

APPENDICES

DRAFT ENVIRONMENTAL IMPACT REPORT SCH# 2016091024 CITADEL OUTLETS EXPANSION & 10-ACRE DEVELOPMENT PROJECT COMMERCE, CALIFORNIA



LEAD AGENCY:

**CITY OF COMMERCE
PUBLIC WORKS AND DEVELOPMENT SERVICES DEPARTMENT, PLANNING
DIVISION
2535 COMMERCE WAY
COMMERCE, CALIFORNIA 90040**

REPORT PREPARED BY:

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FEBRUARY 14, 2019

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TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
Appendices	5
Appendix A – Air Quality Worksheets	7
Appendix B – Noise Worksheets.....	73
Appendix C – Utilities Worksheets.....	83

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APPENDICES

APPENDIX A – AIR QUALITY WORKSHEETS

APPENDIX B – NOISE WORKSHEETS

APPENDIX C – UTILITIES WORKSHEETS

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APPENDIX A

AIR QUALITY WORKSHEETS

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CalEEMod Version: CalEEMod.2016.3.2

Page 1 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

Citadel Expansion
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	70.00	1000sqft	1.61	70,000.00	0
Unrefrigerated Warehouse-No Rail	55.00	1000sqft	1.26	55,000.00	0
Enclosed Parking with Elevator	700.00	Space	6.30	280,000.00	0
Unenclosed Parking with Elevator	1,618.00	Space	14.56	647,200.00	0
Arena	120.00	1000sqft	38.57	120,000.00	0
Fast Food Restaurant w/o Drive Thru	3.14	1000sqft	0.07	3,140.00	0
Fast Food Restaurant with Drive Thru	6.40	1000sqft	0.15	6,400.00	0
Fast Food Restaurant with Drive Thru	2.00	1000sqft	0.05	2,000.00	0
High Turnover (Sit Down Restaurant)	5.00	1000sqft	0.11	5,000.00	0
Hotel	270.00	Room	9.00	392,040.00	0
Hotel	500.00	Room	16.67	726,000.00	0
Movie Theater (No Matinee)	150.00	1000sqft	3.44	150,000.00	0
Regional Shopping Center	167.72	1000sqft	3.85	167,721.00	0
Regional Shopping Center	69.94	1000sqft	1.61	69,941.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2026
Utility Company	Southern California Edison				

CalEEMod Version: CalEEMod.2016.3.2

Page 2 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

CO2 Intensity (lb/MW/hr)	702.44	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 -

Land Use - This represents the proposed land uses.

Construction Phase - Construction times are estimated.

Demolition -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	100	0
tblAreaCoating	Area_Nonresidential_Exterior	883621	0
tblAreaCoating	Area_Nonresidential_Interior	2650863	0
tblAreaCoating	Area_Parking	56632	0
tblConstructionPhase	NumDays	110.00	88.00
tblConstructionPhase	NumDays	110.00	86.00
tblConstructionPhase	NumDays	110.00	87.00
tblConstructionPhase	NumDays	1,550.00	284.00
tblConstructionPhase	NumDays	1,550.00	390.00
tblConstructionPhase	NumDays	1,550.00	393.00
tblConstructionPhase	NumDays	100.00	43.00
tblConstructionPhase	NumDays	100.00	44.00
tblConstructionPhase	NumDays	100.00	44.00
tblConstructionPhase	NumDays	155.00	44.00

Date: 2/6/2019 11:36 AM

Page 3 of 63

CalEEMod Version: CalEEMod.2016.3.2

Citadel Expansion - South Coast AQMD Air District, Summer

tblConstructionPhase	NumDays	155.00	45.00
tblConstructionPhase	NumDays	155.00	43.00
tblConstructionPhase	NumDays	110.00	41.00
tblConstructionPhase	NumDays	110.00	44.00
tblConstructionPhase	NumDays	110.00	42.00
tblConstructionPhase	NumDays	60.00	43.00
tblConstructionPhase	NumDays	60.00	43.00
tblConstructionPhase	NumDays	60.00	43.00
tblConsumerProducts	ROG_EF	1.98E-05	2.14E-05
tblGrading	AcresOfGrading	110.00	387.50
tblGrading	AcresOfGrading	112.50	387.50
tblGrading	AcresOfGrading	107.50	387.50
tblLandUse	LandUseSquareFeet	167,720.00	167,721.00
tblLandUse	LandUseSquareFeet	69,940.00	69,941.00
tblTripsAndVMT	Hauling TripNumber	102.00	0.00
tblTripsAndVMT	Hauling TripNumber	361.00	0.00
tblTripsAndVMT	Hauling TripNumber	402.00	0.00

2.0 Emissions Summary

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 4 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2019	9.4572	75.4064	78.8619	0.2721	18.2675	2.3919	20.6594	9.9840	2.2006	12.1846	0.0000	27,803.18 03	27,803.18 03	1.9500	0.0000	27,849.32 56
2020	8.5528	66.9159	72.9037	0.2671	15.1355	1.4402	16.5756	4.0782	1.3561	5.4343	0.0000	27,283.72 10	27,283.72 10	1.7467	0.0000	27,327.38 93
2021	190.2406	46.4546	31.6319	0.0642	18.2675	2.0459	20.3134	9.9840	1.8823	11.8663	0.0000	6,228.524 1	6,228.524 1	1.9488	0.0000	6,277.243 0
2022	7.2191	58.3540	64.1714	0.2566	15.1354	0.9706	16.1060	4.0782	0.9125	4.9907	0.0000	26,246.58 73	26,246.58 73	1.6095	0.0000	26,286.82 52
2023	194.5012	47.1006	60.1808	0.2487	15.1354	0.8195	15.9549	4.0782	0.7699	4.8480	0.0000	25,447.27 42	25,447.27 42	1.4866	0.0000	25,484.43 85
2024	6.1932	45.8659	57.5253	0.2445	18.2675	1.3369	19.4982	9.9840	1.2300	11.1163	0.0000	25,034.52 73	25,034.52 73	1.9481	0.0000	25,070.81 01
2025	5.8728	44.4368	54.8916	0.2395	15.1354	0.6437	15.7791	4.0782	0.6043	4.6825	0.0000	24,538.83 21	24,538.83 21	1.4167	0.0000	24,574.24 88
2026	192.1399	8.6074	14.9699	0.0242	2.4591	0.4196	2.5266	0.6522	0.3861	0.7184	0.0000	2,344.932 9	2,344.932 9	0.7165	0.0000	2,362.845 3
Maximum	194.5012	75.4064	78.8619	0.2721	18.2675	2.3919	20.6594	9.9840	2.2006	12.1846	0.0000	27,803.18 03	27,803.18 03	1.9500	0.0000	27,849.32 56

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 5 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2019	9.4572	75.4064	78.8619	0.2721	15.1355	2.3919	16.8561	4.0782	2.2006	6.1269	0.0000	27,803.18 03	27,803.18 03	1.9500	0.0000	27,849.32 56
2020	8.5528	68.9159	72.9037	0.2671	15.1355	1.4402	16.5756	4.0782	1.3561	5.4343	0.0000	27,283.72 10	27,283.72 10	1.7467	0.0000	27,327.38 93
2021	190.2406	46.4546	31.6319	0.0642	7.2470	2.0459	9.2930	3.9263	1.8823	5.8086	0.0000	6,228.524 1	6,228.524 1	1.9488	0.0000	6,277.243 0
2022	7.2191	58.3540	64.1714	0.2566	15.1354	0.9706	16.1060	4.0782	0.9125	4.9907	0.0000	26,246.58 73	26,246.58 73	1.6095	0.0000	26,286.82 52
2023	194.5012	47.1006	60.1808	0.2487	15.1354	0.8195	15.9549	4.0782	0.7699	4.8480	0.0000	25,447.27 42	25,447.27 42	1.4866	0.0000	25,484.43 85
2024	6.1932	45.8659	57.5253	0.2445	15.1354	1.3369	15.8670	4.0782	1.2300	5.0586	0.0000	25,034.52 73	25,034.52 73	1.9481	0.0000	25,070.81 01
2025	5.8728	44.4368	54.8916	0.2395	15.1354	0.6437	15.7791	4.0782	0.6043	4.6825	0.0000	24,538.83 21	24,538.83 21	1.4167	0.0000	24,574.24 88
2026	192.1399	8.6074	14.9699	0.0242	2.4591	0.4196	2.5266	0.6522	0.3861	0.7184	0.0000	2,344.932 9	2,344.932 9	0.7165	0.0000	2,362.845 3
Maximum	194.5012	75.4064	78.8619	0.2721	15.1355	2.3919	16.8561	4.0782	2.2006	6.1269	0.0000	27,803.18 03	27,803.18 03	1.9500	0.0000	27,849.32 56

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
0.00	0.00	0.00	0.00	14.67	0.00	14.48	38.09	0.00	32.54	0.00	0.00	0.00	0.00	0.00	0.00
Percent Reduction															

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 6 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

2.2 Overall Operational
Unmitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Area	38.1824	3.4500e-003	0.3806	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		0.8179	0.8179	2.1300e-003		0.8711
Energy	1.0838	9.8525	8.2761	0.0591		0.7488	0.7488		0.7488	0.7488		11,822.94	11,822.94	0.2266	0.2168	11,893.20
Mobile	50.0882	231.4622	519.7037	2.1482	190.2232	1.4989	191.7221	50.8837	1.3911	52.2748		219,695.4	219,695.4	9.6228		219,936.0
Total	89.3644	241.3181	528.3603	2.2073	190.2232	2.2490	192.4722	50.8837	2.1412	53.0250		231,519.2	231,519.2	9.8515	0.2168	231,830.1
												416	416			214

Mitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Area	38.1824	3.4500e-003	0.3806	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		0.8179	0.8179	2.1300e-003		0.8711
Energy	1.0838	9.8525	8.2761	0.0591		0.7488	0.7488		0.7488	0.7488		11,822.94	11,822.94	0.2266	0.2168	11,893.20
Mobile	45.6757	209.2393	401.0245	1.5885	135.1028	1.1313	136.2341	36.1393	1.0496	37.1889		162,658.7	162,658.7	7.5553		162,847.6
Total	84.9419	219.0952	405.6812	1.6476	135.1028	1.8814	136.9842	36.1393	1.7998	37.9391		174,482.5	174,482.5	7.7841	0.2168	174,741.7
												107	107			052

CalEEMod Version: CalEEMod.2016.3.2

Page 7 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	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	4.95	9.21	22.46	25.35	28.98	16.34	28.83	28.98	15.95	28.45	0.00	24.64	24.64	20.99	0.00	24.63

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 (Area 3)	Demolition	6/1/2019	7/31/2019	5	43	
2	Demolition (Area 1)	Demolition	7/1/2021	8/31/2021	5	44	
3	Demolition (Area 2)	Demolition	1/1/2024	2/29/2024	5	44	
4	Site Preparation (Area 3)	Site Preparation	8/1/2019	9/30/2019	5	43	
5	Site Preparation (Area 1)	Site Preparation	9/1/2021	10/31/2021	5	43	
6	Site Plan (Area 2)	Site Preparation	3/1/2024	4/30/2024	5	43	
7	Grading (Area 3)	Grading	10/1/2019	11/30/2019	5	44	
8	Grading (Area 1)	Grading	11/1/2021	12/31/2021	5	45	
9	Grading (Area 2)	Grading	5/1/2024	6/30/2024	5	43	
10	Building Construction (Area 3)	Building Construction	12/1/2019	12/31/2020	5	284	
11	Building Construction (Area 1)	Building Construction	1/1/2022	6/30/2023	5	390	
12	Building Construction (Area 2)	Building Construction	7/1/2024	12/31/2025	5	393	
13	Paving (Area 3)	Paving	1/1/2021	2/28/2021	5	41	
14	Paving (Area 1)	Paving	7/1/2023	8/31/2023	5	44	
15	Paving (Area 2)	Paving	1/1/2026	2/28/2026	5	42	
16	Architectural Coating (Area 3)	Architectural Coating	3/1/2021	6/30/2021	5	88	
17	Architectural Coatings (Area 1)	Architectural Coating	9/1/2023	12/31/2023	5	86	
18	Architectural Coating (Area 2)	Architectural Coating	3/1/2026	6/30/2026	5	87	

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 8 of 63

Citadel Expansion - South Coast AQMD Air District, Summer

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 20.86

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,650,863; Non-Residential Outdoor: 883,621; Striped Parking Area: 55,632 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition (Area 3)	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition (Area 3)	Excavators	3	8.00	158	0.38
Demolition (Area 3)	Rubber Tired Dozers	2	8.00	247	0.40
Demolition (Area 1)	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition (Area 1)	Excavators	3	8.00	158	0.38
Demolition (Area 1)	Rubber Tired Dozers	2	8.00	247	0.40
Demolition (Area 2)	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition (Area 2)	Excavators	3	8.00	158	0.38
Demolition (Area 2)	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation (Area 3)	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation (Area 3)	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation (Area 1)	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation (Area 1)	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Plan (Area 2)	Rubber Tired Dozers	3	8.00	247	0.40
Site Plan (Area 2)	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading (Area 3)	Excavators	2	8.00	158	0.38
Grading (Area 3)	Graders	1	8.00	187	0.41
Grading (Area 3)	Rubber Tired Dozers	1	8.00	247	0.40
Grading (Area 3)	Scrapers	2	8.00	367	0.48

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Date: 2/6/2019 11:36 AM

Page 9 of 63

CalEEMod Version: CalEEMod.2016.3.2

Citadel Expansion - South Coast AQMD Air District, Summer

Grading (Area 3)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading (Area 1)	Excavators	2	8.00	158	0.38
Grading (Area 1)	Graders	1	8.00	187	0.41
Grading (Area 1)	Rubber Tired Dozers	1	8.00	247	0.40
Grading (Area 1)	Scrapers	2	8.00	367	0.48
Grading (Area 1)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading (Area 2)	Excavators	2	8.00	158	0.38
Grading (Area 2)	Graders	1	8.00	187	0.41
Grading (Area 2)	Rubber Tired Dozers	1	8.00	247	0.40
Grading (Area 2)	Scrapers	2	8.00	367	0.48
Grading (Area 2)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction (Area 3)	Cranes	1	7.00	231	0.29
Building Construction (Area 3)	Forklifts	3	8.00	89	0.20
Building Construction (Area 3)	Generator Sets	1	8.00	84	0.74
Building Construction (Area 3)	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction (Area 3)	Welders	1	8.00	46	0.45
Building Construction (Area 1)	Cranes	1	7.00	231	0.29
Building Construction (Area 1)	Forklifts	3	8.00	89	0.20
Building Construction (Area 1)	Generator Sets	1	8.00	84	0.74
Building Construction (Area 1)	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction (Area 1)	Welders	1	8.00	46	0.45
Building Construction (Area 2)	Cranes	1	7.00	231	0.29
Building Construction (Area 2)	Forklifts	3	8.00	89	0.20
Building Construction (Area 2)	Generator Sets	1	8.00	84	0.74
Building Construction (Area 2)	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction (Area 2)	Welders	1	8.00	46	0.45
Building Construction (Area 2)	Cranes	1	7.00	231	0.29
Building Construction (Area 2)	Forklifts	3	8.00	89	0.20
Building Construction (Area 2)	Generator Sets	1	8.00	84	0.74
Building Construction (Area 2)	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction (Area 2)	Welders	1	8.00	46	0.45
Paving (Area 3)	Pavers	2	8.00	130	0.42

Date: 2/6/2019 11:36 AM

Page 10 of 63

CalEEMod Version: CalEEMod.2016.3.2

Citadel Expansion - South Coast AQMD Air District, Summer

Paving (Area 3)	Paving Equipment	2	8.00	132	0.36
Paving (Area 3)	Rollers	2	8.00	80	0.38
Paving (Area 1)	Pavers	2	8.00	130	0.42
Paving (Area 1)	Paving Equipment	2	8.00	132	0.36
Paving (Area 1)	Rollers	2	8.00	80	0.38
Paving (Area 2)	Pavers	2	8.00	130	0.42
Paving (Area 2)	Paving Equipment	2	8.00	132	0.36
Paving (Area 2)	Rollers	2	8.00	80	0.38
Architectural Coating (Area 3)	Air Compressors	1	6.00	78	0.48
Architectural Coatings (Area 1)	Air Compressors	1	6.00	78	0.48
Architectural Coating (Area 2)	Air Compressors	1	6.00	78	0.48

Trips and VMT

Date: 2/6/2019 11:36 AM

Page 11 of 63

CalEEMod Version: CalEEMod.2016.3.2

Citadel Expansion - South Coast AQMD Air District, Summer

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 (Area 3)	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition (Area 1)	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition (Area 2)	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation (Area 3)	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation (Area 1)	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Plan (Area 2)	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading (Area 3)	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading (Area 1)	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading (Area 2)	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction (Area 3)	9	1,101.00	442.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction (Area 1)	9	1,101.00	442.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction (Area 2)	9	1,101.00	442.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving (Area 3)	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving (Area 1)	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving (Area 2)	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating (Area 3)	1	220.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coatings (Area 1)	1	220.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating (Area 2)	1	220.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

CalEEMod Version: CalEEMod.2016.3.2

Page 12 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.2 Demolition (Area 3) - 2019

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					0.5151	0.0000	0.5151	0.0780	0.0000	0.0780			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949	1.6697	1.6697	1.6697		3.816.899	3.816.899	1.0618		3.843.445
												4	4			1
Total	3.5134	35.7830	22.0600	0.0388	0.5151	1.7949	2.3100	0.0780	1.6697	1.7477		3.816.899	3.816.899	1.0618		3.843.445
												4	4			1

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2889
Total	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2889

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 13 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.2 Demolition (Area 3) - 2019

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					0.2009	0.0000	0.2009	0.0304	0.0000	0.0304			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3.816.899 ₄	3.816.899 ₄	1.0618		3,843.445 ₁
Total	3.5134	35.7830	22.0600	0.0388	0.2009	1.7949	1.9958	0.0304	1.6697	1.7001	0.0000	3.816.899₄	3.816.899₄	1.0618		3,843.445₁

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2869
Total	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2869

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 14 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.3 Demolition (Area 1) - 2021
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					1.7758	0.0000	1.7758	0.2689	0.0000	0.2689			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	1.7758	1.5513	3.3271	0.2689	1.4411	1.7100		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222
Total	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 15 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.3 Demolition (Area 1) - 2021
Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.6925	0.0000	0.6925	0.1049	0.0000	0.1049			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747,944 ₉	3,747,944 ₉	1.0549		3,774.317 ₄
Total	3.1651	31.4407	21.5650	0.0388	0.6925	1.5513	2.2439	0.1049	1.4411	1.5460	0.0000	3,747,944₉	3,747,944₉	1.0549		3,774.317₄

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222
Total	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222

Citadel Expansion - South Coast AQMD Air District, Summer

3.4 Demolition (Area 2) - 2024

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					1.9769	0.0000	1.9769	0.2993	0.0000	0.2993			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.422 ₈	3,747.422 ₈	1.0485		3,773.634 ₅
Total	2.2437	20.8781	19.7073	0.0388	1.9769	0.9602	2.9371	0.2993	0.8922	1.1915		3,747.422₈	3,747.422₈	1.0485		3,773.634₅

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0529	0.0306	0.4508	1.5000e-003	0.1677	1.1500e-003	0.1688	0.0445	1.0600e-003	0.0455		149.1313	149.1313	3.3400e-003		149.2148
Total	0.0529	0.0306	0.4508	1.5000e-003	0.1677	1.1500e-003	0.1688	0.0445	1.0600e-003	0.0455		149.1313	149.1313	3.3400e-003		149.2148

Citadel Expansion - South Coast AQMD Air District, Summer

3.4 Demolition (Area 2) - 2024
Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Fugitive Dust					0.7710	0.0000	0.7710	0.1167	0.0000	0.1167			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
Total	2.2437	20.8781	19.7073	0.0388	0.7710	0.9602	1.7312	0.1167	0.8922	1.0089	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0529	0.0306	0.4508	1.5000e-003	0.1677	1.1500e-003	0.1688	0.0445	1.0600e-003	0.0455		149.1313	149.1313	3.3400e-003		149.2148
Total	0.0529	0.0306	0.4508	1.5000e-003	0.1677	1.1500e-003	0.1688	0.0445	1.0600e-003	0.0455		149.1313	149.1313	3.3400e-003		149.2148

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 18 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.5 Site Preparation (Area 3) - 2019

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.4529	3,766.4529	1.1917		3,796.2445

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003		212.7442
Total	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003		212.7442

Citadel Expansion - South Coast AQMD Air District, Summer

3.5 Site Preparation (Area 3) - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	7.0458	2.3904	9.4362	3.8730	2.1991	6.0721	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003		212.7442
Total	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003		212.7442

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 20 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.6 Site Preparation (Area 1) - 2021

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3.685.6569	3.685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3.685.6569	3.685.6569	1.1920		3,715.4573

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0760	0.0493	0.6781	2.0000e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		199.3326	199.3326	5.3600e-003		199.4666
Total	0.0760	0.0493	0.6781	2.0000e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		199.3326	199.3326	5.3600e-003		199.4666

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 21 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.6 Site Preparation (Area 1) - 2021

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	3.8882	40.4871	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4871	21.1543	0.0380	7.0458	2.0445	9.0903	3.8730	1.8809	5.7539	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0760	0.0483	0.6781	2.0000e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		199.3326	199.3326	5.3600e-003		199.4666
Total	0.0760	0.0483	0.6781	2.0000e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		199.3326	199.3326	5.3600e-003		199.4666

Date: 2/6/2019 11:36 AM

Page 22 of 63

Citadel Expansion - South Coast AQMD Air District, Summer

3.7 Site Plan (Area 2) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3.688.010 0	3.688.010 0	1.1928		3,717.829 4
Total	2.6609	27.1760	18.3356	0.0381	18.0663	1.2294	19.2956	9.9307	1.1310	11.0617		3,688.010 0	3,688.010 0	1.1928		3,717.829 4

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0634	0.0367	0.5409	1.7900e-003	0.2012	1.3800e-003	0.2026	0.0534	1.2700e-003	0.0546		178.9576	178.9576	4.0100e-003		179.0577
Total	0.0634	0.0367	0.5409	1.7900e-003	0.2012	1.3800e-003	0.2026	0.0534	1.2700e-003	0.0546		178.9576	178.9576	4.0100e-003		179.0577

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 23 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.7 Site Plan (Area 2) - 2024

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310	0.0000	3.688.010	3.688.010	1.1928		3.717.829
												0	0			4
Total	2.6609	27.1760	18.3356	0.0381	7.0458	1.2294	8.2752	3.8730	1.1310	5.0040	0.0000	3.688.010	3.688.010	1.1928		3.717.829
												0	0			4

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0634	0.0367	0.5409	1.7900e-003	0.2012	1.3800e-003	0.2026	0.0534	1.2700e-003	0.0546			178.9576	4.0100e-003		179.0577
Total	0.0634	0.0367	0.5409	1.7900e-003	0.2012	1.3800e-003	0.2026	0.0534	1.2700e-003	0.0546			178.9576	4.0100e-003		179.0577

CalEEMod Version: CalEEMod.2016.3.2

Page 24 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.8 Grading (Area 3) - 2019

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					15.3617	0.0000	15.3617	4.3187	0.0000	4.3187			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.019 ₅	6,140.019 ₅	1.9426		6,188.585 ₄
Total	4.7389	54.5202	33.3768	0.0620	15.3617	2.3827	17.7444	4.3187	2.1920	6.5107		6,140.019 ₅	6,140.019 ₅	1.9426		6,188.585 ₄

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0980	0.0682	0.8887	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	0.0980	0.0682	0.8887	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825

CalEEMod Version: CalEEMod.2016.3.2

Page 25 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.8 Grading (Area 3) - 2019

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					5.9911	0.0000	5.9911	1.6843	0.0000	1.6843			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	5.9911	2.3827	8.3737	1.6843	2.1920	3.8763	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0980	0.0682	0.8887	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.5000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	0.0980	0.0682	0.8887	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.5000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825

CalEEMod Version: CalEEMod.2016.3.2

Page 25 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.8 Grading (Area 3) - 2019

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					5.9911	0.0000	5.9911	1.6843	0.0000	1.6843			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	5.9911	2.3827	8.3737	1.6843	2.1920	3.8763	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.5000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.5000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825

CalEEMod Version: CalEEMod.2016.3.2

Page 26 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.9 Grading (Area 1) - 2021

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					15.1542	0.0000	15.1542	4.2963	0.0000	4.2963			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.043 ₄	6,007.043 ₄	1.9428		6,055.613 ₄
Total	4.1912	46.3998	30.8785	0.0620	15.1542	1.9853	17.1395	4.2963	1.8265	6.1228		6,007.043₄	6,007.043₄	1.9428		6,055.613₄

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0844	0.0548	0.7535	2.2200e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		221.4807	221.4807	5.9600e-003		221.6296
Total	0.0844	0.0548	0.7535	2.2200e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		221.4807	221.4807	5.9600e-003		221.6296

CalEEMod Version: CalEEMod.2016.3.2

Page 27 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.9 Grading (Area 1) - 2021
Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					5.9101	0.0000	5.9101	1.6756	0.0000	1.6756			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 ₄	6,007.043 ₄	1.9428		6,055.613 ₄
Total	4.1912	46.3998	30.8785	0.0620	5.9101	1.9853	7.8955	1.6756	1.8265	3.5021	0.0000	6,007.043₄	6,007.043₄	1.9428		6,055.613₄

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0844	0.0548	0.7535	2.2200e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		221.4807	221.4807	5.9600e-003		221.6296
Total	0.0844	0.0548	0.7535	2.2200e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		221.4807	221.4807	5.9600e-003		221.6296

CalEEMod Version: CalEEMod.2016.3.2

Page 28 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.10 Grading (Area 2) - 2024

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					15.5789	0.0000	15.5789	4.3421	0.0000	4.3421			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009,748 ₇	6,009,748 ₇	1.9437		6,058,340 ₅
Total	3.2181	32.3770	27.7228	0.0621	15.5789	1.3354	16.9143	4.3421	1.2286	5.5707		6,009,748 ₇	6,009,748 ₇	1.9437		6,058,340 ₅

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0705	0.0408	0.6010	1.9900e-003	0.2236	1.5400e-003	0.2251	0.0593	1.4100e-003	0.0607		198.8418	198.8418	4.4500e-003		198.9531
Total	0.0705	0.0408	0.6010	1.9900e-003	0.2236	1.5400e-003	0.2251	0.0593	1.4100e-003	0.0607		198.8418	198.8418	4.4500e-003		198.9531

CalEEMod Version: CalEEMod.2016.3.2

Page 29 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.10 Grading (Area 2) - 2024
Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					6.0758	0.0000	6.0758	1.6934	0.0000	1.6934			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286	0.0000	6,009.748	6,009.748	1.9437		6,058.340
												7	7			5
Total	3.2181	32.3770	27.7228	0.0621	6.0758	1.3354	7.4112	1.6934	1.2286	2.9220	0.0000	6,009.748	6,009.748	1.9437		6,058.340
												7	7			5

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0705	0.0408	0.6010	1.9900e-003	0.2236	1.5400e-003	0.2251	0.0593	1.4100e-003	0.0607		198.8418	198.8418	4.4500e-003		198.9531
Total	0.0705	0.0408	0.6010	1.9900e-003	0.2236	1.5400e-003	0.2251	0.0593	1.4100e-003	0.0607		198.8418	198.8418	4.4500e-003		198.9531

CalEEMod Version: CalEEMod 2016.3.2

Page 30 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.11 Building Construction (Area 3) - 2019
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.580	2,591.580	0.6313		2,607.363
												2	2			5
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.580	2,591.580	0.6313		2,607.363
												2	2			5

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.7040	50.5753	12.2262	0.1146	2.8289	0.3350	3.1639	0.8144	0.3205	1.1349		12,208.91	12,208.91	0.8078		12,229.10
												09	09			64
Worker	5.3921	3.7522	49.4719	0.1306	12.3066	0.0958	12.4024	3.2638	0.0882	3.3520		13,002.68	13,002.68	0.4067		13,012.85
												93	93			57
Total	7.0961	54.3276	61.6981	0.2452	15.1355	0.4308	15.5663	4.0782	0.4087	4.4869		25,211.60	25,211.60	1.2145		25,241.96
												01	01			21

CalEEMod Version: CalEEMod.2016.3.2

Page 31 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.11 Building Construction (Area 3) - 2019
Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.7040	50.5753	12.2262	0.1146	2.8289	0.3350	3.1639	0.8144	0.3205	1.1349		12,208.9109	12,208.9109	0.8078		12,229.1064
Worker	5.3921	3.7522	49.4719	0.1306	12.3066	0.0958	12.4024	3.2638	0.0882	3.3520		13,002.6893	13,002.6893	0.4067		13,012.8557
Total	7.0961	54.3276	61.6981	0.2452	15.1355	0.4308	15.5663	4.0782	0.4087	4.4869		25,211.6001	25,211.6001	1.2145		25,241.9621

CalEEMod Version: CalEEMod.2016.3.2

Page 32 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.11 Building Construction (Area 3) - 2020

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063	2,553.063	0.6229		2,568.634
												1	1			5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063	2,553.063	0.6229		2,568.634
												1	1			5

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4516	46.3813	11.0444	0.1137	2.8289	0.2298	3.0587	0.8144	0.2198	1.0342		12,130.62	12,130.62	0.7616		12,149.66
												17	17			22
Worker	4.9814	3.3485	45.0109	0.1265	12.3066	0.0934	12.3999	3.2638	0.0860	3.3498		12,600.03	12,600.03	0.3623		12,609.09
												62	62			27
Total	6.4330	49.7298	56.0552	0.2402	15.1355	0.3231	15.4586	4.0782	0.3058	4.3840		24,730.65	24,730.65	1.1239		24,758.75
												79	79			49

CalEEMod Version: CalEEMod.2016.3.2

Page 33 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.11 Building Construction (Area 3) - 2020
Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2.553.063	2.553.063	0.6229		2,568.634
												1	1			5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063	2,553.063	0.6229		2,568.634
												1	1			5

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4516	46.3813	11.0444	0.1137	2.8289	0.2298	3.0587	0.8144	0.2198	1.0342		12,130.62	12,130.62	0.7616		12,149.66
												17	17			22
Worker	4.9814	3.3485	45.0109	0.1265	12.3066	0.0934	12.3999	3.2638	0.0860	3.3498		12,600.03	12,600.03	0.3623		12,609.09
												62	62			27
Total	6.4330	49.7298	56.0652	0.2402	15.1355	0.3231	15.4586	4.0782	0.3058	4.3840		24,730.65	24,730.65	1.1239		24,758.75
												79	79			49

CalEEMod Version: CalEEMod.2016.3.2

Page 34 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.12 Building Construction (Area 1) - 2022
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.1534	40.0156	9.4543	0.1117	2.8288	0.0736	2.9024	0.8144	0.0703	0.8847		11,936.6133	11,936.6133	0.7012		11,954.1443
Worker	4.3594	2.7228	38.3637	0.1190	12.3066	0.0880	12.3946	3.2638	0.0810	3.3448		11,755.6405	11,755.6405	0.2963		11,763.0486
Total	5.5128	42.7384	47.8080	0.2297	15.1354	0.1616	15.2970	4.0782	0.1514	4.2295		23,692.2538	23,692.2538	0.9976		23,717.1930

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 35 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.12 Building Construction (Area 1) - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,559.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,559.632 2

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.1534	40.0156	9.4543	0.1117	2.8288	0.0736	2.9024	0.8144	0.0703	0.8847		11,936.61 33	11,936.61 33	0.7012		11,954.14 43
Worker	4.3594	2.7228	38.3637	0.1180	12.3066	0.0880	12.3946	3.2638	0.0810	3.3448		11,755.64 05	11,755.64 05	0.2963		11,763.04 86
Total	5.5128	42.7384	47.8080	0.2297	15.1354	0.1616	15.2970	4.0782	0.1514	4.2295		23,692.25 38	23,692.25 38	0.9976		23,717.19 30

Date: 2/6/2019 11:36 AM

Page 36 of 63

CalEEMod Version: CalEEMod.2016.3.2

Citadel Expansion - South Coast AQMD Air District, Summer

3.12 Building Construction (Area 1) - 2023
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8605	30.2520	8.5181	0.1082	2.8288	0.0340	2.8628	0.8144	0.0325	0.8469		11,574.55 31	11,574.55 31	0.6115		11,589.84 00
Worker	4.0989	2.4637	35.4187	0.1135	12.3066	0.0857	12.3923	3.2638	0.0789	3.3427		11,317.51 12	11,317.51 12	0.2673		11,324.19 24
Total	4.9594	32.7157	43.3368	0.2217	15.1354	0.1197	15.2551	4.0782	0.1114	4.1896		22,892.06 43	22,892.06 43	0.8787		22,914.03 24

CalEEMod Version: CalEEMod.2016.3.2

Page 37 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.12 Building Construction (Area 1) - 2023
Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 ₉	2,555.209 ₉	0.6079		2,570.406 ₁
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209₉	2,555.209₉	0.6079		2,570.406₁

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8605	30.2520	8.5181	0.1082	2.8288	0.0340	2.8628	0.8144	0.0325	0.8469		11,574.55 ₃₁	11,574.55 ₃₁	0.6115		11,589.84 ₀₀
Worker	4.0989	2.4637	35.4187	0.1135	12.3066	0.0857	12.3923	3.2638	0.0789	3.3427		11,317.51 ₁₂	11,317.51 ₁₂	0.2673		11,324.19 ₂₄
Total	4.9594	32.7157	43.9368	0.2217	15.1354	0.1197	15.2551	4.0782	0.1114	4.1896		22,892.06₄₃	22,892.06₄₃	0.8787		22,914.03₂₄

CalEEMod Version: CalEEMod.2016.3.2

Page 38 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.13 Building Construction (Area 2) - 2024
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8424	30.1770	8.2730	0.1077	2.8288	0.0337	2.8625	0.8144	0.0322	0.8466		11,532.5879	11,532.5879	0.6020		11,547.6371
Worker	3.8792	2.2451	33.0855	0.1098	12.3066	0.0846	12.3912	3.2638	0.0779	3.3416		10,946.2404	10,946.2404	0.2450		10,952.3653
Total	4.7216	32.4221	41.3585	0.2175	15.1354	0.1182	15.2537	4.0782	0.1100	4.1882		22,478.8284	22,478.8284	0.8470		22,500.0024

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 39 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.13 Building Construction (Area 2) - 2024

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8424	30.1770	8.2730	0.1077	2.8288	0.0337	2.8625	0.8144	0.0322	0.8466		11,532.5879	11,532.5879	0.6020		11,547.6371
Worker	3.8792	2.2451	33.0855	0.1098	12.3066	0.0846	12.3912	3.2638	0.0779	3.3416		10,946.2404	10,946.2404	0.2450		10,952.3653
Total	4.7216	32.4221	41.3585	0.2175	15.1354	0.1182	15.2537	4.0782	0.1100	4.1882		22,478.8284	22,478.8284	0.8470		22,500.0024

Date: 2/6/2019 11:36 AM

Page 40 of 63

Citadel Expansion - South Coast AQMD Air District, Summer

3.13 Building Construction (Area 2) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Off-Road	1.3674	12.4637	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4637	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8210	29.9139	8.0544	0.1071	2.8288	0.0332	2.8620	0.8144	0.0317	0.8461		11,467.03 30	11,467.03 30	0.5924		11,481.84 30
Worker	3.6844	2.0532	30.7625	0.1055	12.3066	0.0630	12.3695	3.2638	0.0764	3.3401		10,515.32 48	10,515.32 48	0.2233		10,520.90 77
Total	4.5054	31.9671	38.8069	0.2125	15.1354	0.1161	15.2515	4.0782	0.1081	4.1862		21,982.35 78	21,982.35 78	0.8157		22,002.75 07

CalEEMod Version: CalEEMod.2016.3.2

Page 41 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.13 Building Construction (Area 2) - 2025
Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8210	29.9139	8.0644	0.1071	2.8288	0.0332	2.8620	0.8144	0.0317	0.8461		11,467.03 30	11,467.03 30	0.5924		11,481.94 30
Worker	3.6844	2.0532	30.7525	0.1055	12.3066	0.0830	12.3895	3.2638	0.0764	3.3401		10,515.32 48	10,515.32 48	0.2233		10,520.90 77
Total	4.5054	31.9671	38.8069	0.2125	15.1354	0.1161	15.2515	4.0782	0.1081	4.1862		21,982.35 78	21,982.35 78	0.8157		22,002.75 07

CalEEMod Version: CalEEMod.2016.3.2

Page 42 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.14 Paving (Area 3) - 2021

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.210 ₉	2,207.210 ₉	0.7139		2,225.057 ₃
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.210₉	2,207.210₉	0.7139		2,225.057₃

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222
Total	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222

CalEEMod Version: CalEEMod.2016.3.2

Page 43 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.14 Paving (Area 3) - 2021

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.210 ₉	2,207.210 ₉	0.7139		2,225.057 ₃
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.210₉	2,207.210₉	0.7139		2,225.057₃

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222
Total	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222

CalEEMod Version: CalEEMod.2016.3.2

Page 44 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.15 Paving (Area 1) - 2023
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584	2,207.584	0.7140		2,225.433
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584	2,207.584	0.7140		2,225.433

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0558	0.0336	0.4825	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		154.1895	154.1895	3.6400e-003		154.2806
Total	0.0558	0.0336	0.4825	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		154.1895	154.1895	3.6400e-003		154.2806

Citadel Expansion - South Coast AQMD Air District, Summer

3.15 Paving (Area 1) - 2023

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 ₁	2,207.584 ₁	0.7140		2,225.433 ₆
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584₁	2,207.584₁	0.7140		2,225.433₆

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0558	0.0336	0.4825	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		154.1895	154.1895	3.6400e-003		154.2806
Total	0.0558	0.0336	0.4825	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		154.1895	154.1895	3.6400e-003		154.2806

CalEEMod Version: CalEEMod.2016.3.2

Page 46 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.16 Paving (Area 2) - 2026

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0479	0.0258	0.3919	1.3900e-003	0.1677	1.0900e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1878	138.1878	2.7900e-003		138.2575
Total	0.0479	0.0258	0.3919	1.3900e-003	0.1677	1.0900e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1878	138.1878	2.7900e-003		138.2575

CalEEMod Version: CalEEMod.2016.3.2

Page 47 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.16 Paving (Area 2) - 2026

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206,745 2	2,206,745 2	0.7137		2,224,587 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206,745 2	2,206,745 2	0.7137		2,224,587 8

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0479	0.0258	0.3919	1.3900e-003	0.1677	1.0900e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1878	138.1878	2.7900e-003		138,2575
Total	0.0479	0.0258	0.3919	1.3900e-003	0.1677	1.0900e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1878	138.1878	2.7900e-003		138,2575

CalEEMod Version: CalEEMod.2016.3.2

Page 48 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.17 Architectural Coating (Area 3) - 2021
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	189.0830					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	189.3119	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.9287	0.6023	8.2879	0.0245	2.4591	0.0181	2.4772	0.6522	0.0167	0.6688		2,436.2873	2,436.2873	0.0655		2,437.9252
Total	0.9287	0.6023	8.2879	0.0245	2.4591	0.0181	2.4772	0.6522	0.0167	0.6688		2,436.2873	2,436.2873	0.0655		2,437.9252

CalEEMod Version: CalEEMod.2016.3.2

Page 49 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.17 Architectural Coating (Area 3) - 2021

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Archit. Coating	189.0530					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	189.3119	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.9287	0.6023	8.2879	0.0245	2.4591	0.0181	2.4772	0.6522	0.0167	0.6688		2,436,287 ₃	2,436,287 ₃	0.0655		2,437,925 ₂
Total	0.9287	0.6023	8.2879	0.0245	2.4591	0.0181	2.4772	0.6522	0.0167	0.6688		2,436,287₃	2,436,287₃	0.0655		2,437,925₂

Date: 2/6/2019 11:36 AM

Page 50 of 63

CalEEMod Version: CalEEMod.2016.3.2

Citadel Expansion - South Coast AQMD Air District, Summer

3.18 Architectural Coatings (Area 1) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Archit. Coating	193.4906					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	193.6822	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8190	0.4923	7.0773	0.0227	2.4591	0.0171	2.4762	0.6522	0.0158	0.6679		2,261.446 ₄	2,261.446 ₄	0.0534		2,262.781 ₄
Total	0.8190	0.4923	7.0773	0.0227	2.4591	0.0171	2.4762	0.6522	0.0158	0.6679		2,261.446 ₄	2,261.446 ₄	0.0534		2,262.781 ₄

Date: 2/6/2019 11:36 AM

Page 51 of 63

CalEEMod Version: CalEEMod.2016.3.2

Citadel Expansion - South Coast AQMD Air District, Summer

3.18 Architectural Coatings (Area 1) - 2023
Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Archit. Coating	193.4906					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	193.6822	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8190	0.4923	7.0773	0.0227	2.4591	0.0171	2.4762	0.6522	0.0158	0.6679		2,261,446 ₄	2,261,446 ₄	0.0534		2,262,781 ₄
Total	0.8190	0.4923	7.0773	0.0227	2.4591	0.0171	2.4762	0.6522	0.0158	0.6679		2,261,446₄	2,261,446₄	0.0534		2,262,781₄

CalEEMod Version: CalEEMod.2016.3.2

Page 52 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.19 Architectural Coating (Area 2) - 2026
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Archit. Coating	191.2665					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	191.4374	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7025	0.3777	5.7479	0.0203	2.4591	0.0160	2.4751	0.6522	0.0148	0.6669		2,026,753 ⁸	2,026,753 ⁸	0.0409		2,027,776 ⁰
Total	0.7025	0.3777	5.7479	0.0203	2.4591	0.0160	2.4751	0.6522	0.0148	0.6669		2,026,753⁸	2,026,753⁸	0.0409		2,027,776⁰

CalEEMod Version: CalEEMod 2016.3.2

Page 53 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

3.19 Architectural Coating (Area 2) - 2026
Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Archit. Coating	191.2655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	191.4374	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.7025	0.3777	5.7479	0.0203	2.4591	0.0160	2.4751	0.6522	0.0148	0.6669		2,026.7538	2,026.7538	0.0409		2,027.7760
Total	0.7025	0.3777	5.7479	0.0203	2.4591	0.0160	2.4751	0.6522	0.0148	0.6669		2,026.7538	2,026.7538	0.0409		2,027.7760

4.0 Operational Detail - Mobile

CalEEMod Version: CalEEMod.2016.3.2

Page 54 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

4.1 Mitigation Measures Mobile

- Increase Diversity
- Improve Destination Accessibility
- Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Category	lb/day															
Mitigated	45.6757	209.2393	401.0245	1.5885	135.1028	1.1313	136.2341	36.1393	1.0496	37.1889		162,658.7483	162,658.7483	7.5553		162,847.6318
Unmitigated	50.0982	231.4622	519.7037	2.1482	190.2232	1.4989	191.7221	50.8837	1.3911	52.2748		219,695.4793	219,695.4793	9.6228		219,936.0479

4.2 Trip Summary Information

Date: 2/6/2019 11:36 AM

Page 55 of 63

CalEEMod Version: CalEEMod.2016.3.2

Citadel Expansion - South Coast AQMD Air District, Summer

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Arena	1,285.20	1,285.20	1,285.20	2,774,107	1,970,262
Enclosed Parking with Elevator	0.00	0.00	0.00		
Fast Food Restaurant w/o Drive Thru	2,248.24	2,185.44	1,570.00	3,879,939	2,755,660
Fast Food Restaurant with Drive Thru	3,175.17	4,620.99	3,473.41	3,603,712	2,559,474
Fast Food Restaurant with Drive Thru	992.24	1,444.06	1,085.44	1,126,160	799,836
General Office Building	772.10	172.20	73.50	1,889,709	1,342,133
High Turnover (Sit Down Restaurant)	635.75	791.85	659.20	901,376	640,187
Hotel	2,205.90	2,211.30	1,606.50	5,061,171	3,594,610
Hotel	4,085.00	4,095.00	2,975.00	9,372,539	6,656,685
Movie Theater (No Matinee)	11,709.00	14,892.00	12,285.00	25,949,488	18,430,179
Regional Shopping Center	7,161.64	8,380.97	4,233.25	14,961,455	10,626,117
Regional Shopping Center	2,986.44	3,494.90	1,765.29	6,238,994	4,431,139
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	92.40	92.40	92.40	396,000	281,252
Total	37,349.08	43,666.31	31,104.19	76,154,649	54,087,534

4.3 Trip Type Information

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Date: 2/6/2019 11:36 AM

Page 56 of 63

CalEEMod Version: CalEEMod.2016.3.2

Citadel Expansion - South Coast AQMD Air District, Summer

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	
Arena	16.60	8.40	6.90	0.00	81.00	19.00	66	28	6	
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0	
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12	
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50	
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50	
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4	
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43	
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4	
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4	
Movie Theater (No Matinee)	16.60	8.40	6.90	1.80	79.20	19.00	66	17	17	
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11	
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11	
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0	
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3	

4.4 Fleet Mix

CalEEMod Version: CalEEMod.2016.3.2

Page 57 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.551582	0.041972	0.204917	0.113538	0.013798	0.005777	0.022002	0.036198	0.002156	0.001623	0.004914	0.000716	0.000809
Enclosed Parking with Elevator	0.551582	0.041972	0.204917	0.113538	0.013798	0.005777	0.022002	0.036198	0.002156	0.001623	0.004914	0.000716	0.000809
Fast Food Restaurant w/o Drive Thru	0.551582	0.041972	0.204917	0.113538	0.013798	0.005777	0.022002	0.036198	0.002156	0.001623	0.004914	0.000716	0.000809
Fast Food Restaurant with Drive Thru	0.551582	0.041972	0.204917	0.113538	0.013798	0.005777	0.022002	0.036198	0.002156	0.001623	0.004914	0.000716	0.000809
General Office Building	0.551582	0.041972	0.204917	0.113538	0.013798	0.005777	0.022002	0.036198	0.002156	0.001623	0.004914	0.000716	0.000809
High Turnover (Sit Down Restaurant)	0.551582	0.041972	0.204917	0.113538	0.013798	0.005777	0.022002	0.036198	0.002156	0.001623	0.004914	0.000716	0.000809
Hotel	0.551582	0.041972	0.204917	0.113538	0.013798	0.005777	0.022002	0.036198	0.002156	0.001623	0.004914	0.000716	0.000809
Movie Theater (No Matinee)	0.551582	0.041972	0.204917	0.113538	0.013798	0.005777	0.022002	0.036198	0.002156	0.001623	0.004914	0.000716	0.000809
Regional Shopping Center	0.551582	0.041972	0.204917	0.113538	0.013798	0.005777	0.022002	0.036198	0.002156	0.001623	0.004914	0.000716	0.000809
Unenclosed Parking with Elevator	0.551582	0.041972	0.204917	0.113538	0.013798	0.005777	0.022002	0.036198	0.002156	0.001623	0.004914	0.000716	0.000809
Unrefrigerated Warehouse-No Rail	0.551582	0.041972	0.204917	0.113538	0.013798	0.005777	0.022002	0.036198	0.002156	0.001623	0.004914	0.000716	0.000809

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Install Energy Efficient Appliances

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 58 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.0838	9.8525	8.2761	0.0591		0.7488	0.7488		0.7488	0.7488		11,822.9445	11,822.9445	0.2266	0.2168	11,893.2023
NaturalGas Unmitigated	1.0838	9.8525	8.2761	0.0591		0.7488	0.7488		0.7488	0.7488		11,822.9445	11,822.9445	0.2266	0.2168	11,893.2023

5.2 Energy by Land Use - NaturalGas

Unmitigated

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

CalEEMod Version: CalEEMod.2016.3.2

Page 59 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

Land Use	Natural Gas Use kBtu/yr	lb/day										lb/day					
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Arena	5950.68	0.0642	0.5834	0.4901	3.5000e-003		0.0443	0.0443		0.0443	0.0443		700.0806	700.0806	0.0134	0.0128	704.2408
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
Fast Food Restaurant w/o Drive Thru	1985.17	0.0214	0.1946	0.1635	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.5492	233.5492	4.4800e-003	4.2800e-003	234.9371
Fast Food Restaurant with Drive Thru	1264.44	0.0136	0.1240	0.1041	7.4000e-004		9.4200e-003	9.4200e-003		9.4200e-003	9.4200e-003		148.7575	148.7575	2.8500e-003	2.7300e-003	149.6414
Fast Food Restaurant with Drive Thru	4046.2	0.0436	0.3967	0.3332	2.3800e-003		0.0302	0.0302		0.0302	0.0302		476.0239	476.0239	9.1200e-003	8.7300e-003	478.8526
General Office Building	1996.44	0.0215	0.1957	0.1644	1.1700e-003		0.0149	0.0149		0.0149	0.0149		234.8751	234.8751	4.5000e-003	4.3100e-003	236.2709
High Turnover (Sit Down Restaurant)	3161.1	0.0341	0.3099	0.2603	1.8600e-003		0.0236	0.0236		0.0236	0.0236		371.8936	371.8936	7.1300e-003	6.8200e-003	374.1036
Hotel	25756.5	0.2778	2.5252	2.1211	0.0152		0.1919	0.1919		0.1919	0.1919		3,030.175 4	3,030.175 4	0.0581	0.0556	3,048.182 2
Hotel	47697.2	0.5144	4.6762	3.9280	0.0281		0.3554	0.3554		0.3554	0.3554		5,611.435 9	5,611.435 9	0.1076	0.1029	5,644.781 9
Movie Theater (No Matinee)	7438.36	0.0802	0.7293	0.6126	4.3800e-003		0.0554	0.0554		0.0554	0.0554		875.1007	875.1007	0.0168	0.0160	880.3010
Regional Shopping Center	314.255	3.3900e-003	0.0308	0.0259	1.8000e-004		2.3400e-003	2.3400e-003		2.3400e-003	2.3400e-003		36.9712	36.9712	7.1000e-004	6.8000e-004	37.1909
Regional Shopping Center	753.596	8.1300e-003	0.0739	0.0621	4.4000e-004		5.6200e-003	5.6200e-003		5.6200e-003	5.6200e-003		88.6583	88.6583	1.7000e-003	1.6300e-003	89.1852
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
Unrefrigerated Warehouse-No Rail	131.096	1.4100e-003	0.0129	0.0108	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004		15.4231	15.4231	3.0000e-004	2.8000e-004	15.5147
Total		1.0838	9.8525	8.2761	0.0591		0.7488	0.7488		0.7488	0.7488		11,822.94 45	11,822.94 45	0.2266	0.2168	11,893.20 23

5.2 Energy by Land Use - Natural Gas

Mitigated

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Date: 2/6/2019 11:36 AM

Page 60 of 63

CalEEMod Version: CalEEMod.2016.3.2

Citadel Expansion - South Coast AQMD Air District, Summer

Land Use	Natural Gas Use kBTU/yr	ROG	NOx	CO	SO2	lb/day					lb/day					CO2e	
						Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4		N2O
Arena	5,95068	0.0642	0.5834	0.4901	3.5000e-003		0.0443	0.0443		0.0443	0.0443		700.0806	700.0806	0.0134	0.0128	704.2408
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
Fast Food Restaurant w/o Drive Thru	1,98517	0.0214	0.1946	0.1635	1.1700e-003		0.0148	0.0148		0.0148	0.0148		233.5492	233.5492	4.4800e-003	4.2800e-003	234.9371
Fast Food Restaurant with Drive Thru	1,26444	0.0136	0.1240	0.1041	7.4000e-004		9.4200e-003	9.4200e-003		9.4200e-003	9.4200e-003		148.7575	148.7575	2.8500e-003	2.7300e-003	149.6414
Fast Food Restaurant with Drive Thru	4,0462	0.0436	0.3967	0.3332	2.3800e-003		0.0302	0.0302		0.0302	0.0302		476.0239	476.0239	9.1200e-003	8.7300e-003	478.8526
General Office Building	1,99644	0.0215	0.1957	0.1644	1.1700e-003		0.0149	0.0149		0.0149	0.0149		234.8751	234.8751	4.5000e-003	4.3100e-003	236.2709
High Turnover (Sit Down Restaurant)	3,1611	0.0341	0.3099	0.2603	1.8600e-003		0.0236	0.0236		0.0236	0.0236		371.8936	371.8936	7.1300e-003	6.8200e-003	374.1036
Hotel	25,7565	0.2778	2.5252	2.1211	0.0152		0.1919	0.1919		0.1919	0.1919		3,030.1754	3,030.1754	0.0581	0.0556	3,048.1822
Hotel	47,6972	0.5144	4.6762	3.9280	0.0281		0.3554	0.3554		0.3554	0.3554		5,611.4359	5,611.4359	0.1076	0.1029	5,644.7819
Movie Theater (No Matinee)	7,43936	0.0802	0.7293	0.6126	4.3800e-003		0.0554	0.0554		0.0554	0.0554		875.1007	875.1007	0.0168	0.0160	880.3010
Regional Shopping Center	0,314255	3.3900e-003	0.0308	0.0259	1.8000e-004		2.3400e-003	2.3400e-003		2.3400e-003	2.3400e-003		36.9712	36.9712	7.1000e-004	6.8000e-004	37.1909
Regional Shopping Center	0,753596	8.1300e-003	0.0739	0.0621	4.4000e-004		5.6200e-003	5.6200e-003		5.6200e-003	5.6200e-003		88.6583	88.6583	1.7000e-003	1.6300e-003	89.1852
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
Unrefrigerated Warehouse-No Rail	0,131096	1.4100e-003	0.0129	0.0108	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004		15.4231	15.4231	3.0000e-004	2.8000e-004	15.5147
Total		1.0838	9.8525	8.2761	0.0591		0.7488	0.7488		0.7488	0.7488		11,822.9445	11,822.9445	0.2266	0.2168	11,893.2023

6.0 Area Detail

CalEEMod Version: CalEEMod.2016.3.2

Page 61 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

6.1 Mitigation Measures Area

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	38.1824	3.4500e-003	0.3806	3.0000e-005	1.3500e-003	1.3500e-003	1.3500e-003	1.3500e-003	1.3500e-003	1.3500e-003		0.8179	0.8179	2.1300e-003		0.8711
Unmitigated	38.1824	3.4500e-003	0.3806	3.0000e-005	1.3500e-003	1.3500e-003	1.3500e-003	1.3500e-003	1.3500e-003	1.3500e-003		0.8179	0.8179	2.1300e-003		0.8711

6.2 Area by SubCategory

Unmitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	38.1474					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0350	3.4500e-003	0.3806	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		0.8179	0.8179	2.1300e-003		0.8711
Total	38.1824	3.4500e-003	0.3806	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		0.8179	0.8179	2.1300e-003		0.8711

CalEEMod Version: CalEEMod.2016.3.2

Page 62 of 63

Date: 2/6/2019 11:36 AM

Citadel Expansion - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	38.1474					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0350	3.4500e-003	0.3806	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		0.8179	0.8179	2.1300e-003		0.8711
Total	38.1824	3.4500e-003	0.3806	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		0.8179	0.8179	2.1300e-003		0.8711

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

CalEEMod Version: CalEEMod.2016.3.2 Page 63 of 63 Date: 2/6/2019 11:36 AM
Citadel Expansion - South Coast AQMD Air District, Summer

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
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

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

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

APPENDIX B

NOISE WORKSHEETS

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APPENDICES • SCH#2016091024
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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road			
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00	
Motorcycles per hour	0	0	
Cars per hour	27779	27779	
Speed cars	40	40	☐ kilometers per hour ☒ miles per hour
Number of vans/hr	2.777	2.777	
Number of heavy trucks/hr	0	0	
Speed trucks	40	40	
Road surface help	Smooth asphalt ▼		

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	16
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	87
Night LAeq is	81

Top: Existing Noise Levels along Telegraph Road without Project 50 feet

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road			
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00	
Motorcycles per hour	0	0	
Cars per hour	27779	27779	
Speed cars	40	40	☐ kilometers per hour ☒ miles per hour
Number of vans/hr	2.777	2.777	
Number of heavy trucks/hr	0	0	
Speed trucks	40	40	
Road surface help	Smooth asphalt ▼		

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	280
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	70
Night LAeq is	64

Bottom: Existing Noise Levels along Telegraph Road without Project 70 dBA/Ldn

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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road			
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00	
Motorcycles per hour	0	0	
Cars per hour	27.779	27.779	
Speed cars	40	40	☐ kilometers per hour ☒ miles per hour
Number of vans/hr	2.777	2.777	
Number of heavy trucks/hr	0	0	
Speed trucks	40	40	
Road surface help	Smooth asphalt		

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	580
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	
	65
Night LAeq is	
	58

Top: Existing Noise Levels along Telegraph Road without Project 65 dBA/Ldn

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road			
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00	
Motorcycles per hour	0	0	
Cars per hour	27779	27779	
Speed cars	40	40	☐ kilometers per hour ☒ miles per hour
Number of vans/hr	0	0	
Number of heavy trucks/hr	2777	2777	
Speed trucks	40	0	
Road surface help	Smooth asphalt		

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	1000
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	
	60
Night LAeq is	
	53

Bottom: Existing Noise Levels along Telegraph Road without Project 60 dBA/Ldn

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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road			
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00	
Motorcycles per hour	0	0	
Cars per hour	29087	29087	
Speed cars	40	40	☐ kilometers per hour ☒ miles per hour
Number of vans/hr	0	0	
Number of heavy trucks/hr	2908	2908	
Speed trucks	40	40	
Road surface help	Smooth asphalt		

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	16
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	89
Night LAeq is	83

[Click Here to Reset](#) [Compute](#)

Top: Existing Noise Levels along Telegraph Road with Project 50 feet

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road			
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00	
Motorcycles per hour	0	0	
Cars per hour	8036	8036	
Speed cars	40	40	☐ kilometers per hour ☒ miles per hour
Number of vans/hr	0	0	
Number of heavy trucks/hr	803	803	
Speed trucks	40	40	
Road surface help	Smooth asphalt		

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	170
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	70
Night LAeq is	64

[Click Here to Reset](#) [Compute](#)

Bottom: Existing Noise Levels along Telegraph Road with Project 70 dBA/Ldn

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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road		
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00
Motorcycles per hour	0	0
Cars per hour	29087	29087
Speed cars	40	40
Number of vans/hr	0	0
Number of heavy trucks/hr	2908	2908
Speed trucks	40	40
Road surface help	Smooth asphalt v	

☐ kilometers per hour ☒ miles per hour

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	720
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn)	
<i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	
	65
Night LAeq is	
	59

Top: Existing Noise Levels along Telegraph Road with Project 65 dBA/Ldn

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road		
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00
Motorcycles per hour	0	0
Cars per hour	29087	29087
Speed cars	40	40
Number of vans/hr	0	0
Number of heavy trucks/hr	2908	2908
Speed trucks	40	40
Road surface help	Smooth asphalt v	

☐ kilometers per hour ☒ miles per hour

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	1240
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn)	
<i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	
	60
Night LAeq is	
	54

Bottom: Existing Noise Levels along Telegraph Road with Project 60 dBA/Ldn

APPENDICES • SCH#2016091024
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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road			
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00	
Motorcycles per hour	0	0	
Cars per hour	8036	8036	
Speed cars	40	40	☐ kilometers per hour ☒ miles per hour
Number of vans/hr	0	0	
Number of heavy trucks/hr	803	803	
Speed trucks	40	40	
Road surface help	Smooth asphalt ▼		

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	16
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	84
Night LAeq is	77

Top: Existing Noise Levels along Washington Boulevard without Project 50 feet

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road			
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00	
Motorcycles per hour	0	0	
Cars per hour	8036	8036	
Speed cars	40	40	☐ kilometers per hour ☒ miles per hour
Number of vans/hr	0	0	
Number of heavy trucks/hr	803	803	
Speed trucks	40	40	
Road surface help	Smooth asphalt ▼		

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	170
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	70
Night LAeq is	64

Bottom: Existing Noise Levels along Washington Boulevard without Project 70 dBA/Ldn

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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road			
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00	
Motorcycles per hour	0	0	
Cars per hour	8036	8036	
Speed cars	40	40	☐ kilometers per hour ☒ miles per hour
Number of vans/hr	0	0	
Number of heavy trucks/hr	803	803	
Speed trucks	40	40	
Road surface help	Smooth asphalt ▼		

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	340
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	
	65
Night LAeq is	
	59

Top: Existing Noise Levels along Washington Boulevard without Project 65 dBA/Ldn

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road			
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00	
Motorcycles per hour	0	0	
Cars per hour	8036	8036	
Speed cars	40	40	☐ kilometers per hour ☒ miles per hour
Number of vans/hr	0	0	
Number of heavy trucks/hr	803	803	
Speed trucks	40	40	
Road surface help	Smooth asphalt ▼		

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	680
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	
	60
Night LAeq is	
	54

Bottom: Existing Noise Levels along Washington Boulevard without Project 60 dBA/Ldn

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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road			
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00	
Motorcycles per hour	0	0	
Cars per hour	8590	8590	
Speed cars	40	40	☐ kilometers per hour ☒ miles per hour
Number of vans/hr	859	859	
Number of heavy trucks/hr	0	0	
Speed trucks	40	40	
Road surface help	Smooth asphalt		

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	16
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn)	
<i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	
	83
Night LAeq is	
	76

Top: Existing Noise Levels along Washington Boulevard with Project 50 feet

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road			
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00	
Motorcycles per hour	0	0	
Cars per hour	8590	8590	
Speed cars	40	40	☐ kilometers per hour ☒ miles per hour
Number of vans/hr	859	859	
Number of heavy trucks/hr	0	0	
Speed trucks	40	40	
Road surface help	Smooth asphalt		

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	160
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn)	
<i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	
	70
Night LAeq is	
	63

Bottom: Existing Noise Levels along Washington Boulevard with Project 70 dBA/Ldn

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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road		
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00
Motorcycles per hour	0	0
Cars per hour	8590	8590
Speed cars	40	40
	☐ kilometers per hour	☒ miles per hour
Number of vans/hr	859	859
Number of heavy trucks/hr	0	0
Speed trucks	40	40
Road surface help	Smooth asphalt ▼	

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	320
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	65
Night LAeq is	59

Top: Existing Noise Levels along Washington Boulevard with Project 65 dBA/Ldn

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

Data on road		
Road traffic input data help	Day: 7.00-22.00	Night: 22.00-7.00
Motorcycles per hour	0	0
Cars per hour	8590	8590
Speed cars	40	40
	☐ kilometers per hour	☒ miles per hour
Number of vans/hr	859	859
Number of heavy trucks/hr	0	0
Speed trucks	40	40
Road surface help	Smooth asphalt ▼	

data on geometry help	
Height of road	0
Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i>	640
Height of house or observer	5
View angle (127 grad= full view)	127
Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing)	0
Percentage reflection from opposite side (0=no surface; 1= all reflective).	0
Distance to reflective surface on opposite side	0
Height of reflecting object (must be at least 5 m)	0
Distance to intersection	0
Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i>	60
Night LAeq is	53

Bottom: Existing Noise Levels along Washington Boulevard with Project 60 dBA/Ldn

APPENDIX C

UTILITIES WORKSHEETS

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AREA 1

Table 1 Project Name: Citadel Area 1		
Definition of Project Parameters - Enter independent variable (no. of units or floor area) in the shaded area. The independent variable to be entered is the number of units (for residential development) or the gross floor area (for non-residential development).		
Land Use	Independent	Factor
Residential Uses	Variable	Total Units
Single-Family Residential	No. of Units	0
Medium Density Residential	No. of Units	0
Multiple-Family Residential	No. of Units	0
Mobile Home	No. of Units	0
Office Uses	Variable	Total Floor Area
Office	Sq. Ft.	0
Medical Office Building	Sq. Ft.	0
Office Park	Sq. Ft.	0
Bank/Financial Services	Sq. Ft.	0
Commercial Uses	Variable	Floor Area/Rooms
Specialty Retail Commercial	Sq. Ft.	0
Convenience Store	Sq. Ft.	0
Movie Theater	Sq. Ft.	0
Shopping Center	Sq. Ft.	122,150
Sit-Down Restaurant	Sq. Ft.	0
Fast-Food Restaurant	Sq. Ft.	45,571
Hotel	Rooms	270
Manufacturing Uses	Variable	Total Floor Area
Industrial Park	Sq. Ft.	0
Manufacturing	Sq. Ft.	0
General Light Industry	Sq. Ft.	0
Warehouse	Sq. Ft.	0
Public/Institutional	Variable	Total Floor Area
Public/Institutional	Sq. Ft.	0
Open Space	Sq. Ft.	0

Table 2: Projected Utility Consumption and Generation		
Summary of Project Impacts - Results of analysis identified below. No modifications should be made to this Table.		
Utilities Consumption and Generation	Factor	Rates
Electrical Consumption	kWh/day	24,769
Natural Gas Consumption	cubic feet/day	1,333
Water Consumption	gallons/day	52,268
Sewage Generation	gallons/day	42,084
Solid Waste Generation	pounds/day	13,987

APPENDICES • SCH#2016091024
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Table 3: Electrical Consumption				
Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	No. of Units	kWh	Variable	kWh/Unit/Day
Single-Family Residential	0	5,625.00	kWh/Unit/Year	0.0
Medium Density Residential	0	5,625.00	kWh/Unit/Year	0.0
Multiple-Family Residential	0	5,625.00	kWh/Unit/Year	0.0
Mobile Home	0	4,644.00	kWh/Unit/Year	0.0
Office Uses	Sq. Ft.	kWh	Variable	kWh/Sq. Ft./Day
Office	0	20.80	kWh/Sq. Ft./Year	0.0
Medical Office Building	0	14.20	kWh/Sq. Ft./Year	0.0
Office Park	0	20.80	kWh/Sq. Ft./Year	0.0
Bank/Financial Services	0	20.80	kWh/Sq. Ft./Year	0.0
Commercial Uses	Sq. Ft./Rooms	kWh	Variable	kWh/Sq. Ft./Day
Specialty Retail Commercial	0	16.00	kWh/Sq. Ft./Year	0.0
Convenience Store	0	16.00	kWh/Sq. Ft./Year	0.0
Movie Theater	0	16.00	kWh/Sq. Ft./Year	0.0
Shopping Center	122,150	35.90	kWh/Sq. Ft./Year	12,014
Sit-Down Restaurant	0	49.10	kWh/Sq. Ft./Year	0.0
Fast-Food Restaurant	45,571	49.10	kWh/Sq. Ft./Year	6,130.2
Hotel	270	8,955.00	kWh/Sq. Ft./Year	6,624.2
Manufacturing Uses	Sq. Ft.	kWh	Variable	kWh/Sq. Ft./Day
Industrial Park	0	4.80	kWh/Sq. Ft./Year	0.0
Manufacturing	0	4.80	kWh/Sq. Ft./Year	0.0
General Light Industry	0	4.80	kWh/Sq. Ft./Year	0.0
Warehouse	0	4.80	kWh/Sq. Ft./Year	0.0
Public/Institutional	Sq. Ft.	kWh	Variable	kWh/Sq. Ft./Day
Public/Institutional	0	4.80	kWh/Sq. Ft./Year	0.0
Open Space	0	0.00	kWh/Sq. Ft./Year	0.0
Total Daily Electrical Consumption (kWh/day)				24,768.7
Sources:				
Residential rates were derived from the SCAQMD's CEQA Air Quality Handbook (April 1993).				
All other rates are from Common Forecasting Methodology VII Demand Forms, 1989				

APPENDICES • SCH#2016091024
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Table 4: Natural Gas Consumption				
Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	No. of Units	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Single-Family Residential	0	6,665.00	Cu. Ft./Mo./Unit	0.0
Medium Density Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Multiple-Family Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Mobile Home	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Office Uses	Sq. Ft.	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Office	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Medical Office Building	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Office Park	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Bank/Financial Services	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Rooms	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Specialty Retail Commercial	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Convenience Store	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Movie Theater	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Shopping Center	122,150	2.90	Cu. Ft./Mo./Sq. Ft.	970.5
Sit-Down Restaurant	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Fast-Food Restaurant	45,571	2.90	Cu. Ft./Mo./Sq. Ft.	362.1
Hotel	270		Cu. Ft./Mo./Room	0.0
Manufacturing Uses	Sq. Ft.	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Industrial Park	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Manufacturing	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
General Light Industry	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Warehouse	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Public/Institutional Use	Sq. Ft.	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Public/Institutional	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Open Space	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Total Daily Natural Gas Consumption (cubic feet/day)				1,332.6
Sources:				
South Coast Air Quality Management District, CEQA Air Quality Handbook. April 1993				

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 4: Natural Gas Consumption				
Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	No. of Units	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Single-Family Residential	0	6,665.00	Cu. Ft./Mo./Unit	0.0
Medium Density Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Multiple-Family Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Mobile Home	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Office Uses	Sq. Ft.	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Office	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Medical Office Building	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Office Park	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Bank/Financial Services	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Rooms	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Specialty Retail Commercial	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Convenience Store	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Movie Theater	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Shopping Center	122,150	2.90	Cu. Ft./Mo./Sq. Ft.	970.5
Sit-Down Restaurant	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Fast-Food Restaurant	45,571	2.90	Cu. Ft./Mo./Sq. Ft.	362.1
Hotel	270		Cu. Ft./Mo./Room	0.0
Manufacturing Uses	Sq. Ft.	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Industrial Park	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Manufacturing	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
General Light Industry	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Warehouse	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Public/Institutional Use	Sq. Ft.	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Public/Institutional	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Open Space	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Total Daily Natural Gas Consumption (cubic feet/day)				1,332.6
Sources: South Coast Air Quality Management District, CEQA Air Quality Handbook. April 1993				

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 5: Water Consumption				
Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	No. of Units	Gals. of Water	Variable	Gals./Day
Single-Family Residential	0	250.00	Gals./Day/Unit	0.0
Medium Density Residential	0	200.00	Gals./Day/Unit	0.0
Multiple-Family Residential	0	200.00	Gals./Day/Unit	0.0
Mobile Home	0	200.00	Gals./Day/Unit	0.0
Office Uses	Sq. Ft.	Gals. of Water	Variable	Gals./Day
Office	0	0.14	Gals./Day/Sq. Ft.	0.0
Medical Office Building	0	0.14	Gals./Day/Sq. Ft.	0.0
Office Park	0	0.14	Gals./Day/Sq. Ft.	0.0
Bank/Financial Services	0	0.14	Gals./Day/Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Room	Gals. of Water	Variable	Gals./Day
Specialty Retail Commercial	0	0.10	Gals./Day/Sq. Ft.	0.0
Convenience Store	0	0.10	Gals./Day/Sq. Ft.	0.0
Movie Theater	0	0.10	Gals./Day/Sq. Ft.	0.0
Shopping Center	122,150	0.10	Gals./Day/Sq. Ft.	12,337.2
Sit-Down Restaurant	0	0.40	Gals./Day/Sq. Ft.	0.0
Fast-Food Restaurant	45,571	0.11	Gals./Day/Sq. Ft.	4,830.5
Hotel	270	130.00	Gals./Day/Room.	35,100.0
Manufacturing Uses	Sq. Ft.	Gals. of Water	Variable	Gals./Day
Industrial Park	0	0.14	Gals./Day/Sq. Ft.	0.0
Manufacturing	0	0.14	Gals./Day/Sq. Ft.	0.0
General Light Industry	0	0.14	Gals./Day/Sq. Ft.	0.0
Warehouse	0	0.01	Gals./Day/Sq. Ft.	0.0
Public/Institutional Use	Sq. Ft.	Gals. of Water	Variable	Gals./Day
Public/Institutional	0	0.10	Gals./Day/Sq. Ft.	0.0
Open Space	0	0.10	Gals./Day/Sq. Ft.	0.0
Total Daily Water Consumption (gallons/day)				52,267.7
Sources:				
Source: Derived from Orange County Sanitation District rates (150% of effluent generation).				

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 6: Sewage Generation				
Project Component	Units of Measure	Generation Factor		Projected Consumption
Residential Uses	No. of Units	Gals. of Effluent	Variable	Gals./Day
Single-Family Residential	0	230.00	Gals./Day/Unit	0.0
Medium Density Residential	0	200.00	Gals./Day/Unit	0.0
Multiple-Family Residential	0	120.00	Gals./Day/Unit	0.0
Mobile Home	0	180.00	Gals./Day/Unit	0.0
Office Uses	Sq. Ft.	Gals. of Effluent	Variable	Gals./Day
Office	0	0.11	Gals./Day/Sq. Ft.	0.0
Medical Office Building	0	0.11	Gals./Day/Sq. Ft.	0.0
Office Park	0	0.11	Gals./Day/Sq. Ft.	0.0
Bank/Financial Services	0	0.11	Gals./Day/Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Rooms	Gals. of Effluent	Variable	Gals./Day
Specialty Retail Commercial	0	0.08	Gals./Day/Sq. Ft.	0.0
Convenience Store	0	0.08	Gals./Day/Sq. Ft.	0.0
Movie Theater	0	0.08	Gals./Day/Sq. Ft.	0.0
Shopping Center	122,150	0.08	Gals./Day/Sq. Ft.	9,869.7
Sit-Down Restaurant	0	0.30	Gals./Day/Sq. Ft.	0.0
Fast-Food Restaurant	45,571	0.08	Gals./Day/Sq. Ft.	3,864.4
Hotel	270	105	Gals./Day/Room.	28,350.0
Manufacturing Uses	Sq. Ft.	Gals. of Effluent	Variable	Gals./Day
Industrial Park	0	0.11	Gals./Day/Sq. Ft.	0.0
Manufacturing	0	0.11	Gals./Day/Sq. Ft.	0.0
General Light Industry	0	0.11	Gals./Day/Sq. Ft.	0.0
Warehouse	0	0.01	Gals./Day/Sq. Ft.	0.0
Public/Institutional Use	Sq. Ft.	Gals. of Effluent	Variable	Gals./Day
Public/Institutional	0	0.08	Gals./Day/Sq. Ft.	0.0
Open Space	0	0.08	Gals./Day/Sq. Ft.	0.0
Total Daily Sewage Generation (gallons/day)				42,084.1
Source: Orange County Sanitation Districts.				

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 7: Solid Waste Generation				
Project Component	Units of Measure	Generation Factor		Projected Generation
Residential Uses	No. of Units	Lbs. of Waste	Variable	Lbs./Day
Single-Family Residential	0	4.00	Lbs./Day/Unit	0.0
Medium Density Residential	0	4.00	Lbs./Day/Unit	0.0
Multiple-Family Residential	0	4.00	Lbs./Day/Unit	0.0
Mobile Home	0	4.00	Lbs./Day/Unit	0.0
Office Uses	Sq. Ft.	Lbs. of Waste	Variable	Lbs./Day
Office	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Medical Office Building	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Office Park	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Bank/Financial Services	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Rooms	Lbs. of Waste	Variable	Lbs./Day
Specialty Retail Commercial	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Convenience Store	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Movie Theater	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Shopping Center	122,150	6.00	Lbs./Day/1,000 Sq. Ft.	732.9
Sit-Down Restaurant	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Fast-Food Restaurant	45,571	42.00	Lbs./Day/1,000 Sq. Ft.	1,914.0
Hotel	270	42.00	Lbs./Day/Room	11,340.0
Manufacturing Uses	Sq. Ft.	Lbs. of Waste	Variable	Lbs./Day
Industrial Park	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Manufacturing	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
General Light Industry	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Warehouse	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Public/Institutional Use	Sq. Ft.	Lbs. of Waste	Variable	Lbs./Day
Public/Institutional	0	4.00	Lbs./Day/1,000 Sq. Ft.	0.0
Open Space	0	3.00	Lbs./Day/1,000 Sq. Ft.	0.0
Total Daily Solid Waste Generation				13,986.9
Source: City of Los Angeles Average Solid Waste Generation Rates, April 1981				

AREA 2

Table 1 Project Name: Citadel Area 2		
Definition of Project Parameters - Enter independent variable (no. of units or floor area) in the shaded area. The independent variable to be entered is the number of units (for residential development) or the gross floor area (for non-residential development).		
Land Use	Independent	Factor
Residential Uses	Variable	Total Units
Single-Family Residential	No. of Units	0
Medium Density Residential	No. of Units	0
Multiple-Family Residential	No. of Units	0
Mobile Home	No. of Units	0
Office Uses	Variable	Total Floor Area
Office	Sq. Ft.	0
Medical Office Building	Sq. Ft.	0
Office Park	Sq. Ft.	0
Bank/Financial Services	Sq. Ft.	0
Commercial Uses	Variable	Floor Area/Rooms
Specialty Retail Commercial	Sq. Ft.	120,000
Convenience Store	Sq. Ft.	0
Movie Theater	Sq. Ft.	150,000
Shopping Center	Sq. Ft.	66,941
Sit-Down Restaurant	Sq. Ft.	0
Fast-Food Restaurant	Sq. Ft.	3,140
Hotel	Rooms	500
Manufacturing Uses	Variable	Total Floor Area
Industrial Park	Sq. Ft.	0
Manufacturing	Sq. Ft.	0
General Light Industry	Sq. Ft.	0
Warehouse	Sq. Ft.	0
Public/Institutional	Variable	Total Floor Area
Public/Institutional	Sq. Ft.	0
Open Space	Sq. Ft.	0

Table 2: Projected Utility Consumption and Generation		
Summary of Project Impacts - Results of analysis identified below. No modifications should be made to this Table.		
Utilities Consumption and Generation	Factor	Rates
Electrical Consumption	kWh/day	31,109
Natural Gas Consumption	cubic feet/day	2,702
Water Consumption	gallons/day	99,364
Sewage Generation	gallons/day	79,991
Solid Waste Generation	pounds/day	27,474

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 3: Electrical Consumption				
Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	No. of Units	kWh	Variable	kWh/Unit/Day
Single-Family Residential	0	5,625.00	kWh/Unit/Year	0.0
Medium Density Residential	0	5,625.00	kWh/Unit/Year	0.0
Multiple-Family Residential	0	5,625.00	kWh/Unit/Year	0.0
Mobile Home	0	4,644.00	kWh/Unit/Year	0.0
Office Uses	Sq. Ft.	kWh	Variable	kWh/Sq. Ft./Day
Office	0	20.80	kWh/Sq. Ft./Year	0.0
Medical Office Building	0	14.20	kWh/Sq. Ft./Year	0.0
Office Park	0	20.80	kWh/Sq. Ft./Year	0.0
Bank/Financial Services	0	20.80	kWh/Sq. Ft./Year	0.0
Commercial Uses	Sq. Ft./Rooms	kWh	Variable	kWh/Sq. Ft./Day
Specialty Retail Commercial	120,000	16.00	kWh/Sq. Ft./Year	5,260.3
Convenience Store	0	16.00	kWh/Sq. Ft./Year	0.0
Movie Theater	150,000	16.00	kWh/Sq. Ft./Year	6,575.3
Shopping Center	66,941	35.90	kWh/Sq. Ft./Year	6,584
Sit-Down Restaurant	0	49.10	kWh/Sq. Ft./Year	0.0
Fast-Food Restaurant	3,140	49.10	kWh/Sq. Ft./Year	422.4
Hotel	500	8,955.00	kWh/Sq. Ft./Year	12,267.1
Manufacturing Uses	Sq. Ft.	kWh	Variable	kWh/Sq. Ft./Day
Industrial Park	0	4.80	kWh/Sq. Ft./Year	0.0
Manufacturing	0	4.80	kWh/Sq. Ft./Year	0.0
General Light Industry	0	4.80	kWh/Sq. Ft./Year	0.0
Warehouse	0	4.80	kWh/Sq. Ft./Year	0.0
Public/Institutional	Sq. Ft.	kWh	Variable	kWh/Sq. Ft./Day
Public/Institutional	0	4.80	kWh/Sq. Ft./Year	0.0
Open Space	0	0.00	kWh/Sq. Ft./Year	0.0
Total Daily Electrical Consumption (kWh/day)				31,109.2
Sources:				
Residential rates were derived from the SCAQMD's CEQA Air Quality Handbook (April 1993).				
All other rates are from Common Forecasting Methodology VII Demand Forms, 1989				

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 4: Natural Gas Consumption				
Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	No. of Units	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Single-Family Residential	0	6,665.00	Cu. Ft./Mo./Unit	0.0
Medium Density Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Multiple-Family Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Mobile Home	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Office Uses	Sq. Ft.	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Office	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Medical Office Building	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Office Park	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Bank/Financial Services	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Rooms	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Specialty Retail Commercial	120,000	2.90	Cu. Ft./Mo./Sq. Ft.	953.4
Convenience Store	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Movie Theater	150,000	2.90	Cu. Ft./Mo./Sq. Ft.	1,191.8
Shopping Center	66,941	2.90	Cu. Ft./Mo./Sq. Ft.	531.9
Sit-Down Restaurant	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Fast-Food Restaurant	3,140	2.90	Cu. Ft./Mo./Sq. Ft.	24.9
Hotel	500		Cu. Ft./Mo./Room	0.0
Manufacturing Uses	Sq. Ft.	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Industrial Park	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Manufacturing	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
General Light Industry	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Warehouse	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Public/Institutional Use	Sq. Ft.	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Public/Institutional	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Open Space	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Total Daily Natural Gas Consumption (cubic feet/day)				2,702.0
Sources: South Coast Air Quality Management District, CEQA Air Quality Handbook. April 1993				

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 5: Water Consumption				
Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	No. of Units	Gals. of Water	Variable	Gals./Day
Single-Family Residential	0	250.00	Gals./Day/Unit	0.0
Medium Density Residential	0	200.00	Gals./Day/Unit	0.0
Multiple-Family Residential	0	200.00	Gals./Day/Unit	0.0
Mobile Home	0	200.00	Gals./Day/Unit	0.0
Office Uses	Sq. Ft.	Gals. of Water	Variable	Gals./Day
Office	0	0.14	Gals./Day/Sq. Ft.	0.0
Medical Office Building	0	0.14	Gals./Day/Sq. Ft.	0.0
Office Park	0	0.14	Gals./Day/Sq. Ft.	0.0
Bank/Financial Services	0	0.14	Gals./Day/Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Room	Gals. of Water	Variable	Gals./Day
Specialty Retail Commercial	120,000	0.10	Gals./Day/Sq. Ft.	12,120.0
Convenience Store	0	0.10	Gals./Day/Sq. Ft.	0.0
Movie Theater	150,000	0.10	Gals./Day/Sq. Ft.	15,150.0
Shopping Center	66,941	0.10	Gals./Day/Sq. Ft.	6,761.0
Sit-Down Restaurant	0	0.40	Gals./Day/Sq. Ft.	0.0
Fast-Food Restaurant	3,140	0.11	Gals./Day/Sq. Ft.	332.8
Hotel	500	130.00	Gals./Day/Room.	65,000.0
Manufacturing Uses	Sq. Ft.	Gals. of Water	Variable	Gals./Day
Industrial Park	0	0.14	Gals./Day/Sq. Ft.	0.0
Manufacturing	0	0.14	Gals./Day/Sq. Ft.	0.0
General Light Industry	0	0.14	Gals./Day/Sq. Ft.	0.0
Warehouse	0	0.01	Gals./Day/Sq. Ft.	0.0
Public/Institutional Use	Sq. Ft.	Gals. of Water	Variable	Gals./Day
Public/Institutional	0	0.10	Gals./Day/Sq. Ft.	0.0
Open Space	0	0.10	Gals./Day/Sq. Ft.	0.0
Total Daily Water Consumption (gallons/day)				99,363.9
Sources:				
Source: Derived from Orange County Sanitation District rates (150% of effluent generation).				

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 6: Sewage Generation				
Project Component	Units of Measure	Generation Factor		Projected Consumption
Residential Uses	No. of Units	Gals. of Effluent	Variable	Gals./Day
Single-Family Residential	0	230.00	Gals./Day/Unit	0.0
Medium Density Residential	0	200.00	Gals./Day/Unit	0.0
Multiple-Family Residential	0	120.00	Gals./Day/Unit	0.0
Mobile Home	0	180.00	Gals./Day/Unit	0.0
Office Uses	Sq. Ft.	Gals. of Effluent	Variable	Gals./Day
Office	0	0.11	Gals./Day/Sq. Ft.	0.0
Medical Office Building	0	0.11	Gals./Day/Sq. Ft.	0.0
Office Park	0	0.11	Gals./Day/Sq. Ft.	0.0
Bank/Financial Services	0	0.11	Gals./Day/Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Rooms	Gals. of Effluent	Variable	Gals./Day
Specialty Retail Commercial	120,000	0.08	Gals./Day/Sq. Ft.	9,696.0
Convenience Store	0	0.08	Gals./Day/Sq. Ft.	0.0
Movie Theater	150,000	0.08	Gals./Day/Sq. Ft.	12,120.0
Shopping Center	66,941	0.08	Gals./Day/Sq. Ft.	5,408.8
Sit-Down Restaurant	0	0.30	Gals./Day/Sq. Ft.	0.0
Fast-Food Restaurant	3,140	0.08	Gals./Day/Sq. Ft.	266.3
Hotel	500	105	Gals./Day/Room.	52,500.0
Manufacturing Uses	Sq. Ft.	Gals. of Effluent	Variable	Gals./Day
Industrial Park	0	0.11	Gals./Day/Sq. Ft.	0.0
Manufacturing	0	0.11	Gals./Day/Sq. Ft.	0.0
General Light Industry	0	0.11	Gals./Day/Sq. Ft.	0.0
Warehouse	0	0.01	Gals./Day/Sq. Ft.	0.0
Public/Institutional Use	Sq. Ft.	Gals. of Effluent	Variable	Gals./Day
Public/Institutional	0	0.08	Gals./Day/Sq. Ft.	0.0
Open Space	0	0.08	Gals./Day/Sq. Ft.	0.0
Total Daily Sewage Generation (gallons/day)				79,991.1
Source: Orange County Sanitation Districts.				

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 7: Solid Waste Generation				
Project Component	Units of Measure	Generation Factor		Projected Generation
Residential Uses	No. of Units	Lbs. of Waste	Variable	Lbs./Day
Single-Family Residential	0	4.00	Lbs./Day/Unit	0.0
Medium Density Residential	0	4.00	Lbs./Day/Unit	0.0
Multiple-Family Residential	0	4.00	Lbs./Day/Unit	0.0
Mobile Home	0	4.00	Lbs./Day/Unit	0.0
Office Uses	Sq. Ft.	Lbs. of Waste	Variable	Lbs./Day
Office	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Medical Office Building	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Office Park	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Bank/Financial Services	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Rooms	Lbs. of Waste	Variable	Lbs./Day
Specialty Retail Commercial	120,000	42.00	Lbs./Day/1,000 Sq. Ft.	5,040.0
Convenience Store	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Movie Theater	150,000	6.00	Lbs./Day/1,000 Sq. Ft.	900.0
Shopping Center	66,941	6.00	Lbs./Day/1,000 Sq. Ft.	401.6
Sit-Down Restaurant	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Fast-Food Restaurant	3,140	42.00	Lbs./Day/1,000 Sq. Ft.	131.9
Hotel	500	42.00	Lbs./Day/Room	21,000.0
Manufacturing Uses	Sq. Ft.	Lbs. of Waste	Variable	Lbs./Day
Industrial Park	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Manufacturing	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
General Light Industry	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Warehouse	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Public/Institutional Use	Sq. Ft.	Lbs. of Waste	Variable	Lbs./Day
Public/Institutional	0	4.00	Lbs./Day/1,000 Sq. Ft.	0.0
Open Space	0	3.00	Lbs./Day/1,000 Sq. Ft.	0.0
Total Daily Solid Waste Generation				27,473.5
Source: City of Los Angeles Average Solid Waste Generation Rates, April 1981				

AREA 3

Table 1 Project Name: CITADEL Area 3		
Definition of Project Parameters - Enter independent variable (no. of units or floor area) in the shaded area. The independent variable to be entered is the number of units (for residential development) or the gross floor area (for non-residential development).		
Land Use	Independent	Factor
Residential Uses	Variable	Total Units
Single-Family Residential	No. of Units	0
Medium Density Residential	No. of Units	0
Multiple-Family Residential	No. of Units	0
Mobile Home	No. of Units	0
Office Uses	Variable	Total Floor Area
Office	Sq. Ft.	70,000
Medical Office Building	Sq. Ft.	0
Office Park	Sq. Ft.	0
Bank/Financial Services	Sq. Ft.	0
Commercial Uses	Variable	Floor Area/Rooms
Specialty Retail Commercial	Sq. Ft.	0
Convenience Store	Sq. Ft.	0
Movie Theater	Sq. Ft.	0
Shopping Center	Sq. Ft.	0
Sit-Down Restaurant	Sq. Ft.	5,000
Fast-Food Restaurant	Sq. Ft.	12,400
Hotel	Rooms	0
Manufacturing Uses	Variable	Total Floor Area
Industrial Park	Sq. Ft.	0
Manufacturing	Sq. Ft.	0
General Light Industry	Sq. Ft.	0
Warehouse	Sq. Ft.	55,000
Public/Institutional	Variable	Total Floor Area
Public/Institutional	Sq. Ft.	0
Open Space	Sq. Ft.	0

Table 2: Projected Utility Consumption and Generation		
Summary of Project Impacts - Results of analysis identified below. No modifications should be made to this Table.		
Utilities Consumption and Generation	Factor	Rates
Electrical Consumption	kWh/day	7,053
Natural Gas Consumption	cubic feet/day	1,230
Water Consumption	gallons/day	13,804
Sewage Generation	gallons/day	10,944
Solid Waste Generation	pounds/day	1,481

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 3: Electrical Consumption				
Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	No. of Units	kWh	Variable	kWh/Unit/Day
Single-Family Residential	0	5,625.00	kWh/Unit/Year	0.0
Medium Density Residential	0	5,625.00	kWh/Unit/Year	0.0
Multiple-Family Residential	0	5,625.00	kWh/Unit/Year	0.0
Mobile Home	0	4,644.00	kWh/Unit/Year	0.0
Office Uses	Sq. Ft.	kWh	Variable	kWh/Sq. Ft./Day
Office	70,000	20.80	kWh/Sq. Ft./Year	3,989.0
Medical Office Building	0	14.20	kWh/Sq. Ft./Year	0.0
Office Park	0	20.80	kWh/Sq. Ft./Year	0.0
Bank/Financial Services	0	20.80	kWh/Sq. Ft./Year	0.0
Commercial Uses	Sq. Ft./Rooms	kWh	Variable	kWh/Sq. Ft./Day
Specialty Retail Commercial	0	16.00	kWh/Sq. Ft./Year	0.0
Convenience Store	0	16.00	kWh/Sq. Ft./Year	0.0
Movie Theater	0	16.00	kWh/Sq. Ft./Year	0.0
Shopping Center	0	35.90	kWh/Sq. Ft./Year	0
Sit-Down Restaurant	5,000	49.10	kWh/Sq. Ft./Year	672.6
Fast-Food Restaurant	12,400	49.10	kWh/Sq. Ft./Year	1,668.1
Hotel	0	8,955.00	kWh/Sq. Ft./Year	0.0
Manufacturing Uses	Sq. Ft.	kWh	Variable	kWh/Sq. Ft./Day
Industrial Park	0	4.80	kWh/Sq. Ft./Year	0.0
Manufacturing	0	4.80	kWh/Sq. Ft./Year	0.0
General Light Industry	0	4.80	kWh/Sq. Ft./Year	0.0
Warehouse	55,000	4.80	kWh/Sq. Ft./Year	723.3
Public/Institutional	Sq. Ft.	kWh	Variable	kWh/Sq. Ft./Day
Public/Institutional	0	4.80	kWh/Sq. Ft./Year	0.0
Open Space	0	0.00	kWh/Sq. Ft./Year	0.0
Total Daily Electrical Consumption (kWh/day)				7,053.0
Sources:				
Residential rates were derived from the SCAQMD's CEQA Air Quality Handbook (April 1993).				
All other rates are from Common Forecasting Methodology VII Demand Forms, 1989				

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 4: Natural Gas Consumption				
Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	No. of Units	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Single-Family Residential	0	6,665.00	Cu. Ft./Mo./Unit	0.0
Medium Density Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Multiple-Family Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Mobile Home	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Office Uses	Sq. Ft.	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Office	70,000	2.00	Cu. Ft./Mo./Sq. Ft.	383.6
Medical Office Building	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Office Park	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Bank/Financial Services	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Rooms	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Specialty Retail Commercial	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Convenience Store	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Movie Theater	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Shopping Center	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Sit-Down Restaurant	5,000	2.90	Cu. Ft./Mo./Sq. Ft.	39.7
Fast-Food Restaurant	12,400	2.90	Cu. Ft./Mo./Sq. Ft.	98.5
Hotel	0		Cu. Ft./Mo./Room	0.0
Manufacturing Uses	Sq. Ft.	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Industrial Park	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Manufacturing	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
General Light Industry	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Warehouse	55,000	4.70	Cu. Ft./Mo./Sq. Ft.	708.2
Public/Institutional Use	Sq. Ft.	Cu. Ft. of Nat. Gas	Variable	Cu. Ft./Day
Public/Institutional	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Open Space	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Total Daily Natural Gas Consumption (cubic feet/day)				1,230.0
Sources: South Coast Air Quality Management District, CEQA Air Quality Handbook. April 1993				

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 5: Water Consumption				
Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	No. of Units	Gals. of Water	Variable	Gals./Day
Single-Family Residential	0	250.00	Gals./Day/Unit	0.0
Medium Density Residential	0	200.00	Gals./Day/Unit	0.0
Multiple-Family Residential	0	200.00	Gals./Day/Unit	0.0
Mobile Home	0	200.00	Gals./Day/Unit	0.0
Office Uses	Sq. Ft.	Gals. of Water	Variable	Gals./Day
Office	70,000	0.14	Gals./Day/Sq. Ft.	9,940.0
Medical Office Building	0	0.14	Gals./Day/Sq. Ft.	0.0
Office Park	0	0.14	Gals./Day/Sq. Ft.	0.0
Bank/Financial Services	0	0.14	Gals./Day/Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Room	Gals. of Water	Variable	Gals./Day
Specialty Retail Commercial	0	0.10	Gals./Day/Sq. Ft.	0.0
Convenience Store	0	0.10	Gals./Day/Sq. Ft.	0.0
Movie Theater	0	0.10	Gals./Day/Sq. Ft.	0.0
Shopping Center	0	0.10	Gals./Day/Sq. Ft.	0.0
Sit-Down Restaurant	5,000	0.40	Gals./Day/Sq. Ft.	2,000.0
Fast-Food Restaurant	12,400	0.11	Gals./Day/Sq. Ft.	1,314.4
Hotel	0	130.00	Gals./Day/Room.	0.0
Manufacturing Uses	Sq. Ft.	Gals. of Water	Variable	Gals./Day
Industrial Park	0	0.14	Gals./Day/Sq. Ft.	0.0
Manufacturing	0	0.14	Gals./Day/Sq. Ft.	0.0
General Light Industry	0	0.14	Gals./Day/Sq. Ft.	0.0
Warehouse	55,000	0.01	Gals./Day/Sq. Ft.	550.0
Public/Institutional Use	Sq. Ft.	Gals. of Water	Variable	Gals./Day
Public/Institutional	0	0.10	Gals./Day/Sq. Ft.	0.0
Open Space	0	0.10	Gals./Day/Sq. Ft.	0.0
Total Daily Water Consumption (gallons/day)				13,804.4
Sources:				
Source: Derived from Orange County Sanitation District rates (150% of effluent generation).				

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 6: Sewage Generation				
Project Component	Units of Measure	Generation Factor		Projected Consumption
Residential Uses	No. of Units	Gals. of Effluent	Variable	Gals./Day
Single-Family Residential	0	230.00	Gals./Day/Unit	0.0
Medium Density Residential	0	200.00	Gals./Day/Unit	0.0
Multiple-Family Residential	0	120.00	Gals./Day/Unit	0.0
Mobile Home	0	180.00	Gals./Day/Unit	0.0
Office Uses	Sq. Ft.	Gals. of Effluent	Variable	Gals./Day
Office	70,000	0.11	Gals./Day/Sq. Ft.	7,952.0
Medical Office Building	0	0.11	Gals./Day/Sq. Ft.	0.0
Office Park	0	0.11	Gals./Day/Sq. Ft.	0.0
Bank/Financial Services	0	0.11	Gals./Day/Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Rooms	Gals. of Effluent	Variable	Gals./Day
Specialty Retail Commercial	0	0.08	Gals./Day/Sq. Ft.	0.0
Convenience Store	0	0.08	Gals./Day/Sq. Ft.	0.0
Movie Theater	0	0.08	Gals./Day/Sq. Ft.	0.0
Shopping Center	0	0.08	Gals./Day/Sq. Ft.	0.0
Sit-Down Restaurant	5,000	0.30	Gals./Day/Sq. Ft.	1,500.0
Fast-Food Restaurant	12,400	0.08	Gals./Day/Sq. Ft.	1,051.5
Hotel	0	105	Gals./Day/Room.	0.0
Manufacturing Uses	Sq. Ft.	Gals. of Effluent	Variable	Gals./Day
Industrial Park	0	0.11	Gals./Day/Sq. Ft.	0.0
Manufacturing	0	0.11	Gals./Day/Sq. Ft.	0.0
General Light Industry	0	0.11	Gals./Day/Sq. Ft.	0.0
Warehouse	55,000	0.01	Gals./Day/Sq. Ft.	440.0
Public/Institutional Use	Sq. Ft.	Gals. of Effluent	Variable	Gals./Day
Public/Institutional	0	0.08	Gals./Day/Sq. Ft.	0.0
Open Space	0	0.08	Gals./Day/Sq. Ft.	0.0
Total Daily Sewage Generation (gallons/day)				10,943.5
Source: Orange County Sanitation Districts.				

APPENDICES • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT • COMMERCE, CALIFORNIA

Table 7: Solid Waste Generation				
Project Component	Units of Measure	Generation Factor		Projected Generation
Residential Uses	No. of Units	Lbs. of Waste	Variable	Lbs./Day
Single-Family Residential	0	4.00	Lbs./Day/Unit	0.0
Medium Density Residential	0	4.00	Lbs./Day/Unit	0.0
Multiple-Family Residential	0	4.00	Lbs./Day/Unit	0.0
Mobile Home	0	4.00	Lbs./Day/Unit	0.0
Office Uses	Sq. Ft.	Lbs. of Waste	Variable	Lbs./Day
Office	70,000	6.00	Lbs./Day/1,000 Sq. Ft.	420.0
Medical Office Building	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Office Park	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Bank/Financial Services	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Rooms	Lbs. of Waste	Variable	Lbs./Day
Specialty Retail Commercial	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Convenience Store	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Movie Theater	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Shopping Center	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Sit-Down Restaurant	5,000	42.00	Lbs./Day/1,000 Sq. Ft.	210.0
Fast-Food Restaurant	12,400	42.00	Lbs./Day/1,000 Sq. Ft.	520.8
Hotel	0	42.00	Lbs./Day/Room	0.0
Manufacturing Uses	Sq. Ft.	Lbs. of Waste	Variable	Lbs./Day
Industrial Park	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Manufacturing	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
General Light Industry	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Warehouse	55,000	6.00	Lbs./Day/1,000 Sq. Ft.	330.0
Public/Institutional Use	Sq. Ft.	Lbs. of Waste	Variable	Lbs./Day
Public/Institutional	0	4.00	Lbs./Day/1,000 Sq. Ft.	0.0
Open Space	0	3.00	Lbs./Day/1,000 Sq. Ft.	0.0
Total Daily Solid Waste Generation				1,480.8
Source: City of Los Angeles Average Solid Waste Generation Rates, April 1981				