	1.2400e-003	8.8000e-004	9.3300e-003	3.0000e-005	2.7900e-003	2.0000e-005	2.8100e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.4106	2.4106	7.0000e-005	0.0000	2.4123

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	3.9900e-003	0.0173	0.2181	3.7000e-004		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	31.8509	31.8509	8.5000e-003	0.0000	32.0633
Total	3.9900e-003	0.0173	0.2181	3.7000e-004		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	31.8509	31.8509	8.5000e-003	0.0000	32.0633

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	8.8000e-004	9.3300e-003	3.0000e-005	2.7900e-003	2.0000e-005	2.8100e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.4106	2.4106	7.0000e-005	0.0000	2.4123
Total	1.2400e-003	8.8000e-004	9.3300e-003	3.0000e-005	2.7900e-003	2.0000e-005	2.8100e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.4106	2.4106	7.0000e-005	0.0000	2.4123

3.6 Foundations/Concrete Pour - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0146	0.1286	0.1491	2.4000e-004		7.1800e-003	7.1800e-003		6.9600e-003	6.9600e-003	0.0000	20.8670	20.8670	2.9400e-003	0.0000	20.9405
Total	0.0146	0.1286	0.1491	2.4000e-004		7.1800e-003	7.1800e-003		6.9600e-003	6.9600e-003	0.0000	20.8670	20.8670	2.9400e-003	0.0000	20.9405

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	6.0000e-004	0.0174	4.1300e-003	6.0000e-005	1.8100e-003	6.0000e-005	1.8700e-003	5.2000e-004	6.0000e-005	5.8000e-004	0.0000	6.1245	6.1245	2.2000e-004	0.0000	6.1299
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5800e-003	2.5500e-003	0.0270	8.0000e-005	8.0800e-003	6.0000e-005	8.1400e-003	2.1500e-003	5.0000e-005	2.2000e-003	0.0000	6.9823	6.9823	2.0000e-004	0.0000	6.9872
Total	4.1800e-003	0.0199	0.0312	1.4000e-004	9.8900e-003	1.2000e-004	0.0100	2.6700e-003	1.1000e-004	2.7800e-003	0.0000	13.1068	13.1068	4.2000e-004	0.0000	13.1172

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.4900e-003	0.0108	0.1536	2.4000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	20.8670	20.8670	2.9400e-003	0.0000	20.9404
Total	2.4900e-003	0.0108	0.1536	2.4000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	20.8670	20.8670	2.9400e-003	0.0000	20.9404

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	6.0000e-004	0.0174	4.1300e-003	6.0000e-005	1.8100e-003	6.0000e-005	1.8700e-003	5.2000e-004	6.0000e-005	5.8000e-004	0.0000	6.1245	6.1245	2.2000e-004	0.0000	6.1299
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5800e-003	2.5500e-003	0.0270	8.0000e-005	8.0800e-003	6.0000e-005	8.1400e-003	2.1500e-003	5.0000e-005	2.2000e-003	0.0000	6.9823	6.9823	2.0000e-004	0.0000	6.9872
Total	4.1800e-003	0.0199	0.0312	1.4000e-004	9.8900e-003	1.2000e-004	0.0100	2.6700e-003	1.1000e-004	2.7800e-003	0.0000	13.1068	13.1068	4.2000e-004	0.0000	13.1172

3.7 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0361	0.3441	0.2559	4.7000e-004		0.0190	0.0190		0.0178	0.0178	0.0000	40.9677	40.9677	0.0103	0.0000	41.2252
Total	0.0361	0.3441	0.2559	4.7000e-004		0.0190	0.0190		0.0178	0.0178	0.0000	40.9677	40.9677	0.0103	0.0000	41.2252

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	8.4000e-003	0.2766	0.0642	7.3000e-004	0.0178	6.4000e-004	0.0185	5.1500e-003	6.1000e-004	5.7600e-003	0.0000	70.4107	70.4107	4.0000e-003	0.0000	70.5107
Worker	0.0205	0.0146	0.1550	4.4000e-004	0.0464	3.4000e-004	0.0467	0.0123	3.1000e-004	0.0126	0.0000	40.0373	40.0373	1.1300e-003	0.0000	40.0655
Total	0.0289	0.2912	0.2192	1.1700e-003	0.0642	9.8000e-004	0.0652	0.0175	9.2000e-004	0.0184	0.0000	110.4479	110.4479	5.1300e-003	0.0000	110.5762

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.5200e-003	0.0674	0.2763	4.7000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	40.9676	40.9676	0.0103	0.0000	41.2252
Total	6.5200e-003	0.0674	0.2763	4.7000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	40.9676	40.9676	0.0103	0.0000	41.2252

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	8.4000e-003	0.2766	0.0642	7.3000e-004	0.0178	6.4000e-004	0.0185	5.1500e-003	6.1000e-004	5.7600e-003	0.0000	70.4107	70.4107	4.0000e-003	0.0000	70.5107
Worker	0.0205	0.0146	0.1550	4.4000e-004	0.0464	3.4000e-004	0.0467	0.0123	3.1000e-004	0.0126	0.0000	40.0373	40.0373	1.1300e-003	0.0000	40.0655
Total	0.0289	0.2912	0.2192	1.1700e-003	0.0642	9.8000e-004	0.0652	0.0175	9.2000e-004	0.0184	0.0000	110.4479	110.4479	5.1300e-003	0.0000	110.5762

3.7 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0900	0.8429	0.6975	1.3000e-003		0.0447	0.0447		0.0420	0.0420	0.0000	113.8739	113.8739	0.0285	0.0000	114.5869
Total	0.0900	0.8429	0.6975	1.3000e-003		0.0447	0.0447		0.0420	0.0420	0.0000	113.8739	113.8739	0.0285	0.0000	114.5869

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	0.0218	0.7272	0.1663	2.0200e-003	0.0496	1.5400e-003	0.0511	0.0143	1.4700e-003	0.0158	0.0000	193.9401	193.9401	0.0106	0.0000	194.2058
Worker	0.0534	0.0365	0.3952	1.1900e-003	0.1288	9.1000e-004	0.1297	0.0342	8.4000e-004	0.0351	0.0000	107.2805	107.2805	2.8200e-003	0.0000	107.3511
Total	0.0751	0.7638	0.5615	3.2100e-003	0.1784	2.4500e-003	0.1809	0.0485	2.3100e-003	0.0509	0.0000	301.2206	301.2206	0.0135	0.0000	301.5569

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	0.0181	0.1874	0.7678	1.3000e-003	0.0496	2.0200e-003	2.0200e-003	0.0143	2.0200e-003	2.0200e-003	0.0000	113.8738	113.8738	0.0285	0.0000	114.5868
Total	0.0181	0.1874	0.7678	1.3000e-003	0.0496	2.0200e-003	2.0200e-003	0.0143	2.0200e-003	2.0200e-003	0.0000	113.8738	113.8738	0.0285	0.0000	114.5868

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	0.0218	0.7272	0.1663	2.0200e-003	0.0496	1.5400e-003	0.0511	0.0143	1.4700e-003	0.0158	0.0000	193.9401	193.9401	0.0106	0.0000	194.2058
Worker	0.0534	0.0365	0.3952	1.1900e-003	0.1288	9.1000e-004	0.1297	0.0342	8.4000e-004	0.0351	0.0000	107.2805	107.2805	2.8200e-003	0.0000	107.3511
Total	0.0751	0.7638	0.5615	3.2100e-003	0.1784	2.4500e-003	0.1809	0.0485	2.3100e-003	0.0509	0.0000	301.2206	301.2206	0.0135	0.0000	301.5569

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7496					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0900e-003	0.0285	0.0339	6.0000e-005	1.7600e-003	1.7600e-003	1.7600e-003		1.7600e-003	1.7600e-003	0.0000	4.7661	4.7661	3.3000e-004	0.0000	4.7743
Total	0.7537	0.0285	0.0339	6.0000e-005	1.7600e-003	1.7600e-003	1.7600e-003		1.7600e-003	1.7600e-003	0.0000	4.7661	4.7661	3.3000e-004	0.0000	4.7743

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3900e-003	1.7000e-003	0.0180	5.0000e-005	5.3900e-003	4.0000e-005	5.4300e-003	1.4300e-003	4.0000e-005	1.4700e-003	0.0000	4.6549	4.6549	1.3000e-004	0.0000	4.6581
Total	2.3900e-003	1.7000e-003	0.0180	5.0000e-005	5.3900e-003	4.0000e-005	5.4300e-003	1.4300e-003	4.0000e-005	1.4700e-003	0.0000	4.6549	4.6549	1.3000e-004	0.0000	4.6581

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	0.7496					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	2.4000e-003	0.0342	6.0000e-005	7.0000e-005	7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.7661	4.7661	3.3000e-004	0.0000	4.7742
Total	0.7502	2.4000e-003	0.0342	6.0000e-005	7.0000e-005	7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.7661	4.7661	3.3000e-004	0.0000	4.7742

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3900e-003	1.7000e-003	0.0180	5.0000e-005	5.3900e-003	4.0000e-005	5.4300e-003	1.4300e-003	4.0000e-005	1.4700e-003	0.0000	4.6549	4.6549	1.3000e-004	0.0000	4.6581
Total	2.3900e-003	1.7000e-003	0.0180	5.0000e-005	5.3900e-003	4.0000e-005	5.4300e-003	1.4300e-003	4.0000e-005	1.4700e-003	0.0000	4.6549	4.6549	1.3000e-004	0.0000	4.6581

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.6756					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0289	0.1991	0.2563	4.2000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	36.0860	36.0860	2.3500e-003	0.0000	36.1447
Total	5.7045	0.1991	0.2563	4.2000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	36.0860	36.0860	2.3500e-003	0.0000	36.1447

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0169	0.0116	0.1252	3.8000e-004	0.0408	2.9000e-004	0.0411	0.0108	2.7000e-004	0.0111	0.0000	33.9772	33.9772	8.9000e-004	0.0000	33.9995
Total	0.0169	0.0116	0.1252	3.8000e-004	0.0408	2.9000e-004	0.0411	0.0108	2.7000e-004	0.0111	0.0000	33.9772	33.9772	8.9000e-004	0.0000	33.9995

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.6756					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2000e-003	0.0182	0.2590	4.2000e-004		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	36.0859	36.0859	2.3500e-003	0.0000	36.1447
Total	5.6798	0.0182	0.2590	4.2000e-004		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	36.0859	36.0859	2.3500e-003	0.0000	36.1447

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0169	0.0116	0.1252	3.8000e-004	0.0408	2.9000e-004	0.0411	0.0108	2.7000e-004	0.0111	0.0000	33.9772	33.9772	8.9000e-004	0.0000	33.9995
Total	0.0169	0.0116	0.1252	3.8000e-004	0.0408	2.9000e-004	0.0411	0.0108	2.7000e-004	0.0111	0.0000	33.9772	33.9772	8.9000e-004	0.0000	33.9995

3.9 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0175	0.1774	0.1678	3.1000e-004		8.3000e-003	8.3000e-003		7.7800e-003	7.7800e-003	0.0000	26.9574	26.9574	7.0600e-003	0.0000	27.1338
Paving	1.5900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0190	0.1774	0.1678	3.1000e-004		8.3000e-003	8.3000e-003		7.7800e-003	7.7800e-003	0.0000	26.9574	26.9574	7.0600e-003	0.0000	27.1338

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	5.2000e-004	5.6600e-003	2.0000e-005	1.8400e-003	1.0000e-005	1.8600e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5359	1.5359	4.0000e-005	0.0000	1.5369
Total	7.6000e-004	5.2000e-004	5.6600e-003	2.0000e-005	1.8400e-003	1.0000e-005	1.8600e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5359	1.5359	4.0000e-005	0.0000	1.5369

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	3.9800e-003	0.0305	0.2001	3.1000e-004	4.8000e-004	4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	26.9574	26.9574	7.0600e-003	0.0000	27.1338
Paving	1.5900e-003				0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.5700e-003	0.0305	0.2001	3.1000e-004	4.8000e-004	4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	26.9574	26.9574	7.0600e-003	0.0000	27.1338

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	5.2000e-004	5.6600e-003	2.0000e-005	1.8400e-003	1.0000e-005	1.8600e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5359	1.5359	4.0000e-005	0.0000	1.5369
Total	7.6000e-004	5.2000e-004	5.6600e-003	2.0000e-005	1.8400e-003	1.0000e-005	1.8600e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.5359	1.5359	4.0000e-005	0.0000	1.5369

Mt. Etna Community Plan Amendment and Rezone Project
Operational GHG Emissions Summary

Category	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	MT/yr					
Area	0	4.9073	4.9073	4.75E-03	0	5.0259
Energy	0	964.2742	964.2742	0.0317	0.0114	968.4641
Mobile	0	1,994.50	1,994.50	0.1447	0	1,998.12
Waste	37.7238	0	37.7238	2.2294	0	93.4592
Water	8.3508	118.8957	127.2465	0.8625	0.0212	155.1392
Total	46.0747	3,082.58	3,128.66	3.2731	0.0326	3,220.21

Mt. Etna Community Plan Amendment and Rezone Project - Statewide , Annual

Mt. Etna Community Plan Amendment and Rezone Project
Statewide , Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	0.00	Space	0.00	0.00	0
Parking Lot	404.00	Space	1.21	161,600.00	0
Apartments Mid Rise	404.00	Dwelling Unit	2.88	404,000.00	1281

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	7			Operational Year	2022

Utility Company San Diego Gas & Electric

CO2 Intensity (lb/MW/hr)	720.49	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
-----------------------------	--------	-----------------------------	-------	-----------------------------	-------

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Changed for SD County

Land Use - Client given inputs

Vehicle Trips - Taken from TIA prepared by Chen+Ryan

Vehicle Emission Factors - EMFAC2017 Factors

Woodstoves - No wood fireplaces

Area Coating -

Energy Use -

Area Mitigation -

Water Mitigation -

Waste Mitigation - Based on SD Zero Waste Plan goal of 75% diversion by 2020

Fleet Mix - EMFAC2017 fleet mix

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT/yr				
Area	2.3175	0.0347	3.0067	1.6000e-004		0.0166	0.0166		0.0166	0.0166	0.0000	4.9073	4.9073	4.7500e-003	0.0000	5.0259
Energy	0.0340	0.2908	0.1237	1.8600e-003		0.0235	0.0235		0.0235	0.0235	0.0000	964.2742	964.2742	0.0317	0.0114	968.4641
Mobile	1.3823	1.3774	10.5167	0.0216	2.1560	0.0192	2.1752	0.5755	0.0180	0.5934	0.0000	1.994.5034	1.994.5034	0.1447	0.0000	1.998.1217
Waste						0.0000	0.0000		0.0000	0.0000	37.7238	0.0000	37.7238	2.2294	0.0000	93.4592
Water						0.0000	0.0000		0.0000	0.0000	8.3508	118.8957	127.2465	0.8625	0.0212	155.1392
Total	3.7339	1.7029	13.6471	0.0236	2.1560	0.0593	2.2153	0.5755	0.0581	0.6336	46.0747	3,082.5806	3,128.6552	3.2731	0.0326	3,220.2100

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	2.3175	0.0347	3.0067	1.6000e-004	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	0.0000	4.9073	4.9073	4.7500e-003	0.0000	5.0259
Energy	0.0340	0.2908	0.1237	1.8600e-003	0.0235	0.0235	0.0235	0.0235	0.0235	0.0235	0.0000	964.2742	964.2742	0.0317	0.0114	968.4641
Mobile	1.3823	1.3774	10.5167	0.0216	2.1560	0.0192	2.1752	0.5755	0.0180	0.5934	0.0000	1,994.5034	1,994.5034	0.1447	0.0000	1,998.1217
Waste					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	9.4310	0.0000	9.4310	0.5574	0.0000	23.3648
Water					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	6.6807	100.6232	107.3039	0.6902	0.0170	129.6372
Total	3.7339	1.7029	13.6471	0.0236	2.1560	0.0593	2.2153	0.5755	0.0581	0.6336	16.1116	3,064.3081	3,080.4198	1.4288	0.0284	3,124.6137

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.03	0.59	1.54	56.35	12.87	2.97

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3823	1.3774	10.5167	0.0216	2.1560	0.0192	2.1752	0.5755	0.0180	0.5934	0.0000	1,994.5034	1,994.5034	0.1447	0.0000	1,998.1217
Unmitigated	1.3823	1.3774	10.5167	0.0216	2.1560	0.0192	2.1752	0.5755	0.0180	0.5934	0.0000	1,994.5034	1,994.5034	0.1447	0.0000	1,998.1217

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
Apartments Mid Rise	2,020.00	2,020.00	2020.00	5,762,753		5,762,753	
Enclosed Parking with Elevator	0.00	0.00	0.00				
Parking Lot	0.00	0.00	0.00				
Total	2,020.00	2,020.00	2,020.00	5,762,753		5,762,753	

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-	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by			
Apartments Mid Rise	10.80	7.30	7.50	41.40	19.30	39.30				86	11	3			
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00				0	0	0			
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00				0	0	0			

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.548470	0.062992	0.183336	0.122442	0.024733	0.006148	0.008613	0.006191	0.000732	0.000545	0.029420	0.000989	0.005388
Enclosed Parking with Elevator	0.552843	0.039396	0.193030	0.116235	0.017695	0.005634	0.019549	0.044452	0.002104	0.001859	0.005467	0.000816	0.000920
Parking Lot	0.552843	0.039396	0.193030	0.116235	0.017695	0.005634	0.019549	0.044452	0.002104	0.001859	0.005467	0.000816	0.000920

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	0.0000	627.5448	627.5448	0.0253	5.2300e-003	629.7336
Electricity Unmitigated						0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	627.5448	627.5448	0.0253	5.2300e-003	629.7336
Natural Gas Mitigated	0.0340	0.2908	0.1237	1.8600e-003		0.0235	0.0235	0.0235	0.0235	0.0235	0.0000	336.7295	336.7295	6.4500e-003	6.1700e-003	338.7305
Natural Gas Unmitigated	0.0340	0.2908	0.1237	1.8600e-003		0.0235	0.0235	0.0235	0.0235	0.0235	0.0000	336.7295	336.7295	6.4500e-003	6.1700e-003	338.7305

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	6.31007e+006	0.0340	0.2908	0.1237	1.8600e-003		0.0235	0.0235	0.0235	0.0235	0.0235	0.0000	336.7295	336.7295	6.4500e-003	6.1700e-003	338.7305
Enclosed 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	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0340	0.2908	0.1237	1.8600e-003		0.0235	0.0235	0.0235	0.0235	0.0235	0.0000	336.7295	336.7295	6.4500e-003	6.1700e-003	338.7305

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	6.31007e+006	0.0340	0.2908	0.1237	1.8600e-003		0.0235	0.0235		0.0235	0.0235	0.0000	336.7295	336.7295	6.4500e-003	6.1700e-003	338.7305
Enclosed 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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0340	0.2908	0.1237	1.8600e-003		0.0235	0.0235		0.0235	0.0235	0.0000	336.7295	336.7295	6.4500e-003	6.1700e-003	338.7305

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.86366e+006	609.0605	0.0245	5.0700e-003	611.1848
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	56560	18.4843	7.4000e-004	1.5000e-004	18.5488
Total		627.5448	0.0253	5.2200e-003	629.7336

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.86366e+006	609.0605	0.0245	5.0700e-003	611.1848
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	56560	18.4843	7.4000e-004	1.5000e-004	18.5488
Total		627.5448	0.0253	5.2200e-003	629.7336

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr															
Mitigated	2.3175	0.0347	3.0067	1.6000e-004		0.0166	0.0166		0.0166	0.0166	0.0000	4.9073	4.9073	4.7500e-003	0.0000	5.0259
Unmitigated	2.3175	0.0347	3.0067	1.6000e-004		0.0166	0.0166		0.0166	0.0166	0.0000	4.9073	4.9073	4.7500e-003	0.0000	5.0259

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6382					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5883					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0911	0.0347	3.0067	1.6000e-004		0.0166	0.0166		0.0166	0.0166	0.0000	4.9073	4.9073	4.7500e-003	0.0000	5.0259
Total	2.3175	0.0347	3.0067	1.6000e-004		0.0166	0.0166		0.0166	0.0166	0.0000	4.9073	4.9073	4.7500e-003	0.0000	5.0259

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6382					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5883					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0911	0.0347	3.0067	1.6000e-004		0.0166	0.0166		0.0166	0.0166	0.0000	4.9073	4.9073	4.7500e-003	0.0000	5.0259
Total	2.3175	0.0347	3.0067	1.6000e-004		0.0166	0.0166		0.0166	0.0166	0.0000	4.9073	4.9073	4.7500e-003	0.0000	5.0259

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	107.3039	0.6902	0.0170	129.6372
Unmitigated	127.2465	0.8625	0.0212	155.1392

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	26.3222 / 16.5944	127.2465	0.8625	0.0212	155.1392
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		127.2465	0.8625	0.0212	155.1392

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	21.0578	107.3039	0.6902	0.0170	129.6372
Enclosed Parking with Elevator	15.5822				
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		107.3039	0.6902	0.0170	129.6372

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	9.4310	0.5574	0.0000	23.3648
Unmitigated	37.7238	2.2294	0.0000	93.4592

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	185.84	37.7238	2.2294	0.0000	93.4592
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		37.7238	2.2294	0.0000	93.4592

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	46.46	9.4310	0.5574	0.0000	23.3648
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		9.4310	0.5574	0.0000	23.3648

F-2 CAP Checklist



CLIMATE ACTION PLAN CONSISTENCY CHECKLIST INTRODUCTION

In December 2015, the City adopted a Climate Action Plan (CAP) that outlines the actions that City will undertake to achieve its proportional share of State greenhouse gas (GHG) emission reductions. The purpose of the Climate Action Plan Consistency Checklist (Checklist) is to, in conjunction with the CAP, provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA).¹

Analysis of GHG emissions and potential climate change impacts from new development is required under CEQA. The CAP is a plan for the reduction of GHG emissions in accordance with CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP.

This Checklist is part of the CAP and contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP as determined through the use of this Checklist may rely on the CAP for the cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. Cumulative GHG impacts would be significant for any project that is not consistent with the CAP.

The Checklist may be updated to incorporate new GHG reduction techniques or to comply with later amendments to the CAP or local, State, or federal law.

¹ Certain projects seeking ministerial approval may be required to complete the Checklist. For example, projects in a Community Plan Implementation Overlay Zone may be required to use the Checklist to qualify for ministerial level review. See Supplemental Development Regulations in the project's community plan to determine applicability.

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CAP CONSISTENCY CHECKLIST SUBMITTAL APPLICATION

- ❖ The Checklist is required only for projects subject to CEQA review.²
- ❖ If required, the Checklist must be included in the project submittal package. Application submittal procedures can be found in [Chapter 11: Land Development Procedures](#) of the City's Municipal Code.
- ❖ The requirements in the Checklist will be included in the project's conditions of approval.
- ❖ The applicant must provide an explanation of how the proposed project will implement the requirements described herein to the satisfaction of the Planning Department.

Application Information

Contact Information

Project No./Name: _____

Property Address: _____

Applicant Name/Co.: _____

Contact Phone: _____ Contact Email: _____

Was a consultant retained to complete this checklist? ☐ Yes ☐ No If Yes, complete the following

Consultant Name: _____ Contact Phone: _____

Company Name: _____ Contact Email: _____

Project Information

1. What is the size of the project (acres)? _____

2. Identify all applicable proposed land uses:

☐ Residential (indicate # of single-family units): _____

☐ Residential (indicate # of multi-family units): _____

☐ Commercial (total square footage): _____

☐ Industrial (total square footage): _____

☐ Other (describe): _____

3. Is the project or a portion of the project located in a Transit Priority Area? ☐ Yes ☐ No

4. Provide a brief description of the project proposed: _____

² Certain projects seeking ministerial approval may be required to complete the Checklist. For example, projects in a Community Plan Implementation Overlay Zone may be required to use the Checklist to qualify for ministerial level review. See Supplemental Development Regulations in the project's community plan to determine applicability.



CAP CONSISTENCY CHECKLIST QUESTIONS

Step 1: Land Use Consistency

The first step in determining CAP consistency for discretionary development projects is to assess the project's consistency with the growth projections used in the development of the CAP. This section allows the City to determine a project's consistency with the land use assumptions used in the CAP.

Step 1: Land Use Consistency		
Checklist Item (Check the appropriate box and provide explanation and supporting documentation for your answer)	Yes	No
A. Is the proposed project consistent with the existing General Plan and Community Plan land use and zoning designations? ³ <u>OR</u>		
B. If the proposed project is not consistent with the existing land use plan and zoning designations, and includes a land use plan and/or zoning designation amendment, would the proposed amendment result in an increased density within a Transit Priority Area (TPA) ⁴ and implement CAP Strategy 3 actions, as determined in Step 3 to the satisfaction of the Development Services Department? <u>OR</u> ,	☐	☐
C. If the proposed project is not consistent with the existing land use plan and zoning designations, does the project include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations?		

If **"Yes,"** proceed to Step 2 of the Checklist. For question B above, complete Step 3. For question C above, provide estimated project emissions under both existing and proposed designation(s) for comparison. Compare the maximum buildout of the existing designation and the maximum buildout of the proposed designation.

If **"No,"** in accordance with the City's Significance Determination Thresholds, the project's GHG impact is significant. The project must nonetheless incorporate each of the measures identified in Step 2 to mitigate cumulative GHG emissions impacts unless the decision maker finds that a measure is infeasible in accordance with CEQA Guidelines Section 15091. Proceed and complete Step 2 of the Checklist.

³ This question may also be answered in the affirmative if the project is consistent with SANDAG Series 12 growth projections, which were used to determine the CAP projections, as determined by the Planning Department.

⁴ This category applies to all projects that answered in the affirmative to question 3 on the previous page: Is the project or a portion of the project located in a transit priority area.

Step 2: CAP Strategies Consistency

The second step of the CAP consistency review is to review and evaluate a project's consistency with the applicable strategies and actions of the CAP. Step 2 only applies to development projects that involve permits that would require a certificate of occupancy from the Building Official or projects comprised of one and two family dwellings or townhouses as defined in the California Residential Code and their accessory structures.⁵ All other development projects that would not require a certificate of occupancy from the Building Official shall implement Best Management Practices for construction activities as set forth in the [Greenbook](#) (for public projects).

Step 2: CAP Strategies Consistency			
Checklist Item (Check the appropriate box and provide explanation for your answer)	Yes	No	N/A
Strategy 1: Energy & Water Efficient Buildings			
1. <i>Cool/Green Roofs.</i> • Would the project include roofing materials with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than the values specified in the voluntary measures under California Green Building Standards Code (Attachment A)?; <u>OR</u> • Would the project roof construction have a thermal mass over the roof membrane, including areas of vegetated (green) roofs, weighing at least 25 pounds per square foot as specified in the voluntary measures under California Green Building Standards Code?; <u>OR</u> • Would the project include a combination of the above two options? Check "N/A" only if the project does not include a roof component.	☐	☐	☐

⁵ Actions that are not subject to Step 2 would include, for example: 1) discretionary map actions that do not propose specific development, 2) permits allowing wireless communication facilities, 3) special events permits, 4) use permits or other permits that do not result in the expansion or enlargement of a building (e.g., decks, garages, etc.), and 5) non-building infrastructure projects such as roads and pipelines. Because such actions would not result in new occupancy buildings from which GHG emissions reductions could be achieved, the items contained in Step 2 would not be applicable.

2. *Plumbing fixtures and fittings*

With respect to plumbing fixtures or fittings provided as part of the project, would those low-flow fixtures/appliances be consistent with each of the following:

Residential buildings:

- Kitchen faucets: maximum flow rate not to exceed 1.5 gallons per minute at 60 psi;
- Standard dishwashers: 4.25 gallons per cycle;
- Compact dishwashers: 3.5 gallons per cycle; and
- Clothes washers: water factor of 6 gallons per cubic feet of drum capacity?

Nonresidential buildings:

- Plumbing fixtures and fittings that do not exceed the maximum flow rate specified in [Table A5.303.2.3.1 \(voluntary measures\) of the California Green Building Standards Code](#) (See Attachment A); and
- Appliances and fixtures for commercial applications that meet the provisions of [Section A5.303.3 \(voluntary measures\) of the California Green Building Standards Code](#) (See Attachment A)?

Check "N/A" only if the project does not include any plumbing fixtures or fittings.

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Strategy 3: Bicycling, Walking, Transit & Land Use

3. Electric Vehicle Charging

- Multiple-family projects of 17 dwelling units or less: Would 3% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official, to allow for the future installation of electric vehicle supply equipment to provide electric vehicle charging stations at such time as it is needed for use by residents?
- Multiple-family projects of more than 17 dwelling units: Of the total required listed cabinets, boxes or enclosures, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use by residents?
- Non-residential projects: Of the total required listed cabinets, boxes or enclosures, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use?

Check "N/A" only if the project is a single-family project or would not require the provision of listed cabinets, boxes, or enclosures connected to a conduit linking the parking spaces with electrical service, e.g., projects requiring fewer than 10 parking spaces.



Strategy 3: Bicycling, Walking, Transit & Land Use

(Complete this section if project includes non-residential or mixed uses)

4. Bicycle Parking Spaces

Would the project provide more short- and long-term bicycle parking spaces than required in the City's Municipal Code ([Chapter 14, Article 2, Division 5](#))?⁶

Check "N/A" only if the project is a residential project.



⁶ Non-portable bicycle corrals within 600 feet of project frontage can be counted towards the project's bicycle parking requirements.

5. *Shower facilities*

If the project includes nonresidential development that would accommodate over 10 tenant occupants (employees), would the project include changing/shower facilities in accordance with the voluntary measures under the [California Green Building Standards Code](#) as shown in the table below?

Number of Tenant Occupants (Employees)	Shower/Changing Facilities Required	Two-Tier (12" X 15" X 72") Personal Effects Lockers Required
0-10	0	0
11-50	1 shower stall	2
51-100	1 shower stall	3
101-200	1 shower stall	4
Over 200	1 shower stall plus 1 additional shower stall for each 200 additional tenant-occupants	1 two-tier locker plus 1 two-tier locker for each 50 additional tenant-occupants

Check "N/A" only if the project is a residential project, or if it does not include nonresidential development that would accommodate over 10 tenant occupants (employees).

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6. *Designated Parking Spaces*

If the project includes a nonresidential use in a TPA, would the project provide designated parking for a combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles in accordance with the following table?

Number of Required Parking Spaces	Number of Designated Parking Spaces
0-9	0
10-25	2
26-50	4
51-75	6
76-100	9
101-150	11
151-200	18
201 and over	At least 10% of total

This measure does not cover electric vehicles. See Question 4 for electric vehicle parking requirements.

Note: Vehicles bearing Clean Air Vehicle stickers from expired HOV lane programs may be considered eligible for designated parking spaces. The required designated parking spaces are to be provided within the overall minimum parking requirement, not in addition to it.

Check "N/A" only if the project is a residential project, or if it does not include nonresidential use in a TPA.

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7. Transportation Demand Management Program

If the project would accommodate over 50 tenant-occupants (employees), would it include a transportation demand management program that would be applicable to existing tenants and future tenants that includes:

At least one of the following components:

- Parking cash out program
- Parking management plan that includes charging employees market-rate for single-occupancy vehicle parking and providing reserved, discounted, or free spaces for registered carpools or vanpools
- Unbundled parking whereby parking spaces would be leased or sold separately from the rental or purchase fees for the development for the life of the development

And at least three of the following components:

- Commitment to maintaining an employer network in the SANDAG iCommute program and promoting its RideMatcher service to tenants/employees
- On-site carsharing vehicle(s) or bikesharing
- Flexible or alternative work hours
- Telework program
- Transit, carpool, and vanpool subsidies
- Pre-tax deduction for transit or vanpool fares and bicycle commute costs
- Access to services that reduce the need to drive, such as cafes, commercial stores, banks, post offices, restaurants, gyms, or childcare, either onsite or within 1,320 feet (1/4 mile) of the structure/use?

Check "N/A" only if the project is a residential project or if it would not accommodate over 50 tenant-occupants (employees).

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Step 3: Project CAP Conformance Evaluation (if applicable)

The third step of the CAP consistency review only applies if Step 1 is answered in the affirmative under option B. The purpose of this step is to determine whether a project that is located in a TPA but that includes a land use plan and/or zoning designation amendment is nevertheless consistent with the assumptions in the CAP because it would implement CAP Strategy 3 actions. In general, a project that would result in a reduction in density inside a TPA would not be consistent with Strategy 3. The following questions must each be answered in the affirmative and fully explained.

1. Would the proposed project implement the General Plan's City of Villages strategy in an identified Transit Priority Area (TPA) that will result in an increase in the capacity for transit-supportive residential and/or employment densities?

Considerations for this question:

- Does the proposed land use and zoning designation associated with the project provide capacity for transit-supportive residential densities within the TPA?
- Is the project site suitable to accommodate mixed-use village development, as defined in the General Plan, within the TPA?
- Does the land use and zoning associated with the project increase the capacity for transit-supportive employment intensities within the TPA?

2. Would the proposed project implement the General Plan's Mobility Element in Transit Priority Areas to increase the use of transit?

Considerations for this question:

- Does the proposed project support/incorporate identified transit routes and stops/stations?
- Does the project include transit priority measures?

3. Would the proposed project implement pedestrian improvements in Transit Priority Areas to increase walking opportunities?

Considerations for this question:

- Does the proposed project circulation system provide multiple and direct pedestrian connections and accessibility to local activity centers (such as transit stations, schools, shopping centers, and libraries)?
- Does the proposed project urban design include features for walkability to promote a transit supportive environment?

4. Would the proposed project implement the City of San Diego's Bicycle Master Plan to increase bicycling opportunities?

Considerations for this question:

- Does the proposed project circulation system include bicycle improvements consistent with the Bicycle Master Plan?
- Does the overall project circulation system provide a balanced, multimodal, "complete streets" approach to accommodate mobility needs of all users?

5. Would the proposed project incorporate implementation mechanisms that support Transit Oriented Development?

Considerations for this question:

- Does the proposed project include new or expanded urban public spaces such as plazas, pocket parks, or urban greens in the TPA?
- Does the land use and zoning associated with the proposed project increase the potential for jobs within the TPA?
- Do the zoning/implementing regulations associated with the proposed project support the efficient use of parking through mechanisms such as: shared parking, parking districts, unbundled parking, reduced parking, paid or time-limited parking, etc.?

6. Would the proposed project implement the Urban Forest Management Plan to increase urban tree canopy coverage?

Considerations for this question:

- Does the proposed project provide at least three different species for the primary, secondary and accent trees in order to accommodate varying parkway widths?
- Does the proposed project include policies or strategies for preserving existing trees?
- Does the proposed project incorporate tree planting that will contribute to the City's 20% urban canopy tree coverage goal?

Responses to San Diego CAP Checklist Step 3 Questions

The proposed Clairemont Mesa Community Plan Amendment is within a Transit Priority Area (TPA), allows for increased density affordable housing, and is consistent with assumptions in the CAP, as it implements CAP Strategy 3 actions, as demonstrated by the following response to Cap Checklist Section 3 questions:

- 1) **Would the proposed project implement the General Plan's City of Villages strategy in an identified Transit Priority Area (TPA) that will result in an increase in the capacity for transit-supportive residential and/or employment densities?**

Yes. According to the City's General Plan Land Use Element, the goal of the City of Villages strategy is to provide mixed-use villages located throughout the City connected by high-quality transit (City of San Diego 2015a). The project site is located in a TPA and proposes a Community Plan Amendment to the Clairemont Mesa Community Plan to allow for increased capacity for transit-supportive and affordable multifamily residential densities and 1,500 square feet of non-residential ground floor use. A total of 404 affordable multifamily residential units are proposed for future development on the 4.09-acre site of the former San Diego Sheriff's Crime Lab site.

- 2) **Would the proposed project implement the General Plan's Mobility Element in Transit Priority Areas to increase the use of transit?**

Yes. According to the City's Planning Department, "transit priority area" means an area within one-half mile of a major transit stop that is existing or planned (City of San Diego 2019). The City's General Plan Mobility Element encourages more people to live and work within walking distance of transit (City of San Diego 2015b). The General Plan supports transit through policies supportive of transit and pedestrian-oriented design, and implementation of transit priority measures. The proposed Community Plan Amendment would implement the General Plan Mobility Element in a TPA to increase the use of transit. A total of 404 affordable multifamily residential units are proposed for future development on the project site. Existing transit routes and stops are located within one mile of the project site, including MTS Bus Route 27 and 41. MTS Bus Route 27's Balboa Avenue and Genesee Avenue bus stop and MTS Bus Route 41's Genesee Avenue and Mt Etna Drive bus stop are both located within 400 feet of the project site. As detailed in the Community Plan Amendment Supplemental Development Regulation (SDR) 13, the proposed project's transportation amenities would be intended to encourage alternative modes of transportation and facilitate non-vehicular access to everyday activities. Future improvements at the project site could include transit oriented improvements on street frontages or an on-site kiosk or information center with multi-modal wayfinding information.

and transit information, as determined by the City Engineer.

3) Would the proposed project implement pedestrian improvements in Transit Priority Areas to increase walking opportunities?

Yes. The General Plan Mobility Element includes the following goals: for the City to have a complete, functional, and interconnected pedestrian network, that is accessible to pedestrians of all abilities; and to have greater walkability achieved through pedestrian-friendly street, site, and building design (City of San Diego 2015b). The streets immediately surrounding the project site all include sidewalks and all of the signalized intersections within the vicinity include striped crosswalks, pedestrian signal heads, and ADA-compliant ramps, where crossings are allowed. Pedestrian improvements and design guidelines are proposed with the Community Plan Amendment to facilitate efficient pedestrian movement in and around the project site and with existing and proposed adjacent land uses. As detailed in the Community Plan Amendment SDR 6, design guidelines include, but are not limited to, setback requirements, unobstructed and lighted ADA accessible paths, and sidewalk improvements along Mt. Etna Drive and Genesee Avenue.

4) Would the proposed project implement the City of San Diego's Bicycle Master Plan to increase bicycling opportunities?

Yes. The City of San Diego's Bicycle Master Plan includes the following goals: a city where bicycling is a viable travel choice, particularly for trips of less than five miles; a safe and comprehensive local and regional bikeway network; and environmental quality, public health, recreation and mobility benefits through increased bicycling (City of San Diego 2013). There are currently Class II bike lanes provided on both sides of Genesee Avenue. The Class II bike lane adjacent to the project site on the east has been painted green for high visibility as the lane approaches Genesee Avenue and Balboa Avenue intersection to the south and sits adjacent to the right turn pocket. The proposed Community Plan Amendment includes multi-modal mobility bicycle features to encourage bicycle riding and storage, including dedicated bicycle lanes and parking areas.

5) Would the proposed project incorporate implementation mechanisms that support Transit Oriented Development?

Yes. The Community Plan Amendment encourages transit oriented development. As detailed above, the project site is adjacent to existing transit routes and future residents would be encouraged to utilize available transit (as detailed in the Community Plan Amendment SDR 13). In addition, at least 1,500 square feet of non-residential ground floor use would be part of the future development, which would include employment opportunities within the TPA. The non-residential ground floor uses would facilitate multi-modal access and community connectivity (Community Plan Amendment SDR 9).

6) Would the proposed project implement the Urban Forest Management Plan to increase urban tree canopy coverage?

Yes. The City's Urban Forest Management Plan includes goals to establish and maintain optimal levels of tree cover, age, and species diversity to maximize ecosystem benefits provided by urban trees; and to incorporate street tree plans and urban forest management in community plan updates (City of San Diego 2015c). The Community Plan Amendment SDR 7 includes landscape and streetscape development standards and design guidelines to require tree planting to increase urban tree canopy coverage. Street trees would be planted and maintained along public street frontages to provide a shaded pedestrian environment and give a pedestrian character to the street.

As determined in the above Step 3 answers, the proposed Clairemont Mesa Community Plan Amendment is consistent with the CAP.

References

- City of San Diego, 2013. City of San Diego Bicycle Master Plan. Available at https://www.sandiego.gov/sites/default/files/legacy/planning/programs/transportation/mobility/pdf/bicycle_master_plan_final_dec_2013.pdf. December 2013.
- City of San Diego, 2015a. City of San Diego General Plan Land Use and Community Planning Element. Available at <https://www.sandiego.gov/planning/genplan>. Updated June 29, 2015.
- City of San Diego, 2015b. City of San Diego General Plan Mobility Element. Available at <https://www.sandiego.gov/planning/genplan>. Updated June 29, 2015.
- City of San Diego, 2015c. City of San Diego Urban Forest Management Plan. Available at https://www.sandiego.gov/sites/default/files/legacy/planning/programs/urbanforest/pdf/city_sd_ufmp_draft_rpt_18_feb_2015.pdf. February 18, 2015.
- City of San Diego, 2019. Transit Priority Areas per SB 743. Available at <https://www.sandiego.gov/sites/default/files/transit-priority-map.pdf>. February 5, 2019.



CLIMATE ACTION PLAN CONSISTENCY CHECKLIST ATTACHMENT A

This attachment provides performance standards for applicable Climate Action Plan (CAP) Consistency Checklist measures.

Table 1 Roof Design Values for Question 1: Cool/Green Roofs supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan				
Land Use Type	Roof Slope	Minimum 3-Year Aged Solar Reflectance	Thermal Emittance	Solar Reflective Index
Low-Rise Residential	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16
High-Rise Residential Buildings, Hotels and Motels	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16
Non-Residential	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16
Source: Adapted from the California Green Building Standards Code (CALGreen) Tier 1 residential and non-residential voluntary measures shown in Tables A4.106.5.1 and A5.106.11.2.2, respectively. Roof installation and verification shall occur in accordance with the CALGreen Code. CALGreen does not include recommended values for low-rise residential buildings with roof slopes of ≤ 2:12 for San Diego's climate zones (7 and 10). Therefore, the values for climate zone 15 that covers Imperial County are adapted here. Solar Reflectance Index (SRI) equal to or greater than the values specified in this table may be used as an alternative to compliance with the aged solar reflectance values and thermal emittance.				

Table 2 Fixture Flow Rates for Non-Residential Buildings related to Question 2: Plumbing Fixtures and Fittings supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan

Fixture Type	Maximum Flow Rate
Showerheads	1.8 gpm @ 80 psi
Lavatory Faucets	0.35 gpm @60 psi
Kitchen Faucets	1.6 gpm @ 60 psi
Wash Fountains	1.6 [rim space(in.)/20 gpm @ 60 psi]
Metering Faucets	0.18 gallons/cycle
Metering Faucets for Wash Fountains	0.18 [rim space(in.)/20 gpm @ 60 psi]
Gravity Tank-type Water Closets	1.12 gallons/flush
Flushometer Tank Water Closets	1.12 gallons/flush
Flushometer Valve Water Closets	1.12 gallons/flush
Electromechanical Hydraulic Water Closets	1.12 gallons/flush
Urinals	0.5 gallons/flush

Source: Adapted from the [California Green Building Standards Code](#) (CALGreen) Tier 1 non-residential voluntary measures shown in Tables A5.303.2.3.1 and A5.106.11.2.2, respectively. See the [California Plumbing Code](#) for definitions of each fixture type.

Where complying faucets are unavailable, aerators rated at 0.35 gpm or other means may be used to achieve reduction.

Acronyms:

gpm = gallons per minute

psi = pounds per square inch (unit of pressure)

in. = inch

Table 3 Standards for Appliances and Fixtures for Commercial Application related to Question 2: Plumbing Fixtures and Fittings supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan

Appliance/Fixture Type	Standard	
Clothes Washers	Maximum Water Factor (WF) that will reduce the use of water by 10 percent below the California Energy Commissions' WF standards for commercial clothes washers located in Title 20 of the <i>California Code of Regulations</i> .	
Conveyor-type Dishwashers	0.70 maximum gallons per rack (2.6 L) (High-Temperature)	0.62 maximum gallons per rack (4.4 L) (Chemical)
Door-type Dishwashers	0.95 maximum gallons per rack (3.6 L) (High-Temperature)	1.16 maximum gallons per rack (2.6 L) (Chemical)
Undercounter-type Dishwashers	0.90 maximum gallons per rack (3.4 L) (High-Temperature)	0.98 maximum gallons per rack (3.7 L) (Chemical)
Combination Ovens	Consume no more than 10 gallons per hour (38 L/h) in the full operational mode.	
Commercial Pre-rinse Spray Valves (manufactured on or after January 1, 2006)	Function at equal to or less than 1.6 gallons per minute (0.10 L/s) at 60 psi (414 kPa) and • Be capable of cleaning 60 plates in an average time of not more than 30 seconds per plate. • Be equipped with an integral automatic shutoff. • Operate at static pressure of at least 30 psi (207 kPa) when designed for a flow rate of 1.3 gallons per minute (0.08 L/s) or less.	

Source: Adapted from the [California Green Building Standards Code](#) (CALGreen) Tier 1 non-residential voluntary measures shown in Section A5.303.3. See the [California Plumbing Code](#) for definitions of each appliance/fixture type.

Acronyms:

L = liter

L/h = liters per hour

L/s = liters per second

psi = pounds per square inch (unit of pressure)

kPa = kilopascal (unit of pressure)