
APPENDIX A
Air Quality Data

**2013 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

2013

Source/Receptor Area No. Location	Station No.	Carbon Monoxide ^{a)}		Ozone								Nitrogen Dioxide ^{b)}				Sulfur Dioxide ^{c)}			
		No. Days of Data	Max Conc. in ppm 8-hour	No. Days of Data	Max. Conc. in ppm 1-hour	Max. Conc. in ppm 8-hour	Fourth High Conc. ppm 8-hour	Health Advisory ≥ 0.15 ppm 1-hour	No. Days Standard Exceeded				No. Days of Data	Max Conc. in ppb 1-hour	98 th Percentile Conc. ppb 1-hour	Annual Average AAM Conc. ppb	No. Days of Data	Max. Conc. in ppb 1-hour	99 th Percentile Conc. ppb 1-hour
									Old Federal > 0.124 ppm 1-hour	Current Federal > 0.075 ppm 8-hour	Current State > 0.09 ppm 1-hour	Current State > 0.070 ppm 8-hour							
LOS ANGELES COUNTY																			
1 Central LA	087	330	2.0	365	0.081	0.069	0.060	0	0	0	0	0	301	90.3	62.6	21.8	312	6.3	5.2
2 Northwest Coastal LA County	091	340	1.3	359	0.088	0.075	0.059	0	0	0	1	291	51.2	48.8	14.5	--	--	--	
3 Southwest Coastal LA County	820	281*	2.5	352	0.105	0.081	0.060	0	0	1	1	334	77.8	58.0	11.8	322	10.1	6.5	
4 South Coastal LA County 1	072	249*	2.0	267*	0.092	0.070	0.060	0	0	0	0	234*	66.9	55.7	14.0	178*	21.8	10.1	
4 South Coastal LA County 2	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4 South Coastal LA County 3	033	323	2.6	362	0.090	0.069	0.057	0	0	0	0	325	81.3	71.3	21.5	349	15.1	11.6	
6 West San Fernando Valley	074	323	2.3	320	0.124	0.092	0.084	0	0	11	7	258*	58.2	51.7	14.4	--	--	--	
7 East San Fernando Valley	069	335	2.4	362	0.110	0.083	0.079	0	0	6	4	284	72.5	60.0	20.2	342	10.8	4.2	
8 West San Gabriel Valley	088	201*	1.7	211*	0.099	0.075	0.070	0	0	0	2	200*	66.7	60.3	19.1	--	--	--	
9 East San Gabriel Valley 1	060	343	1.7	361	0.115	0.085	0.080	0	0	6	7	352	76.9	56.7	17.7	--	--	--	
9 East San Gabriel Valley 2	591	347	0.8	340	0.135	0.100	0.088	0	1	24	24	349	55.7	50.4	13.0	--	--	--	
10 Pomona/Walnut Valley	075	340	1.6	355	0.125	0.099	0.085	0	1	15	12	343	78.8	64.8	22.5	--	--	--	
11 South San Gabriel Valley	085	347	2.0	363	0.101	0.072	0.070	0	0	0	2	337	79.4	60.6	20.6	--	--	--	
12 South Central LA County	112	338	3.5	358	0.090	0.080	0.063	0	0	1	0	340	69.8	61.8	17.6	--	--	--	
13 Santa Clarita Valley	090	352	0.8	365	0.134	0.104	0.094	0	2	40	30	362	65.4	45.0	14.4	--	--	--	
ORANGE COUNTY																			
16 North Orange County	3177	355	2.2	363	0.104	0.078	0.066	0	0	1	2	269*	85.0	53.3	14.8	--	--	--	
17 Central Orange County	3176	333	2.6	340	0.084	0.070	0.063	0	0	0	0	301	81.6	58.8	18.0	--	--	--	
18 North Coastal Orange County	3195	313	2.0	385	0.095	0.083	0.065	0	0	1	1	330	75.7	53.2	11.6	296	4.2	3.3	
19 Saddleback Valley	3812	356	1.3	365	0.104	0.082	0.074	0	0	2	2	--	--	--	--	--	--	--	
RIVERSIDE COUNTY																			
22 Norco/Corona	4155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
23 Metropolitan Riverside County 1	4144	334	2.0	357	0.123	0.103	0.094	0	0	26	13	318	59.6	54.8	17.3	354	8.1	4.6	
23 Metropolitan Riverside County 2	4146	318	1.6	--	--	--	--	--	--	--	--	257*	57.6	50.7	15.8	--	--	--	
23 Mira Loma	4165	339	1.9	365	0.118	0.096	0.092	0	0	21	11	333	53.8	50.7	13.7	--	--	--	
24 Perris Valley	4149	--	--	344	0.108	0.090	0.088	0	0	34	17	60	--	--	--	--	--	--	
25 Lake Elsinore	4158	336	0.6	362	0.102	0.089	0.081	0	0	12	6	294	46.6	40.0	8.4	--	--	--	
26 Temecula	4031	--	--	324	0.093	0.078	0.075	0	0	3	0	12	--	--	--	--	--	--	
29 Banning Airport	4164	--	--	254*	0.115	0.103	0.091	0	0	41	24	66	308	51.9	45.0	8.5	--	--	--
30 Coachella Valley 1**	4137	354	1.5	365	0.113	0.104	0.090	0	0	46	10	82	359	52.3	38.5	7.5	--	--	--
30 Coachella Valley 2**	4157	--	--	365	0.105	0.087	0.085	0	0	18	2	38	--	--	--	--	--	--	
SAN BERNARDINO COUNTY																			
32 Northwest San Bernardino Valley	5175	340	1.7	365	0.143	0.111	0.095	0	3	27	25	44	276*	62.1	53.3	17.7	--	--	--
33 Southwest San Bernardino Valley	5817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34 Central San Bernardino Valley 1	5197	337	1.3	363	0.151	0.122	0.100	1	2	42	34	68	335	81.7	60.6	20.6	298	3.8	3.1
34 Central San Bernardino Valley 2	5203	340	1.7	361	0.139	0.112	0.097	0	2	36	22	53	291	72.2	54.5	17.6	--	--	--
35 East San Bernardino Valley	5204	--	--	356	0.133	0.119	0.104	0	3	63	43	93	--	--	--	--	--	--	
37 Central San Bernardino Mountains	5181	--	--	365	0.120	0.105	0.099	0	0	72	45	101	--	--	--	--	--	--	
38 East San Bernardino Mountains	5818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
DISTRICT MAXIMUM			3.5		0.151	0.122	0.104	1	3	72	45	101		90.3	71.3	22.5		21.8	11.6
SOUTH COAST AIR BASIN			3.5		0.151	0.122	0.104	1	5	88	70	119		90.3	71.3	22.5		21.8	11.6

* Incomplete data.

** Salton Sea Air Basin

-- Pollutant not monitored

ppm - Parts Per Million parts of air, by volume

ppb - Parts Per Billion parts of air, by volume

AAM = Annual Arithmetic Mean

a) - The federal 8-hour standard (8-hour average CO > 9 ppm) and state 8-hour standard (8-hour average CO > 9.0 ppm) were not exceeded.

The federal and state 1-hour standards (35 ppm and 20 ppm) were not exceeded either.

b) - The NO₂ federal 1-hour standard is 100 ppb and the annual standard is annual arithmetic mean NO₂ > 0.0534 ppm (53.4 ppb). The state 1-hour and annual standards are 0.18 ppm (180 ppb) and 0.030 ppm (30 ppb).

c) - The federal SO₂ 1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average SO₂ > 0.25 ppm (250 ppb) and 24-hour average SO₂ > 0.04 ppm (40 ppb).



**South Coast
Air Quality Management District**
21865 Copley Drive
Diamond Bar, CA 91765-4182
www.aqmd.gov

For information on the current standard levels and most recent revisions please refer to "Appendix II - Current Air Quality" of the "Final 2012 AQMP" which can be accessed at [http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-\(february-2013\)/appendix-ii-final-2012.pdf](http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-(february-2013)/appendix-ii-final-2012.pdf). Maps showing the source/receptor area boundaries can be accessed via the Internet by entering your address in the AQMD Current Hourly Air Quality Map, accessed from <http://www2.aqmd.gov/webappl/aisaqi2/VEMap3D.aspx>. A map or copy of the AQMP Appendix II is also available free of charge from the AQMD Public Information Center at 1-800-CUT-SMOG.

**2013 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

2013

Source/Receptor Area No. Location		Station No.	Suspended Particulates PM10 ^{d)}				Fine Particulates PM2.5 ^{f)}					Lead ^{h)}		PM10 Sulfate ⁱ⁾		
			No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. (AAM) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	98 th Percentile Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Std > 35 µg/m ³ 24-hour	Annual Average Conc. (AAM) µg/m ³	Max. Monthly Average Conc. µg/m ³	Max. 3-Months Rolling Averages µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
LOS ANGELES COUNTY																
1	Central LA	087	60	57	0	1(2%)	29.5	344	43.1	29.0	1(0.3%)	11.95	0.013	0.011	60	5.8
2	Northwest Coastal LA County	091	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Southwest Coastal LA County	820	56	38	0	0	20.8	--	--	--	--	--	0.005	0.004	56	5.6
4	South Coastal LA County 1	072	43*	37	0	0	23.2	331	47.2	26.1	2(0.6%)	11.34	0.006	0.006	43*	4.5
4	South Coastal LA County 2	077	56	54	0	1(2%)	27.3	341	42.9	24.6	1(0.3%)	10.97	0.012	0.009	56	4.8
4	South Coastal LA County 3	033	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	West San Fernando Valley	074	--	--	--	--	--	118	41.8	23.0	1(0.8%)	9.71	--	--	--	--
7	East San Fernando Valley	069	58	52	0	1(2%)	28.5	346	45.1	30.4	4(1.2%)	12.15	--	--	58	5.4
8	West San Gabriel Valley	088	--	--	--	--	--	64*	25.7	20.5	0(0%)	10.13	--	--	--	--
9	East San Gabriel Valley 1	060	61	76	0	6(10%)	33.0	120	29.6	26.4	0(0%)	10.54	--	--	61	4.8
9	East San Gabriel Valley 2	591	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Pomona/Walnut Valley	075	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11	South San Gabriel Valley	085	--	--	--	--	--	114	29.1	28.8	0(0%)	11.56	0.012	0.011	--	--
12	South Central LA County	112	--	--	--	--	--	113	52.1	24.3	1(0.9%)	11.95	0.014	0.011	--	--
13	Santa Clarita Valley	090	60	43	0	0	21.6	--	--	--	--	--	--	--	60	3.7
ORANGE COUNTY																
16	North Orange County	3177	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Central Orange County	3176	59	77	0	1(2%)	25.4	331	37.8	22.7	1(0.3%)	10.09	--	--	59	4.7
18	North Coastal Orange County	3195	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Saddleback Valley	3812	61	51	0	1(2%)	19.3	117	28.0	17.5	0(0%)	8.08	--	--	61	4.4
RIVERSIDE COUNTY																
22	Norco/Corona	4155	57	58	0	2(4%)	28.3	--	--	--	--	--	--	--	57	4.2
23	Metropolitan Riverside County 1	4144	119	135	0	10(8%)	33.8	353	60.3	34.6	6(1.7%)	12.50	0.010	0.009	119	4.2
23	Metropolitan Riverside County 2	4146	--	--	--	--	--	117	53.7	29.2	1(0.9%)	11.28	0.007	0.006	--	--
23	Mira Loma	4165	59	147	0	14(24%)	41.1	355	56.5	37.5	9(2.5%)	14.12	--	--	59	4.2
24	Perris Valley	4149	57	70	0	10(18%)	33.6	--	--	--	--	--	--	--	57	3.4
25	Lake Elsinore	4158	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Temecula	4031	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Banning Airport	4164	61	64	0	1(2%)	20.6	--	--	--	--	--	--	--	61	2.9
30	Coachella Valley 1**	4137	60	129	0	3(5%)	22.6	117	18.5	13.8	0(0%)	6.52	--	--	60	3.5
30	Coachella Valley 2**	4157	120	129+	0+	23(19%)	38.1	118	25.8	15.9	0(0%)	8.35	--	--	120	3.9
SAN BERNARDINO COUNTY																
32	Northwest San Bernardino Valley	5175	--	--	--	--	--	--	--	--	--	--	0.008	0.006	--	--
33	Southwest San Bernardino Valley	5817	60	115	0	3(5%)	33.2	110	49.3	26.8	1(0.9%)	11.98	--	--	60	4.8
34	Central San Bernardino Valley 1	5197	61	90	0	19(31%)	40.6	121	43.6	33.1	1(0.8%)	12.26	--	--	61	4.1
34	Central San Bernardino Valley 2	5203	60	102	0	3(5%)	31.3	110	55.3	33.4	1(0.9%)	11.41	0.010	0.010	60	4.6
35	East San Bernardino Valley	5204	61	72	0	2(3%)	27.1	--	--	--	--	--	--	--	61	3.6
37	Central San Bernardino Mountains	5181	60	37	0	0	21.4	--	--	--	--	--	--	--	60	3.6
38	East San Bernardino Mountains	5818	--	--	--	--	--	59	35.5	35.1	1(1.7%)	9.67	--	--	--	--
DISTRICT MAXIMUM				147+	0+	23	41.1		60.3	37.5	9	14.12	0.013++	0.011++		5.8
SOUTH COAST AIR BASIN				147	0	33	41.1		60.4	37.5	13	14.12	0.013++	0.011++		5.8

* Incomplete data. ** Salton Sea Air Basin µg/m³ - Micrograms per cubic meter of air AAM = Annual Arithmetic Mean -- Pollutant not monitored
d) - Federal Reference Method (FRM) PM10 samples were collected every 6 days at all sites except for Stations 4144 and 4157, where samples were collected every 3 days. PM10 statistics listed above are for the FRM data only. Federal Equivalent Method (FEM) PM10 continuous monitoring instruments were operated at some of the above locations. Max 24-hour average PM10 at sites with FEM monitoring was 153 µg/m³, at Indio (155 µg/m³ is needed to exceed the PM10 standard).
e) - State standard is annual average (AAM) > 20 µg/m³. Federal annual PM10 standard (AAM > 50 µg/m³) was revoked in 2006.
f) - PM2.5 samples were collected every 3 days at all sites except for station numbers 069, 072, 077, 087, 3176, 4144 and 4165, where samples were taken daily, and station number 5818 where samples were taken every 6 days. PM2.5 statistics listed above are for the FRM data only. FEM PM2.5 continuous monitoring instruments were operated at some of the above locations for special purposes with the max 24-hour average concentration recorded of 83.2 µg/m³, (at Mira Loma).
g) - U.S. EPA has revised the federal annual PM2.5 standard from annual average (AAM) > 15.0 µg/m³ to AAM > 12.0 µg/m³, effective December 14, 2012. State standard is annual average (AAM) > 12.0 µg/m³.
+) - High PM10 data sample (159 µg/m³ on August 23 at Indio) excluded due to the high wind in accordance with the EPA Exceptional Event Regulation. Also, multiple high PM10 FEM data recorded in Coachella Valley and the Basin were excluded.
h) - Federal lead standard is 3-months rolling average > 0.15 µg/m³; state standard is monthly average ≥ 1.5 µg/m³. Lead statistics listed above are for population-oriented sites only. Lead standards were not exceeded.
++) - Higher lead concentrations were recorded at source-oriented monitoring sites immediately downwind of stationary lead sources. Maximum monthly and 3-month rolling averages recorded were 0.14 µg/m³ and 0.10 µg/m³, respectively.
i) - State sulfate standard is 24-hour ≥ 25 µg/m³. There is no federal standard for sulfate.



**2014 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

2014

Source/Receptor Area No. Location	Station No.	Carbon Monoxide a)			Ozone b)										Nitrogen Dioxide c)				Sulfur Dioxide d)			
		No. Days of Data	Max Conc. in ppm 1-hour	Max Conc. in ppm 8-hour	No. Days of Data	Max. Conc. in ppm 1-hour	Max. Conc. in ppm 8-hour	Fourth High Conc. ppm 8-hour	No. Days Standard Exceeded						No. Days of Data	Max Conc. in ppb 1-hour	98 th Percentile Conc. ppb 1-hour	Annual Average AAM Conc. ppb	No. Days of Data	Max. Conc. in ppb 1-hour	99 th Percentile Conc. ppb 1-hour	
									Old Federal > 0.124 ppm 1-hour	Current Federal > 0.070 ppm 8-hour	2008 Federal > 0.075 ppm 8-hour	1997 Federal > 0.084 ppm 8-hour	Current State > 0.09 ppm 1-hour	Current State > 0.070 ppm 8-hour								
LOS ANGELES COUNTY																						
1	Central LA	087	365	3	2.0	365	0.113	0.094	0.072	0	6	2	1	3	7	365	82.1	67.4	22.2	364	5.4	4.4
2	Northwest Coastal LA County	091	365	2	1.3	365	0.116	0.094	0.077	0	5	4	2	1	6	337	63.9	53.9	13.3	--	--	--
3	Southwest Coastal LA County	820	365	3	1.9	365	0.114	0.080	0.075	0	6	3	0	1	6	365	87.3	66.4	11.9	365	15.3	9.1
4	South Coastal LA County 1	072	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	South Coastal LA County 2	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	South Coastal LA County 3	033	345	4	2.6	351	0.087	0.072	0.061	0	1	0	0	0	1	340	135.9	84.8	20.7	288*	14.7*	10.1*
6	West San Fernando Valley	074	365	4	3.0	365	0.116	0.092	0.083	0	27	11	2	6	31	327	58.9	52.4	11.7	--	--	--
7	East San Fernando Valley	069	158*	3*	3.0*	161*	0.091*	0.079*	0.069*	0*	2*	1*	0*	0*	2*	150*	73.2*	65.2*	21.8*	154*	4.5*	3.9*
8	West San Gabriel Valley	088	348	3	1.8	333	0.124	0.096	0.086	0	13	7	4	6	13	347	75.2	60.1	16.6	--	--	--
9	East San Gabriel Valley 1	060	365	2	1.9	365	0.123	0.092	0.081	0	18	11	3	11	20	361	70.2	60.6	17.8	--	--	--
9	East San Gabriel Valley 2	591	365	1	0.7	364	0.133	0.101	0.096	5	58	38	14	41	60	352	65.7	51.1	13.1	--	--	--
10	Pomona/Walnut Valley	075	365	2	1.6	358	0.123	0.099	0.090	0	53	33	9	22	56	365	88.9	63.8	22.1	--	--	--
11	South San Gabriel Valley	085	364	4	2.5	361	0.121	0.092	0.079	0	7	5	1	7	7	365	86.7	61.9	19.5	--	--	--
12	South Central LA County	112	356	6	3.8	355	0.094	0.081	0.073	0	4	2	0	0	4	350	68.2	59.2	15.6	--	--	--
13	Santa Clarita Valley	090	361	3	1.2	360	0.137	0.110	0.097	2	64	45	16	32	65	360	57.7	46.1	12.7	--	--	--
ORANGE COUNTY																						
16	North Orange County	3177	363	4	2.1	362	0.119	0.088	0.075	0	6	2	2	5	6	361	83.6	56.6	15.2	--	--	--
17	Central Orange County	3176	365	3	2.1	338	0.111	0.081	0.076	0	6	4	0	2	6	338	75.8	59.8	15.2	--	--	--
18	North Coastal Orange County	3195	365	3	1.9	364	0.096	0.079	0.076	0	6	4	0	1	6	365	60.6	53.7	10.8	357	8.8	3.7
19	Saddleback Valley	3812	365	1	0.7	365	0.115	0.088	0.078	0	10	5	2	4	10	--	--	--	--	--	--	--
RIVERSIDE COUNTY																						
22	Corona/Norco Area	4155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Metropolitan Riverside County 1	4144	365	2	1.9	365	0.141	0.104	0.091	1	66	41	12	29	69	362	59.9	53.2	15.1	365	5.6	3.5
23	Metropolitan Riverside County 2	4146	363	2	1.4	--	--	--	--	--	--	--	--	--	--	361	56.3	50.2	15.8	--	--	--
23	Metropolitan Riverside County 3	4165	364	2	2.4	364	0.138	0.102	0.087	1	52	29	6	17	55	364	57.7	49.2	13.7	--	--	--
24	Perris Valley	4149	--	--	--	341	0.117	0.094	0.089	0	59	38	7	16	63	--	--	--	--	--	--	--
25	Elsinore Valley	4158	355	2	1.4	354	0.104	0.086	0.079	0	13	6	1	4	13	334	45.3	39.6	8.2	--	--	--
26	Temecula Valley	4031	--	--	--	345	0.119	0.100	0.077	0	10	4	1	1	14	--	--	--	--	--	--	--
29	San Geronio Pass	4164	--	--	--	362	0.114	0.097	0.094	0	58	38	11	22	58	351	52.3	45.5	8.5	--	--	--
30	Coachella Valley 1**	4137	365	2	0.9	365	0.108	0.093	0.089	0	55	35	7	9	61	341	46.3	41.2	7.1	--	--	--
30	Coachella Valley 2**	4157	--	--	--	365	0.095	0.091	0.084	0	24	10	2	2	30	--	--	--	--	--	--	--
SAN BERNARDINO COUNTY																						
32	Northwest San Bernardino Valley	5175	361	3	1.2	361	0.126	0.101	0.093	1	57	42	15	34	60	357	74.1	56.7	16.6	--	--	--
33	Southwest San Bernardino Valley	5817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Central San Bernardino Valley 1	5197	331	3	1.2	330	0.127	0.105	0.093	1	52	37	14	31	52	330	70.4	63.6	20.2	330	4.0	2.8
34	Central San Bernardino Valley 2	5203	360	4	2.4	365	0.121	0.099	0.095	0	75	51	21	38	76	365	72.6	56.1	18.0	--	--	--
35	East San Bernardino Valley	5204	--	--	--	365	0.128	0.104	0.099	2	79	55	27	47	83	--	--	--	--	--	--	--
37	Central San Bernardino Mountains	5181	--	--	--	365	0.130	0.106	0.102	1	93	68	41	50	97	--	--	--	--	--	--	--
38	East San Bernardino Mountains	5818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DISTRICT MAXIMUM			6	3.8		0.141	0.110	0.102	5	93	68	41	50	97		135.9	84.8	22.2		15.3	10.1	
SOUTH COAST AIR BASIN				3.8		0.141	0.110	0.102	10	123	92	54	74	129		135.9	84.8	22.2		15.3	10.1	

* Incomplete data.

** Salton Sea Air Basin

-- Pollutant not monitored

ppm – Parts Per Million parts of air, by volume ppb – Parts Per Billion parts of air, by volume AAM – Annual Arithmetic Mean

a) The federal 8-hour standard (8-hour average CO > 9 ppm) and state 8-hour standard (8-hour average CO > 9.0 ppm) were not exceeded.

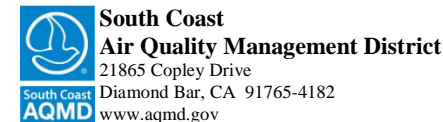
The federal and state 1-hour CO standards (35 ppm and 20 ppm) were not exceeded.

b) The current (2015) O₃ federal standard was revised effective December 28, 2015.

c) The NO₂ federal 1-hour standard is 100 ppb and the annual standard is annual arithmetic mean NO₂ > 0.0534 ppm (53.4 ppb). The state 1-hour and annual standards are 0.18 ppm (180 ppb) and 0.030 ppm (30 ppb).

d) The federal SO₂ 1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average SO₂ > 0.25 ppm (250 ppb) and 24-hour average SO₂ > 0.04 ppm (40 ppb).

For information on the current standard levels and most recent revisions please refer to "Appendix II – Current Air Quality" of the "Final 2012 AQMP" which can be accessed at [http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-\(february-2013\)/appendix-ii-final-2012.pdf](http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-(february-2013)/appendix-ii-final-2012.pdf). Maps showing the source/receptor area boundaries can be accessed via the Internet by entering your address in the AQMD Current Hourly Air Quality Map, at <http://www2.aqmd.gov/webapp1/gis/2/VEMap3D.aspx>. A printed map or copy of the AQMP Appendix II is also available free of charge from the AQMD Public Information Center at 1-800-CUT-SMOG.



**2014 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

2014

Source/Receptor Area No. Location	Station No.	Suspended Particulates PM10 ^{e)}				Fine Particulates PM2.5 ^{g)}					Lead ⁱ⁾		PM10 Sulfate ^{j)}		
		No. Days of Data	Max. Conc. in $\mu\text{g}/\text{m}^3$ 24-hour	No. (%) Samples Exceeding Standards Federal > 150 $\mu\text{g}/\text{m}^3$ 24-hour	State > 50 $\mu\text{g}/\text{m}^3$ 24-hour	Annual Average Conc. ^{f)} ($\mu\text{g}/\text{m}^3$)	No. Days of Data	Max. Conc. in $\mu\text{g}/\text{m}^3$ 24-hour	98 th Percentile Conc. in $\mu\text{g}/\text{m}^3$ 24-hour	No (%) Samples Exceeding Federal Std > 35 $\mu\text{g}/\text{m}^3$ 24-hour	Annual Average Conc. ^{g)} ($\mu\text{g}/\text{m}^3$)	Max. Monthly Average Conc. $\mu\text{g}/\text{m}^3$	Max. 3-Months Rolling Averages $\mu\text{g}/\text{m}^3$	No. Days of Data	Max. Conc. in $\mu\text{g}/\text{m}^3$ 24-hour
LOS ANGELES COUNTY															
1 Central LA	087	359	87	0	32(9%)	35.4	341	59.9	34.5	6(1.8%)	12.36	0.013	0.01	57	11.0
2 Northwest Coastal LA County	091	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3 Southwest Coastal LA County	820	60	46	0	0	22.0	--	--	--	--	--	0.008	0.01	60	5.1
4 South Coastal LA County 1	072	--	--	--	--	--	346	51.5	31.3	2(0.6%)	11.42	--	--	--	--
4 South Coastal LA County 2	077	59	59	0	2(3%)	26.6	329	52.2	27.2	2(0.6%)	10.72	0.012	0.01	59	4.5
4 South Coastal LA County 3	033	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6 West San Fernando Valley	074	--	--	--	--	--	109	27.2	20.9	0	9.72	--	--	--	--
7 East San Fernando Valley	069	164*	68*	0*	2(1%)*	31.2*	178*	64.6*	29.0*	2(1.1%)*	12.08*	--	--	29*	4.0*
8 West San Gabriel Valley	088	--	--	--	--	--	113	38.8	26.3	1(0.9%)	11.29	--	--	--	--
9 East San Gabriel Valley 1	060	60	96	0	22(37%)	44.1	118	32.4	29.9	0	11.63	--	--	59	14.3
9 East San Gabriel Valley 2	591	360	78	0	30(8%)	32.9	--	--	--	--	--	--	--	--	--
10 Pomona/Walnut Valley	075	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11 South San Gabriel Valley	085	--	--	--	--	--	116	35.1	30.1	0	12.08	0.017	0.01	--	--
12 South Central LA County	112	--	--	--	--	--	113	35.8	30.9	1(0.9%)	12.64	0.013	0.01	--	--
13 Santa Clarita Valley	090	59	47	0	0	23.2	--	--	--	--	--	--	--	58	4.3
ORANGE COUNTY															
16 North Orange County	3177	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17 Central Orange County	3176	364	122	0	12(3%)	26.3	344	56.2	34.4	6(1.7%)	10.53	--	--	61	9.4
18 North Coastal Orange County	3195	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19 Saddleback Valley	3812	60	41	0	0	20.2	115	25.5	21.6	0	8.02	--	--	60	4.0
RIVERSIDE COUNTY															
22 Corona/Corona Area	4155	59	65	0	3(5%)	30.9	--	--	--	--	--	--	--	59	3.8
23 Metropolitan Riverside County 1	4144	361	100	0	101(28%)	42.0	346	48.9	34.3	5(1.4%)	12.48	0.011	0.01	117	4.1
23 Metropolitan Riverside County 2	4146	365	91	0	27(7%)	33.6	110	30.9	26.0	0	10.94	0.010	0.01	--	--
23 Metropolitan Riverside County 3	4165	359	145	0	207(58%)	54.9	351	73.6	40.0	9(2.6%)	14.48	--	--	61	4.2
24 Perris Valley	4149	60	87	0	8(13%)	35.1	--	--	--	--	--	--	--	60	3.5
25 Elsinore Valley	4158	355	86	0	10(3%)	25.0	--	--	--	--	--	--	--	--	--
26 Temecula Valley	4031	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29 San Geronio Pass	4164	58	45	0	0	20.7	--	--	--	--	--	--	--	58	2.7
30 Coachella Valley 1**	4137	356	113	0	10(3%)	22.6	113	15.5	14.5	0	6.42	--	--	54	2.6
30 Coachella Valley 2**	4157	359+	152+	0+	64(18%)+	40.2+	112	26.5	16.8	0	8.32	--	--	121	3.2
SAN BERNARDINO COUNTY															
32 Northwest San Bernardino Valley	5175	356	80	0	9(3%)	28.9	--	--	--	--	--	0.009	0.01	--	--
33 Southwest San Bernardino Valley	5817	30*	67*	0*	4(13%)*	33.2*	58*	38.4*	34.6*	1(1.7%)*	12.96*	--	--	30*	3.9*
34 Central San Bernardino Valley 1	5197	58	68	0	13(22%)	39.7	109	78.9	34.5	1(0.9%)	13.18	--	--	58	5.0
34 Central San Bernardino Valley 2	5203	362	140	0	18(5%)	34.2	110	73.9	28.1	1(0.9%)	11.67	0.012	0.01	60	4.6
35 East San Bernardino Valley	5204	60	62	0	2(3%)	25.9	--	--	--	--	--	--	--	59	3.4
37 Central San Bernardino Mountains	5181	61	47	0	0	18.5	--	--	--	--	--	--	--	60	2.9
38 East San Bernardino Mountains	5818	--	--	--	--	--	56	24.2	19.1	0	7.03	--	--	--	--
DISTRICT MAXIMUM			152+	0+	207+	54.9		78.9	40.0	9	14.48	0.017++	0.01++		14.3
SOUTH COAST AIR BASIN			145	0	233	54.9		78.9	40.0	15	14.48	0.017++	0.01++		14.3

* Incomplete data. ** Salton Sea Air Basin $\mu\text{g}/\text{m}^3$ – Micrograms per cubic meter of air AAM – Annual Arithmetic Mean -- Pollutant not monitored
e) Federal Reference Method (FRM) PM10 samples were collected every 6 days at all sites except for Stations 4144 and 4157, where samples were collected every 3 days. Federal Equivalent Method (FEM) PM10 continuous monitoring instruments were operated at some of the above locations. PM10 statistics listed above are based on FRM-FEM combined data.
f) State standard is annual average (AAM) > 20 $\mu\text{g}/\text{m}^3$. Federal annual PM10 standard (AAM > 50 $\mu\text{g}/\text{m}^3$) was revoked in 2006.
+ High FRM and FEM PM10 data sample were excluded due to high winds in accordance with the U.S. EPA Exceptional Event Rule.
g) PM2.5 samples were collected every 3 days at all sites except for station numbers 072, 077, 087, 3176, 4144 and 4165, where samples were taken daily, and station number 5818 where samples were taken every 6 days. PM2.5 statistics listed above are for the FRM data only. FEM PM2.5 continuous monitoring instruments were operated at some of the above locations for real-time alerts and forecasts.
h) Both Federal and State standards are annual average (AAM) > 12.0 $\mu\text{g}/\text{m}^3$.
i) Federal lead standard is 3-months rolling average > 0.15 $\mu\text{g}/\text{m}^3$; state standard is monthly average \geq 1.5 $\mu\text{g}/\text{m}^3$. Lead standards were not exceeded.
j) State sulfate standard is 24-hour \geq 25 $\mu\text{g}/\text{m}^3$. There is no federal standard for sulfate.
++ Higher lead concentrations were recorded at source-oriented monitoring sites immediately downwind of stationary lead sources. Maximum monthly and 3-month rolling averages recorded were 0.10 $\mu\text{g}/\text{m}^3$ and 0.07 $\mu\text{g}/\text{m}^3$, respectively.



**2015 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

2015

Source/Receptor Area No. Location	Station No.	Carbon Monoxide a)			Ozone b)										Nitrogen Dioxide c)				Sulfur Dioxide d)			
		No. Days of Data	Max Conc. in ppm 1-hour	Max Conc. in ppm 8-hour	No. Days of Data	Max. Conc. in ppm 1-hour	Max. Conc. in ppm 8-hour	Fourth High Conc. ppm 8-hour	No. Days Standard Exceeded						No. Days of Data	Max Conc. in ppb 1-hour	98 th Percentile Conc. ppb 1-hour	Annual Average AAM Conc. ppb	No. Days of Data	Max. Conc. in ppb 1-hour	99 th Percentile Conc. ppb 1-hour	
									Old Federal > 0.124 ppm 1-hour	Current Federal > 0.070 ppm 8-hour	2008 Federal > 0.075 ppm 8-hour	1997 Federal > 0.084 ppm 8-hour	Current State > 0.09 ppm 1-hour	Current State > 0.070 ppm 8-hour								
LOS ANGELES COUNTY																						
1	Central LA	087	365	3.2	1.8	365	0.104	0.074	0.072	0	6	0	0	2	6	365	79.1	62.4	22.2	364	12.6	6.3
2	Northwest Coastal LA County	091	365	1.6	1.4	353	0.102	0.072	0.069	0	2	0	0	2	3	365	67.6	49.4	11.7	--	--	--
3	Southwest Coastal LA County	820	357	1.7	1.4	365	0.096	0.077	0.069	0	3	1	0	1	3	365	87.0	58.1	10.9	358	14.9	6.8
4	South Coastal LA County 1	072	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	South Coastal LA County 2	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	South Coastal LA County 3	033	364	3.3	2.2	364	0.087	0.066	0.056	0	0	0	0	0	0	353	101.8	64.4	19.8	296*	37.5	11.8
6	West San Fernando Valley	074	365	3.0	2.5	365	0.119	0.094	0.087	0	32	15	4	11	34	354	72.5	51.7	13.5	--	--	--
8	West San Gabriel Valley	088	365	2.6	1.6	361	0.111	0.084	0.082	0	18	7	0	12	18	365	74.9	55.9	15.3	--	--	--
9	East San Gabriel Valley 1	060	352	2.1	1.3	352	0.122	0.096	0.088	0	27	17	7	21	28	351	71.0	58.5	15.4	--	--	--
9	East San Gabriel Valley 2	591	363	1.2	1.0	362	0.127	0.102	0.095	2	48	34	11	37	51	365	66.2	52.6	11.2	--	--	--
10	Pomona/Walnut Valley	075	346	1.8	1.6	347	0.136	0.098	0.094	2	53	36	14	30	55	346	72.3	60.3	21.2	--	--	--
11	South San Gabriel Valley	085	365	2.8	1.7	346	0.107	0.081	0.075	0	11	2	0	6	11	345	70.4	61.6	20.5	--	--	--
12	South Central LA County	112	363	4.4	3.3	361	0.091	0.072	0.065	0	1	0	0	0	1	363	73.6	58.7	16.9	--	--	--
13	Santa Clarita Valley	090	359	1.2	0.9	358	0.126	0.108	0.091	1	52	37	15	23	55	360	64.6	43.5	11.8	--	--	--
ORANGE COUNTY																						
16	North Orange County	3177	365	3.0	1.6	365	0.103	0.082	0.073	0	7	2	0	4	8	334	58.0	50.8	15.0	--	--	--
17	Central Orange County	3176	365	3.1	2.2	365	0.100	0.080	0.065	0	1	1	0	1	1	365	59.1	54.6	14.6	--	--	--
18	North Coastal Orange County	3195	365	3.0	2.2	364	0.099	0.079	0.068	0	2	1	0	1	2	357	52.4	47.9	11.6	352	4.5	3.1
19	Saddleback Valley	3812	364	1.4	0.7	358	0.099	0.088	0.075	0	8	3	2	2	8	--	--	--	--	--	--	--
RIVERSIDE COUNTY																						
22	Corona/Norco Area	4155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Metropolitan Riverside County 1	4144	364	2.5	1.7	361	0.132	0.105	0.096	1	55	39	17	31	59	361	57.4	52.3	14.4	363	1.9	1.6
23	Metropolitan Riverside County 3	4165	362	2.3	1.6	356	0.127	0.104	0.093	1	51	36	20	29	51	362	68.1	49.2	13.4	--	--	--
24	Perris Valley	4149	--	--	--	365	0.124	0.102	0.094	0	49	31	12	25	50	--	--	--	--	--	--	--
25	Elsinore Valley	4158	364	0.8	0.6	362	0.131	0.098	0.093	1	31	19	12	18	35	357	47.2	38.8	8.7	--	--	--
26	Temecula Valley	4031	--	--	--	365	0.100	0.087	0.079	0	20	6	1	1	23	--	--	--	--	--	--	--
29	San Geronio Pass	4164	--	--	--	359	0.124	0.097	0.091	0	46	25	11	16	49	365	49.6	44.3	8.4	--	--	--
30	Coachella Valley 1**	4137	365	2.0	0.7	365	0.102	0.092	0.086	0	47	26	5	3	51	365	41.5	37.7	6.2	--	--	--
30	Coachella Valley 2**	4157	--	--	--	287	0.093	0.085	0.079	0	11	4	1	0	12	--	--	--	--	--	--	--
30	Coachella Valley 3**	4032	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAN BERNARDINO COUNTY																						
32	Northwest San Bernardino Valley	5175	364	2.1	1.3	364	0.136	0.106	0.101	2	66	53	27	49	69	359	71.6	55.7	15.9	--	--	--
34	Central San Bernardino Valley 1	5197	358	2.8	1.2	358	0.133	0.111	0.100	3	57	39	20	36	59	358	89.1	66.1	18.7	352	4.0	3.1
34	Central San Bernardino Valley 2	5203	362	2.3	1.8	356	0.134	0.117	0.105	6	78	57	29	52	79	362	71.4	52.7	15.2	--	--	--
35	East San Bernardino Valley	5204	--	--	--	329	0.137	0.115	0.102	2	76	54	30	44	77	--	--	--	--	--	--	--
37	Central San Bernardino Mountains	5181	--	--	--	365	0.144	0.127	0.107	3	86	61	30	46	86	--	--	--	--	--	--	--
38	East San Bernardino Mountains	5818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DISTRICT MAXIMUM			4.4	3.3		0.144	0.127	0.107		6	86	61	30	52	86	101.8	66.1	22.2		37.5	11.8	
SOUTH COAST AIR BASIN			4.4	3.3		0.144	0.127	0.107		10	113	81	47	71	115	101.8	66.1	22.2		37.5	11.8	
NEAR-ROAD SITE MAX			3.1	2.6		--	--	--		--	--	--	--	--	--	94.7	77.2	35.6		--	--	

* Incomplete data. ** Salton Sea Air Basin -- Pollutant not monitored
 ppm – Parts Per Million parts of air, by volume ppb – Parts Per Billion parts of air, by volume AAM – Annual Arithmetic Mean
 a) The federal 8-hour standard (8-hour average CO > 9 ppm) and state 8-hour standard (8-hour average CO > 9.0 ppm) were not exceeded.
 The federal and state 1-hour CO standards (35 ppm and 20 ppm) were not exceeded.
 b) The current (2015) O₃ federal standard was revised effective December 28, 2015.
 c) The NO₂ federal 1-hour standard is 100 ppb and the annual standard is annual arithmetic mean NO₂ > 0.0534 ppm (53.4 ppb). The state 1-hour and annual standards are 0.18 ppm (180 ppb) and 0.030 ppm (30 ppb).
 d) The federal SO₂ 1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average SO₂ > 0.25 ppm (250 ppb) and 24-hour average SO₂ > 0.04 ppm (40 ppb).



For information on the current standard levels and most recent revisions please refer to "Appendix II – Current Air Quality" of the "Draft 2016 AQMP" which can be accessed at <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/DRAFT2016AQMP/appii.pdf?sfvrsn=4>. Maps showing the source/receptor area boundaries can be accessed via the Internet by entering your address in the AQMD Current Hourly Air Quality Map, at <http://www2.aqmd.gov/webapp/gisaqi2/VEMap3D.aspx>. A printed map or copy of the AQMP Appendix II is also available free of charge from the AQMD Public Information Center at 1-800-CUT-SMOG.

**2015 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

2015

Source/Receptor Area No. Location		Station No.	Suspended Particulates PM10 ^{e)}				Fine Particulates PM2.5 ^{g)}				Lead ⁱ⁾		PM10 Sulfate ^{j)}			
			No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Standards Federal > 150 µg/m ³ State > 50 µg/m ³		Annual Average Conc. (AAM) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	98 th Percentile Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Std > 35 µg/m ³ 24-hour	Annual Average Conc. (AAM) µg/m ³	Max. Monthly Average Conc. µg/m ³	Max. 3-Months Rolling Averages µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
LOS ANGELES COUNTY																
1	Central LA	087	335	88	0	26(8%)	33.1	342	56.4	38.0	7(2.0%)	12.38	0.013	0.01	58	6.1
2	Northwest Coastal LA County	091	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Southwest Coastal LA County	820	57	43	0	0	21.2	--	--	--	--	--	0.008	0.01	57	6.5
4	South Coastal LA County 1	072	--	--	--	--	--	338	54.6	32.1	3(0.9%)	10.81	--	--	--	--
4	South Coastal LA County 2	077	58	62	0	2(3%)	26.5	347	48.3	31.2	4(1.2%)	10.26	0.010	0.01	58	6.3
4	South Coastal LA County 3	033	59	80	0	6(10%)	31.5	--	--	--	--	--	--	--	59	6.9
6	West San Fernando Valley	074	--	--	--	--	--	113	36.8	28.4	1(0.9%)	8.84	--	--	--	--
8	West San Gabriel Valley	088	--	--	--	--	--	119	48.5	32.4	2(1.7%)	9.85	--	--	--	--
9	East San Gabriel Valley 1	060	59	101	0	12(20%)	37.1	120	70.3	30.0	2(1.7%)	9.88	--	--	59	21.0
9	East San Gabriel Valley 2	591	362	100	0	29(8%)	29.0	--	--	--	--	--	--	--	--	--
10	Pomona/Walnut Valley	075	---	---	---	---	---	--	--	--	--	--	--	--	--	--
11	South San Gabriel Valley	085	--	--	--	--	--	118	52.7	41.8	3(2.5%)	11.52	0.014	0.01	--	--
12	South Central LA County	112	--	--	--	--	--	111	41.3	37.2	3(2.7%)	11.78	0.014	0.01	--	--
13	Santa Clarita Valley	090	52	41	0	0	18.4	--	--	--	--	--	--	--	52	5.3
ORANGE COUNTY																
16	North Orange County	3177	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Central Orange County	3176	363	66	0	11(3%)	24.8	295*	45.8	29.8	3(1.0%)	9.38	--	--	56	4.2
18	North Coastal Orange County	3195	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Saddleback Valley	3812	51	49	0	0	19.0	115	31.5	15.1	0	7.05	--	--	51	3.3
RIVERSIDE COUNTY																
22	Corona/Norco Area	4155	44	87	0	3(7%)	29.6	--	--	--	--	--	--	--	44*	3.8
23	Metropolitan Riverside County 1	4144	354	91	0	67(19%)	36.8	341	54.7	38.1	9(2.6%)	11.89	0.008	0.01	114	6.0
23	Metropolitan Riverside County 3	4165	358	131	0	162(45%)	48.8	343	56.6	43.2	17(5.0%)	13.34	--	--	102	4.9
24	Perris Valley	4149	57	74	0	3(5%)	30.3	--	--	--	--	--	--	--	58	3.6
25	Elsinore Valley	4158	356	90	0	5(1%)	18.7	--	--	--	--	--	--	--	--	--
26	Temecula Valley	4031	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	San Geronio Pass	4164	59	139	0	2(3%)	22.2	--	--	--	--	--	--	--	59	3.8
30	Coachella Valley 1**	4137	354	115	0	5(1%)	18.8	108	22.7	17.1	0	5.76	--	--	57	4.6
30	Coachella Valley 2**	4157	270	145	0	36(13%)	36.2	94	24.6	19.7	0	7.54	--	--	97	4.1
30	Coachella Valley 3**	4032	360	147	0	70(19%)	39.9	--	--	--	--	--	--	--	--	--
SAN BERNARDINO COUNTY																
32	Northwest San Bernardino Valley	5175	336	77	0	12(4%)	26.9	--	--	--	--	--	0.010	0.01	--	--
34	Central San Bernardino Valley 1	5197	55	96	0	13(24\$)	37.8	114	50.5	37.7	3(2.6%)	11.05	--	--	55	14.7
34	Central San Bernardino Valley 2	5203	357	78	0	17(5%)	30.7	110	53.5	33.6	2(1.8%)	10.74	0.012	0.01	58	9.0
35	East San Bernardino Valley	5204	59	95	0	2(3%)	24.7	--	--	--	--	--	--	--	59	7.3
37	Central San Bernardino Mountains	5181	57	41	0	0	16.0	--	--	--	--	--	--	--	58	4.2
38	East San Bernardino Mountains	5818	--	--	--	--	--	58	39.4	35.3	1(1.7%)	7.59	--	--	--	--
DISTRICT MAXIMUM				147+	0+	162+	48.8+		70.3	43.2	17	13.34	0.014	0.01		21.0
SOUTH COAST AIR BASIN				139+	0+	173+	48.8+		70.3	43.2	25	13.34	0.014	0.01		21.0
NEAR-ROAD/SOURCE SITE MAX⁺⁺				--	--	--	--		52.7	39.9	10	14.48	0.037	0.03		--

* Incomplete data. ** Salton Sea Air Basin µg/m³ – Micrograms per cubic meter of air AAM – Annual Arithmetic Mean -- Pollutant not monitored

e) Federal Reference Method (FRM) PM10 samples were collected every 6 days at all sites except for Stations 4144 and 4157, where samples were collected every 3 days. Federal Equivalent Method (FEM) PM10 continuous monitoring instruments were operated at some of the above locations. PM10 statistics listed above are based on combined FRM-FEM data.

f) State annual average (AAM) PM10 standard is > 20 µg/m³. Federal annual PM10 standard (AAM > 50 µg/m³) was revoked in 2006.

g) PM2.5 samples were collected every 3 days at all sites except for station numbers 072, 077, 087, 3176, 4144 and 4165, where samples were taken daily, and station number 5818 where samples were taken every 6 days. PM2.5 statistics listed above are for the FRM data only. FEM PM2.5 continuous monitoring instruments were operated at some of the above locations for real-time alerts and forecasting only.

h) Both Federal and State standards are annual average (AAM) > 12.0 µg/m³.

i) Federal lead standard is 3-months rolling average > 0.15 µg/m³; state standard is monthly average ≥ 1.5 µg/m³. Lead standards were not exceeded.

j) State sulfate standard is 24-hour ≥ 25 µg/m³. There is no federal standard for sulfate.

+ High FRM and FEM PM10 data samples recorded at locations in Coachella Valley and the Basin are excluded due to high winds in accordance with the U.S. EPA Exceptional Event Rule.

++ Four near-road sites measuring PM2.5, CO and NO₂ are operating near the following freeways: I-5, I-10, CA-60 and I-710. Near-source lead stations, located immediately downwind of stationary lead sources, generally measure lead concentrations higher than the ambient network stations.



Collins Street ES - Los Angeles-South Coast County, Annual

Collins Street ES
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	29.00	1000sqft	6.56	29,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2018
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MW hr)	1227.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Collins Street ES - Los Angeles-South Coast County, Annual

Project Characteristics - Construction is expected to begin late 2017 and last 50 days.

Land Use - Client provided 6.56 total acres (includes outdoor recreational facilities).

Construction Phase - Only demolition activity, no other construction. Client specified 50 day total work schedule.

Off-road Equipment - Only demolition activity, no other construction.

Off-road Equipment -

Trips and VMT - Only demolition activity, no other construction.

Demolition -

Grading - Only demolition activity, no other construction.

Vehicle Trips - No planned operations of the site after demolition.

Consumer Products - No planned operations of the site after demolition.

Area Coating - No planned operations of the site after demolition.

Energy Use - No planned operations of the site after demolition.

Water And Wastewater - No planned operations of the site after demolition.

Solid Waste - No planned operations of the site after demolition.

Construction Off-road Equipment Mitigation - Tier 3 engines required. Soil Stabilization, replace ground, and water exposed areas required by Rule 403.

Collins Street ES - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	0
tblAreaCoating	Area_EF_Nonresidential_Interior	100	0
tblAreaCoating	Area_EF_Parking	100	0
tblAreaCoating	Area_EF_Residential_Exterior	50	0
tblAreaCoating	Area_EF_Residential_Interior	50	0
tblAreaCoating	Area_Nonresidential_Exterior	14500	0
tblAreaCoating	Area_Nonresidential_Interior	43500	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	50.00
tblEnergyUse	LightingElect	2.66	0.00
tblEnergyUse	NT24E	1.59	0.00
tblEnergyUse	NT24NG	1.08	0.00
tblEnergyUse	T24E	1.83	0.00
tblEnergyUse	T24NG	9.37	0.00
tblLandUse	LotAcreage	0.67	6.56
tblSolidWaste	SolidWasteGenerationRate	37.70	0.00
tblVehicleTrips	WD_TR	15.43	0.00
tblWater	IndoorWaterUseRate	840,910.60	0.00
tblWater	OutdoorWaterUseRate	2,162,341.54	0.00

Collins Street ES - Los Angeles-South Coast County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.1057	1.0945	0.6020	1.0700e-003	0.0195	0.0550	0.0745	3.5600e-003	0.0512	0.0548	0.0000	98.4493	98.4493	0.0249	0.0000	99.0715
Maximum	0.1057	1.0945	0.6020	1.0700e-003	0.0195	0.0550	0.0745	3.5600e-003	0.0512	0.0548	0.0000	98.4493	98.4493	0.0249	0.0000	99.0715

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0262	0.4836	0.6436	1.0700e-003	0.0105	0.0217	0.0323	2.2000e-003	0.0217	0.0239	0.0000	98.4492	98.4492	0.0249	0.0000	99.0713
Maximum	0.0262	0.4836	0.6436	1.0700e-003	0.0105	0.0217	0.0323	2.2000e-003	0.0217	0.0239	0.0000	98.4492	98.4492	0.0249	0.0000	99.0713

Collins Street ES - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	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	75.19	55.81	-6.90	0.00	46.06	60.49	56.70	38.20	57.59	56.33	0.00	0.00	0.00	0.04	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1048	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.2000e-004	7.2000e-004	0.0000	0.0000	7.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1048	0.0000	3.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	7.2000e-004	7.2000e-004	0.0000	0.0000	7.7000e-004

Collins Street ES - Los Angeles-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1048	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.2000e-004	7.2000e-004	0.0000	0.0000	7.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1048	0.0000	3.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	7.2000e-004	7.2000e-004	0.0000	0.0000	7.7000e-004

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/2/2017	12/8/2017	5	50	

Acres of Grading (Site Preparation Phase): 0

Collins Street ES - Los Angeles-South Coast County, Annual

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	132.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Clean Paved Roads

Collins Street ES - Los Angeles-South Coast County, Annual

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0143	0.0000	0.0143	2.1600e-003	0.0000	2.1600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1026	1.0687	0.5753	9.7000e-004		0.0548	0.0548		0.0511	0.0511	0.0000	89.0013	89.0013	0.0243	0.0000	89.6096
Total	0.1026	1.0687	0.5753	9.7000e-004	0.0143	0.0548	0.0691	2.1600e-003	0.0511	0.0532	0.0000	89.0013	89.0013	0.0243	0.0000	89.6096

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.5000e-004	0.0237	4.8300e-003	5.0000e-005	1.1300e-003	1.2000e-004	1.2600e-003	3.1000e-004	1.2000e-004	4.3000e-004	0.0000	5.2500	5.2500	3.8000e-004	0.0000	5.2594
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3600e-003	2.0400e-003	0.0219	5.0000e-005	4.1100e-003	4.0000e-005	4.1500e-003	1.0900e-003	4.0000e-005	1.1300e-003	0.0000	4.1981	4.1981	1.8000e-004	0.0000	4.2025
Total	3.1100e-003	0.0258	0.0267	1.0000e-004	5.2400e-003	1.6000e-004	5.4100e-003	1.4000e-003	1.6000e-004	1.5600e-003	0.0000	9.4481	9.4481	5.6000e-004	0.0000	9.4619

Collins Street ES - Los Angeles-South Coast County, Annual

3.2 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.2900e-003	0.0000	5.2900e-003	8.0000e-004	0.0000	8.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0231	0.4578	0.6169	9.7000e-004		0.0216	0.0216		0.0216	0.0216	0.0000	89.0011	89.0011	0.0243	0.0000	89.6095
Total	0.0231	0.4578	0.6169	9.7000e-004	5.2900e-003	0.0216	0.0269	8.0000e-004	0.0216	0.0224	0.0000	89.0011	89.0011	0.0243	0.0000	89.6095

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.5000e-004	0.0237	4.8300e-003	5.0000e-005	1.1300e-003	1.2000e-004	1.2600e-003	3.1000e-004	1.2000e-004	4.3000e-004	0.0000	5.2500	5.2500	3.8000e-004	0.0000	5.2594
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3600e-003	2.0400e-003	0.0219	5.0000e-005	4.1100e-003	4.0000e-005	4.1500e-003	1.0900e-003	4.0000e-005	1.1300e-003	0.0000	4.1981	4.1981	1.8000e-004	0.0000	4.2025
Total	3.1100e-003	0.0258	0.0267	1.0000e-004	5.2400e-003	1.6000e-004	5.4100e-003	1.4000e-003	1.6000e-004	1.5600e-003	0.0000	9.4481	9.4481	5.6000e-004	0.0000	9.4619

4.0 Operational Detail - Mobile

Collins Street ES - Los Angeles-South Coast County, Summer

Collins Street ES
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	29.00	1000sqft	6.56	29,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2018
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MW hr)	1227.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Collins Street ES - Los Angeles-South Coast County, Summer

Project Characteristics - Construction is expected to begin late 2017 and last 50 days.

Land Use - Client provided 6.56 total acres (includes outdoor recreational facilities).

Construction Phase - Only demolition activity, no other construction. Client specified 50 day total work schedule.

Off-road Equipment - Only demolition activity, no other construction.

Off-road Equipment -

Trips and VMT - Only demolition activity, no other construction.

Demolition -

Grading - Only demolition activity, no other construction.

Vehicle Trips - No planned operations of the site after demolition.

Consumer Products - No planned operations of the site after demolition.

Area Coating - No planned operations of the site after demolition.

Energy Use - No planned operations of the site after demolition.

Water And Wastewater - No planned operations of the site after demolition.

Solid Waste - No planned operations of the site after demolition.

Construction Off-road Equipment Mitigation - Tier 3 engines required. Soil Stabilization, replace ground, and water exposed areas required by Rule 403.

Collins Street ES - Los Angeles-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	0
tblAreaCoating	Area_EF_Nonresidential_Interior	100	0
tblAreaCoating	Area_EF_Parking	100	0
tblAreaCoating	Area_EF_Residential_Exterior	50	0
tblAreaCoating	Area_EF_Residential_Interior	50	0
tblAreaCoating	Area_Nonresidential_Exterior	14500	0
tblAreaCoating	Area_Nonresidential_Interior	43500	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	50.00
tblEnergyUse	LightingElect	2.66	0.00
tblEnergyUse	NT24E	1.59	0.00
tblEnergyUse	NT24NG	1.08	0.00
tblEnergyUse	T24E	1.83	0.00
tblEnergyUse	T24NG	9.37	0.00
tblLandUse	LotAcreage	0.67	6.56
tblSolidWaste	SolidWasteGenerationRate	37.70	0.00
tblVehicleTrips	WD_TR	15.43	0.00
tblWater	IndoorWaterUseRate	840,910.60	0.00
tblWater	OutdoorWaterUseRate	2,162,341.54	0.00

Collins Street ES - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.2267	43.7371	24.1230	0.0429	0.7847	2.1999	2.9846	0.1436	2.0486	2.1921	0.0000	4,350.6909	4,350.6909	1.0973	0.0000	4,378.1223
Maximum	4.2267	43.7371	24.1230	0.0429	0.7847	2.1999	2.9846	0.1436	2.0486	2.1921	0.0000	4,350.6909	4,350.6909	1.0973	0.0000	4,378.1223

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.0482	19.3026	25.7847	0.0429	0.4253	0.8691	1.2945	0.0892	0.8688	0.9579	0.0000	4,350.6909	4,350.6909	1.0973	0.0000	4,378.1223
Maximum	1.0482	19.3026	25.7847	0.0429	0.4253	0.8691	1.2945	0.0892	0.8688	0.9579	0.0000	4,350.6909	4,350.6909	1.0973	0.0000	4,378.1223

Collins Street ES - Los Angeles-South Coast County, 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	75.20	55.87	-6.89	0.00	45.80	60.49	56.63	37.90	57.59	56.30	0.00	0.00	0.00	0.00	0.00	0.00

Collins Street ES - Los Angeles-South Coast County, 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/2/2017	12/8/2017	5	50	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	132.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Collins Street ES - Los Angeles-South Coast County, Summer

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5709	0.0000	0.5709	0.0864	0.0000	0.0864			0.0000			0.0000
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.283 3	3,924.283 3	1.0730		3,951.107 0
Total	4.1031	42.7475	23.0122	0.0388	0.5709	2.1935	2.7644	0.0864	2.0425	2.1290		3,924.283 3	3,924.283 3	1.0730		3,951.107 0

Collins Street ES - Los Angeles-South Coast County, Summer

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0298	0.9177	0.1874	2.1600e-003	0.0462	4.8500e-003	0.0510	0.0127	4.6400e-003	0.0173		233.0700	233.0700	0.0163		233.4770
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	0.0938	0.0720	0.9234	1.9500e-003	0.1677	1.5600e-003	0.1692	0.0445	1.4400e-003	0.0459		193.3376	193.3376	8.0300e-003		193.5383
Total	0.1236	0.9896	1.1108	4.1100e-003	0.2138	6.4100e-003	0.2202	0.0571	6.0800e-003	0.0632		426.4076	426.4076	0.0243		427.0153

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2115	0.0000	0.2115	0.0320	0.0000	0.0320			0.0000			0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	0.9246	18.3130	24.6739	0.0388	0.2115	0.8627	1.0743	0.0320	0.8627	0.8948	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070

Collins Street ES - Los Angeles-South Coast County, Summer

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0298	0.9177	0.1874	2.1600e-003	0.0462	4.8500e-003	0.0510	0.0127	4.6400e-003	0.0173		233.0700	233.0700	0.0163		233.4770
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	0.0938	0.0720	0.9234	1.9500e-003	0.1677	1.5600e-003	0.1692	0.0445	1.4400e-003	0.0459		193.3376	193.3376	8.0300e-003		193.5383
Total	0.1236	0.9896	1.1108	4.1100e-003	0.2138	6.4100e-003	0.2202	0.0571	6.0800e-003	0.0632		426.4076	426.4076	0.0243		427.0153

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

APPENDIX B

Tree Survey



Los Angeles Unified School District

Facilities Services Division



OFFICE OF THE SUPERINTENDENT

FACILITIES SERVICES DIVISION

TO: David Montes, Complex Project Manager, FETU

March 3, 2017

FROM: Phil J. Fernandez, Tree Maintenance Supervisor

SUBJECT: Tree assessment for building demolition

Background

I was contacted by David Montes from FETU to assess and inventory the tree at Collins El. closed site before the start of demolition.

Observations

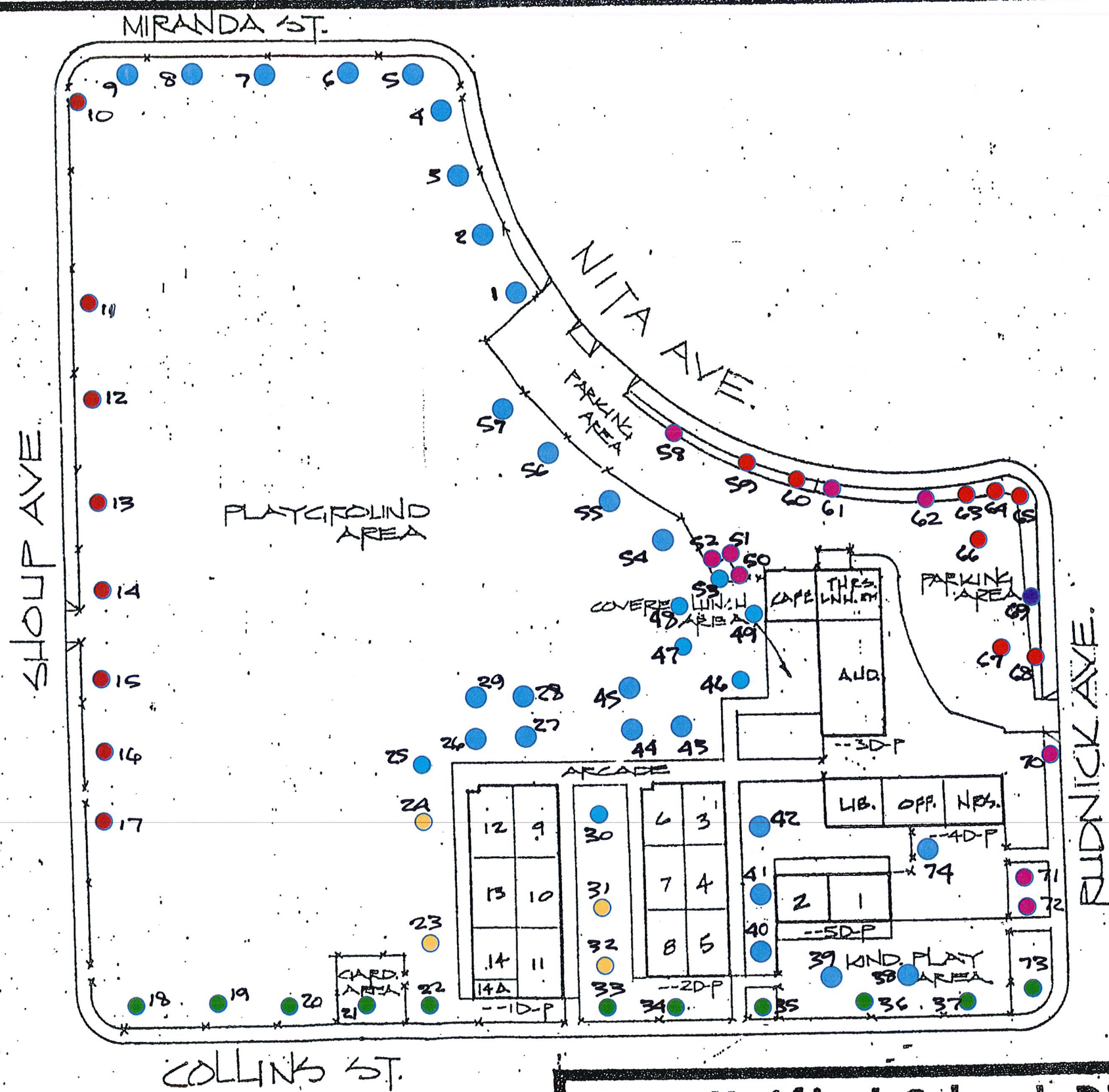
On February 1, 2017, Angel Arroyo, Senior tree Surgeon went out to the site and assessed all the trees on site. During the assessment, there were no protected trees within the foot print of this project. In the attachment 2 and 3 there is a plot plan with location of trees and a list of the trees. On the list, everything in red should be removed during the demolition to avoid anyone getting hurt during the project.

If you have any questions, don't hesitate to call me at (213) 369-5382

Respectfully,

Phil J. Fernandez
Certified Arborist WE-6828A
Tree Department, LAUSD

- Liquidamber styraciflua
- Fraxinus uhdei
- Ulmus parvifolia
- Fraxinus velutina
- Washingtonia robusta
- Morus alba
- Albizia julibrissim
- Gleditsia triacanthos



COLLINS ST. E.S.
 5717 RUDNIK AVE.
 WOODLAND HILLS, CA. 91367

L.A. Unified School District School: COLLINS ST. SCHOOL Drawn By: C. CONDON Date: 11/9/76 Scale: 1"=100'	Drwg. of 1
--	--------------------------

Tree Inventory/ Health Assessment

Collins Elementary

	Tree Name	D.B.H.	Height	Width	Condition/ Comments
1	Morus alba/ Fruitless Mullberry	15"	25'	20'	Good/ Dormant
2	Morus alba/ Fruitless Mullberry	15"	25'	20'	Good/ Dormant
3	Morus alba/ Fruitless Mullberry	15"	25'	20'	Good/ Dormant
4	Morus alba/ Fruitless Mullberry	15"	25'	20'	Good/ Dormant
5	Morus alba/ Fruitless Mullberry	15"	25'	20'	Good/ Dormant
6	Morus alba/ Fruitless Mullberry	15"	25'	20'	Good/ Dormant
7	Morus alba/ Fruitless Mullberry	15"	25'	20'	Cavity in trunk/ Dormant
8	Morus alba/ Fruitless Mullberry	15"	25'	20'	Good/ Dormant
9	Morus alba/ Fruitless Mullberry	15"	25'	20'	Good/ Dormant
10	Fraxinus velutina/ Modesto	24"	30'	20'	2 split limbs/ Dormant
11	Fraxinus velutina/ Modesto	16"	12'	10'	Splitting apart/ Dormant
12	Fraxinus velutina/ Modesto	20"	25'	20'	Good/ Dormant
13	Fraxinus velutina/ Modesto	16"	20'	20'	Good/ Dormant
14	Fraxinus velutina/ Modesto	18"	20'	20'	3 dead limbs/ Dormant
15	Fraxinus velutina/ Modesto	20"	20'	20'	Good/ Dormant
16	Fraxinus velutina/ Modesto	20"	20'	20'	Good/ Dormant
17	Fraxinus velutina/ Modesto	20"	20'	20'	Splitting apart/ Dormant
18	Ulmus parifolia/ Chinese elm	24"	40'	35'	Good/ Dormant
19	Ulmus parifolia/ Chinese elm	24"	40'	35'	Good/ Dormant
20	Ulmus parifolia/ Chinese elm	24"	40'	35'	Good/ Dormant
21	Ulmus parifolia/ Chinese elm	24"	40'	35'	Good/ Dormant
22	Ulmus parifolia/ Chinese elm	24"	40'	35'	Good/ Dormant
23	Gleditsia triacanthos/ Locust	10"	10'	5	Dead
24	Gleditsia triacanthos/ Locust	10"	25'	5'	Dead
25	Fraxinus uhdei/ Shamel ash	28"	50'	30'	Good
26	Morus alba/ Fruitless Mullberry	15"	25'	20'	Unhealthy/ leaning
27	Morus alba/ Fruitless Mullberry	15"	25'	20'	Good/ Dormant
28	Morus alba/ Fruitless Mullberry	15"	25'	20'	Good/ Dormant
29	Morus alba/ Fruitless Mullberry	15"	25'	20'	Dead
30	Fraxinus uhdei/ Shamel ash	28"	55'	30	Good/ Dormant
31	Gleditsia triacanthos/ Locust	6"	10'	5'	Dead
32	Gleditsia triacanthos/ Locust	6"	10'	5'	Dead
33	Ulmus parifolia/ Chinese elm	24"	40'	35'	Good/ Dormant
34	Ulmus parifolia/ Chinese elm	24"	40'	35'	Good/ Dormant
35	Ulmus parifolia/ Chinese elm	24"	40'	35'	Good/ Dormant
36	Ulmus parifolia/ Chinese elm	24"	40'	35'	Good/ Dormant
37	Ulmus parifolia/ Chinese elm	24"	40'	35'	Good/ Dormant
38	Morus alba/ Fruitless Mullberry	12"	15'	10'	Dead
39	Morus alba/ Fruitless Mullberry	12"	15'	10'	Dead
40	Morus alba/ Fruitless Mullberry	12"	15'	10'	Dead

41	Morus alba/ Fruitless Mullberry	12"	15'	10'	Dead
42	Morus alba/ Fruitless Mullberry	12"	15'	10'	Dead
43	Morus alba/ Fruitless Mullberry	12"	15'	10'	Dead
44	Morus alba/ Fruitless Mullberry	12"	15'	10'	Dead
45	Morus alba/ Fruitless Mullberry	12"	15'	10'	Dead
46	Fraxinus uhdei/ Shamel ash	14"	25'	20'	Good/ Dormant
47	Fraxinus uhdei/ Shamel ash	14"	25'	20'	Dead
48	Fraxinus uhdei/ Shamel ash	20"	30"	20'	Good/ Dormant
49	Fraxinus uhdei/ Shamel ash	20"	30"	20'	Good/ Dormant
50	Washingtonia robustia/ Mexican fan palm	14"	20'	8'	Good/ full dried skirt
51	Washingtonia robustia/ Mexican fan palm	20"	40'	8'	Good/ full dried skirt
52	Washingtonia robustia/ Mexican fan palm	14"	20'	8'	Good/ full dried skirt
53	Fraxinus uhdei/ Shamel ash	14"	40'	15'	Good
54	Morus alba/ Fruitless Mullberry	14"	15'	10'	Dead
55	Morus alba/ Fruitless Mullberry	14"	15'	10'	Dead
56	Morus alba/ Fruitless Mullberry	14"	15'	10'	Dead
57	Morus alba/ Fruitless Mullberry	14"	15'	10'	Dead
58	Washingtonia robustia/ Mexican fan palm	20"	30'	30'	Good/ full dried skirt
59	Liquidambar styraciflua/ Sweet gum	6"	8'	5'	Dead
60	Liquidambar styraciflua/ Sweet gum	10"	30'	18'	good
61	Washingtonia robustia/ Mexican fan palm	20"	25'	8'	Good/ full dried skirt
62	Washingtonia robustia/ Mexican fan palm	20"	25'	8'	Good/ full dried skirt
63	Liquidambar styraciflua/ Sweet gum	12"	20'	8'	Good/ Dormant
64	Liquidambar styraciflua/ Sweet gum	12"	20'	8'	Good/ Dormant
65	Liquidambar styraciflua/ Sweet gum	12"	20'	8'	Good/ Dormant
66	Liquidambar styraciflua/ Sweet gum	12"	20'	8'	Good/ Dormant
67	Liquidambar styraciflua/ Sweet gum	12"	20'	8'	Good/ Dormant
68	Liquidambar styraciflua/ Sweet gum	12"	20'	8'	Good/ Dormant
69	Albizia julibrissim/ Pink silk tree	6"	8'	10'	Good
70	Washingtonia robustia/ Mexican fan palm	20"	8'	8'	Good/ full dried skirt
71	Washingtonia robustia/ Mexican fan palm	20"	8'	8'	Good/ full dried skirt
72	Washingtonia robustia/ Mexican fan palm	20"	8'	8'	Good/ full dried skirt
73	Ulmus parifolia/ Chinese elm	12"	20'	8'	Good/ Dormant
74	Morus alba/ Fruitless Mullberry	15"	20'	12'	Dead
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					

APPENDIX C

Historic Resource Evaluation Report



July 18, 2017

Jessica Kirchner Flores
Impact Sciences
28 North Marengo Avenue
Pasadena, California 91101

**Draft Historic Resource Evaluation Report for Collins Street Elementary School,
Woodland Hills, Los Angeles County, California**

Dear Ms. Flores:

ASM Affiliates, Inc. (ASM) evaluated the campus of Collins Street Elementary School (ES), a Los Angeles Unified School District (LAUSD) school at 5717 Rudnick Avenue in the Woodland Hills neighborhood of Los Angeles, Los Angeles County, California. This evaluation was required in advance of the planned demolition of existing buildings at the campus (Project). This documentation ensures consideration of any buildings more than 45 years of age within the Project area, in compliance with the California Environmental Quality Act (CEQA), and was guided by the *LAUSD Historic Context Statement, 1870–1969* (LAUSD HCS) (Sapphos Environmental, Inc., 2014).

EXECUTIVE SUMMARY

The approximately 6.56-acre Collins Street ES campus is located on the western side of the San Fernando Valley, bounded by Miranda Street to the north,¹ Rudnick Avenue to the east, Collins Street to the south, and Shoup Avenue to the west. The Woodland Hills Recreation Center is located to the north across Miranda Street, and to the south across Collins Street is a church complex. A church and school are to the east across Rudnick Avenue. The remainder of the surrounding neighborhood is primarily single-family residential properties. The parcel (APN 2146-004-904) is located within the Canoga Park – Winnetka – Woodland Hills – West Hills Community Plan Area (CPA) of the City of Los Angeles (Figures 1 and 2). The Mid-Century Modern campus was constructed in 1959. The campus has been vacant since it was closed in the summer of 1984.

Collins Street ES is not an outstanding representation of the applicable contexts and themes established in the LAUSD HCS. The campus does not appear to be eligible either as an individual resource or a historic district under National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) Criteria A/1, B/2, C/3, or D/4, or City of Los Angeles Historic Cultural Monument (HCM) Criteria a-d. The campus therefore does not qualify as a historical resource pursuant to CEQA.

INTRODUCTION

This assessment was prepared by ASM to determine the historical resource status of the Collins Street ES campus and to facilitate LAUSD compliance with CEQA.

¹ The northeastern, curved segment of Miranda Street was labeled Nita Avenue in original architectural drawings of the school. Miranda Street currently refers to both segments.

ASM's literature review revealed that the campus is not listed in the NRHP or the CRHR; it is not a California Point of Historical Interest; and it is not a California State Historical Landmark. The property was not identified as a potential historic resource by SurveyLA, although it lies within the Canoga Park – Winnetka – Woodland Hills – West Hills Community Plan Area, which was surveyed in 2012 (Architectural Resources Group 2013). It is not within or adjacent to a potential historic district as identified by SurveyLA.

The report is organized into the following sections: Introduction, Methodology, Survey Findings, Eligibility Criteria, Evaluation of Eligibility, and Conclusion. Figures and maps are included as Attachment A, California Department of Parks and Recreation Series 523 forms are included as Attachment B, and architectural drawings are included as Attachment C.

METHODOLOGY

To begin this evaluation, on January 27, 2017, ASM requested a records search of the campus through the South Central Coastal Information Center for previously identified, documented, and registered historic resources. No historical resources have been previously identified within the campus boundaries. A request for a search of the Sacred Lands Files held by the California Native American Heritage Commission was submitted on February 10, 2017. On February 17, a response was received stating that the search returned negative results.

ASM conducted background research of the Collins Street ES campus, including databases of historic newspapers, Los Angeles County Assessor's maps, Los Angeles Zoning Information and Map Access System, and historic aerial photographs. Historic architectural drawings and construction documents provided by the LAUSD Office of Environmental Health & Safety were reviewed prior to visiting the campus. The PlanLAUSD database was searched for a pre-planning survey and other information about the campus; no results were found. A number of academic and professional sources were consulted (e.g., Pacific Coast Architecture Database, American Institute of Architects Historical Directory, Avery Index to Architectural Periodicals) for information about the architect and to determine his relevance and potential influence in the field of architecture. A site survey was conducted by ASM (Shannon Davis, Senior Architectural Historian and Marilyn Novell, Architectural Historian) on February 9, 2017, to document the campus through photographs and extensive notes.

ASM carefully considered the eligibility of the Collins Street ES campus as potentially significant under NRHP/CRHR Criteria A/1, B/2, C/3, and D/4, City of Los Angeles HCM Criteria a-d, and as a CEQA-defined historical resource. The evaluation was conducted in conformance with NRHP Bulletin *How to Apply the National Register Criteria for Evaluation* (National Park Service Bulletin No. 15 1997), the California Office of Historic Preservation's *Instructions for Recording Historical Resources* (1995), and Technical Assistance Series #7 *How to Nominate a Resource to the California Register of Historical Resources* (2001).

ASM reviewed the SurveyLA findings for the Canoga Park – Winnetka – Woodland Hills – West Hills CPA, which did not record the Collins Street ES campus as a potentially eligible historic resource. ASM referred to the *LAUSD Historic Context Statement, 1870-1969* (Sapphos Environmental, Inc., 2014) for guidance in the evaluation of Collins Street ES buildings as individually eligible and the campus as a historic district within the context of LAUSD's nearly 800 campuses.

HISTORY OF THE CAMPUS

The designer of Collins Street ES was Harry Thomas MacDonald (1920-2014), who, after receiving his degree from the University of Southern California, began his career in 1944 designing public schools.² When he was interviewed in 1962, he indicated that he specialized in secondary school design.³

Architectural drawings approved in 1959 indicate that the original name for the school was East of Woodlake School. The school was approved for construction by the Los Angeles City Board of Education in August 1959 and was scheduled to open in September of the following year.⁴

The small neighborhood school was not convenient topographically for 30 or 40 families who lived on Rolling Road at the top of the steep hill to the east. Improvising students, who had been walking approximately two miles to get to school by following the winding streets, discovered a more efficient route: they used sheets of cardboard to slide directly down the hill. No objections were raised by school officials or the owner of the property, although one mother mentioned her increased laundry duties.⁵

Collins Street ES was one of 22 LAUSD schools closed citywide between 1982 and 1984. Among those school closures, 19 were in the West Valley, where declining enrollment was blamed on lower birth rates, rising housing prices that prevented young families from moving into the area, and the mandatory integration program that was said to have provoked families to pull their children out of public schools.⁶ Since then, some of the schools were reopened or leased to private schools. Collins Street ES was leased for a five-year term to Kadima Hebrew Academy of Woodland Hills for \$51,300 annually.⁷ When the leases were vacated, maintenance of the schools and the large vacant grounds that remained was costly, and the schools, including Collins Street ES, drew complaints from neighbors. As late as 2014, LAUSD considered redeveloping the school, but the age of the buildings meant that contamination with asbestos and lead paint would need to be mitigated and the sites would need to be brought into compliance with seismic, building, and accessibility codes.^{8,9}

SURVEY FINDINGS

Collins Street ES is composed of a cluster of five Mid-Century-Modern-style educational buildings that were designed as a group and built in 1959. Buildings include a Multi-Purpose Building, a main (administration) building, a lunch shelter, two classrooms (Building A and Building B), a kindergarten building, and several segments of an arcade that provides circulation throughout the school. With the exception of the Multi-Purpose Building, which is L-shaped, all of the buildings are generally rectangular and sit on poured-concrete foundations. All are clad in smooth stucco and capped with low-pitched side-gabled roofs covered in asphalt roll material with generous cantilevered overhangs and deep, flat wood fascias. Attached to the fascias of the arcades and the cantilevered portions of the roofs are metal gutters that are canted outward at the top. The gutters are supported by regularly spaced decorative flat welded-steel L-shaped brackets.

² Juliette Funes. "In Memoriam: Harry MacDonald, 93." *USC News*. June 4, 2013.

³ Harry Thomas MacDonald (Architect). Pacific Coast Architecture Database. Available at: <http://pcad.lib.washington.edu/person/5382/>; accessed February 9, 2017.

⁴ "4 Schools Ready for Construction." *Los Angeles Times*. August 23, 1959. "12 New Schools to Open Doors Next September." *Los Angeles Times*. April 19, 1960.

⁵ Stan Mandel. "Slide Beats Walking: They Get to School by Seat of Pants." *Los Angeles Times*. February 23, 1961.

⁶ Pamela Moreland. 1984. "Closed Because of Low Enrollment: 1 of 2 Canoga Park Schools Sold at Auction." *Los Angeles Times*. November 14, 1984.

⁷ "Board Accepts Bids to Lease 3 Vacant Woodland Hills Schools." *Los Angeles Times*. June 17, 1992.

⁸ "LAUSD Revives Effort to Reopen Four Blighted West Valley Schools." *Los Angeles Daily News*. September 8, 2013.

⁹ Gregory J. Wilcox. "4 Shuttered LAUSD Schools in West San Fernando Valley May House Charters." *Los Angeles Daily News*. October 27, 2014.

The gable ends of the buildings lack fenestration, with a few exceptions in the case of doors to restrooms or utility rooms. Doors throughout the campus are flat wood set in minimal wood surrounds. Typical windows are steel-frame in a combination of fixed and sliders and are generally grouped with doors and transoms.

The site plan consists of buildings organized in an orthogonal manner and interspersed with landscaped areas planted with mature trees and shrubs (Figure 3 and Attachment C). A system of arcades connects to wide overhanging eaves on the long sides of the buildings. Wood grilles, fences, and gates throughout the campus form a unifying design motif and serve to define and screen outdoor areas. The buildings are clustered near the southeast corner of the parcel, with the remainder of the parcel allocated to asphalt-paved play areas, planted ornamental trees, and lawns. The primary entrance is between the Multi-Purpose Building and the Main Building, where a high wood grille and gate open onto the central arcade at the interior of the school. A canopy with a cut-out to admit light connects the Multi-Purpose Building to the Main Building, and a wood grille forms a screen around a patio north of the Main Building.

Alterations are minimal, consisting of the replacement of some windows with air-conditioner units and the addition of a chain-link fence around the perimeter of the campus. Some of the windows have been broken and are covered with plywood, and parts of the wood grille at the main entrance have been replaced with plywood. The effects of leaking roofs are apparent throughout the campus, particularly in the Main Building and the Kindergarten Building. Although the interiors were accessible throughout the campus at the time of survey, visibility was minimal because of lack of electricity.

Multi-Purpose Building

The Multi-Purpose Building (Building 7) is a 6,742-square-foot, L-shaped building near the corner of Miranda Street and Rudnick Avenue adjacent to campus parking areas. As the tallest and most distinct building, it anchors the small complex of campus buildings and bears the sign identifying the school and address in geometric sans-serif surface-mounted aluminum letters (Figures 4 and 5). The main mass of the building, which houses an assembly room, a kitchen, and faculty dining area, is capped with a moderately pitched shed roof. A set of double flat metal doors sheltered by a small flat cantilevered canopy with an upward-canted fascia is located at the east façade, and there is an additional entrance at the west façade. The primary entrance is recessed at the south façade and is set into walls clad in 1-inch ceramic tile in random patterns of gray, white, and maroon. A wood grille to the left of the entrance provides access to the interior of the campus (Figures 6-8). The interior of the assembly room is organized in a combination of a classic proscenium-type theater with raked fixed folding plywood seating and a raised stage, along with a flat area toward the front to allow flexible use of the space as a cafeteria, assembly room, and theater (Figure 9). Folding cafeteria-style tables and benches are stored in closets lining the sides of the room. The ceiling is smooth stucco with recessed round lighting fixtures and large circular vents. Walls are smooth stucco, and floors are covered in 12-x-12-inch vinyl tiles. The stage floor is composed of wood planks. Modifications include an extension of the stage into the auditorium space.

A single-story shed-roof wing visually intersects the main part of the Multi-Purpose Building and houses the teachers' dining room and a kitchen (Figure 10). In the teachers' dining area, a flat metal door and four sets of two-light sliding steel windows are grouped within a narrow wood surround. A red-brick patio screened by a wood grille is located to the north outside of the area. A kitchen is located in the west end of the wing. Five horizontally oriented windows, which have been covered in plywood, are aligned on the west façade.

A lunch pavilion is connected to the west façade of the assembly room. It consists of a deep flat roof with stucco-clad sides that cant outward at the top. It is supported by steel columns and has a poured-concrete

floor (Figure 11). To the west is an asphalt and concrete patio area with rectangular and square concrete masonry unit planters containing mature trees (Figure 12).

Main Building

The 4,106-square-foot Main Building (Building 8), located south of the Multi-Purpose Building, houses the library, the nurse's offices, and administrative offices. The low-pitched side-gabled building has wide cantilevered overhanging eaves on the north and south façades forming shelters for the walkways beneath. On the north façade is a series of flat metal doors, providing access to both offices and utility rooms. On the south façade are three flat metal doors with low concrete porches. Each door is grouped with sets of two-light sliding and fixed steel windows. A wood grille screens the windows on the east façade, and a patio to the north of the Main Building is screened by an additional wood grille (Figures 13-17).

The interior spaces include a moderately sized library with a separate textbook room, a supply room, a work room, storage for audio-visual equipment, utility rooms, the principal's office, a conference room, a clerk's area separated from the public entrance by a counter, a conference room, the nurse's area, and restrooms.

Classroom Buildings

Classroom Buildings A and B (Buildings 5 and 3) are low-pitched, side-gabled buildings with back-to-back classrooms opening onto two primary façades. The wide cantilevered eaves have minimal metal cylindrical supports and provide shelter for the corridors below. Steel-framed windows are grouped in four sets of four, with fixed and horizontally sliding portions. Below the windows is a row of wood paneling. Windows are generally arranged in groups with a flat wood door at each end (Figures 18-25).

At the interior, the classrooms have 12-x-12-inch vinyl tile flooring and acoustical tile ceilings. The classrooms that were accessible during the survey had built-in wood cabinets (Figure 26).

Kindergarten Building

The Kindergarten Building (Building 6) is a 2,400-square-foot building to the south of the Main Building. It houses two large side-by-side classrooms. The windows and primary entrance doors are on the south façade, where they open onto a fenced play area. At the north façade are two doors and a row of lockers (Figures 27 and 28).

The Arcade

The Arcade consists of multiple segments of flat-roofed canopies with cylindrical metal supports and flat wood fascia that connect to the overhanging eaves of the buildings and provide shelter for circulation throughout the campus. The ceilings of the arcade are clad in smooth stucco (Figures 29-32).

ELIGIBILITY CRITERIA

National Register of Historic Places

Authorized by the National Historic Preservation Act of 1966, the National Park Service's NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. The NRHP is the official list of the nation's historic places worthy of preservation. The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity and:

- A. are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. are associated with the lives of persons significant in our past; or
- C. embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or have yielded, or
- D. may be likely to yield, information important in prehistory or history.

Integrity

In order to be eligible for listing in the NRHP and CRHR, a property must retain sufficient integrity to convey its significance. The NRHP publication *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, establishes how to evaluate the integrity of a property: “Integrity is the ability of a property to convey its significance” (National Park Service, National Register of Historic Places 1991). The evaluation of integrity must be grounded in an understanding of a property’s physical features and how they relate to the concept of integrity. Determining which of these aspects are most important to a property requires knowing why, where, and when a property is significant. To retain historic integrity, a property must possess several, and usually most, aspects of integrity:

1. *Location* is the place where the historic property was constructed or the place where the historic event occurred.
2. *Design* is the combination of elements that create the form, plan, space, structure, and style of a property.
3. *Setting* is the physical environment of a historic property, and refers to the character of the site and the relationship to surrounding features and open space. Setting often refers to the basic physical conditions under which a property was built and the functions it was intended to serve. These features can be either natural or manmade, including vegetation, paths, fences, and relationships between other features or open space.
4. *Materials* are the physical elements that were combined or deposited during a particular period or time, and in a particular pattern or configuration to form a historic property.
5. *Workmanship* is the physical evidence of crafts of a particular culture or people during any given period of history or prehistory, and can be applied to the property as a whole, or to individual components.
6. *Feeling* is a property’s expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, when taken together, convey the property’s historic character.
7. *Association* is the direct link between the important historic event or person and a historic property.

California Register of Historical Resources

The CRHR program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA. The criteria established for eligibility for the CRHR are directly comparable to the national criteria established for the NRHP.

In order to be eligible for listing in the CRHR, a building, object, or structure must satisfy at least one of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. It is associated with the lives of persons important to local, California, or national history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Historical resources eligible for listing in the CRHR must also retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. For the purposes of eligibility for the CRHR, integrity is defined as “the authenticity of an historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance” (California Office of Historic Preservation 2001). This general definition is generally strengthened by the more specific definition offered by the NRHP—the criteria and guidelines on which the CRHR criteria and guidelines are based upon.

California Environmental Quality Act

CEQA Section 15064.5 *Determining the Significance of Impacts to Archeological and Historical Resources* requires that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to historical resources. Historical resources are recognized as part of the environment under CEQA. It defines historical resources as “any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.”

Lead agencies have a responsibility to evaluate historical resources against the CRHR criteria prior to making a finding as to a proposed Project’s impacts to historical resources. Mitigation of adverse impacts is required if the proposed Project will cause substantial adverse change to a historical resource. Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired. While demolition and destruction are fairly obvious significant impacts, it is more difficult to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The CEQA Guidelines provide that a Project that demolishes or alters those physical characteristics of an historical resource that convey its historical significance (i.e., its character-defining features) can be considered to materially impair the resource’s significance. The CRHR is used in the consideration of historical resources relative to significance for purposes of CEQA. The CRHR includes resources listed in, or formally determined eligible for listing in, the NRHP, as well as some California State Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts), or that have been identified in a local historical resources inventory, may be eligible for listing in the CRHR and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise.

Generally, a resource shall be considered by the lead agency to be a “historical resource” if it:

1. Is listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (PRC Section 5024.1, Title 14 CCR, Section 4850 et seq.).
2. Is included in a local register of historical resources, or is identified as significant in an historical resource survey meeting the requirements of PRC Section 5024.1(g).
3. Is a building or structure determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

City of Los Angeles Historic-Cultural Monuments

According to the City of Los Angeles Cultural Heritage Ordinance Chapter 9, Division 22 (Cultural Heritage Ordinance) of the Los Angeles Administrative Code, Historic-Cultural Monument designation is reserved for those resources that have a special aesthetic, architectural, or engineering interest or value of a historic nature. Any site (including significant trees or other plant life located on a site), building or structure of particular historic or cultural significance to the City of Los Angeles, can be designated as long as it is a historic structure or site:

- a. in which the broad cultural, economic or social history of the nation, State or community is reflected or exemplified; or
- b. that is identified with historic personages or with important events in the main currents of national, State or local history; or
- c. that embodies the distinguishing characteristics of an architectural type specimen, inherently valuable for a study of a period, style or method of construction; or
- d. that is a notable work of a master builder, designer, or architect whose individual genius influenced his or her age.

A proposed resource may be eligible for local designation as a Historic-Cultural Monument if it meets at least one of the criteria above.

Los Angeles Unified School District

The *LAUSD Historic Context Statement, 1870-1969* (LAUSD HCS) (Sapphos Environmental, Inc., 2014) establishes guidelines for evaluating the significance of LAUSD campuses. The LAUSD HCS outlines historic contexts and themes, with eligibility standards, character-defining features, and integrity considerations for each. Collins Street ES campus was considered under the appropriate contexts and themes, and associated property types, period of significance, areas of significance, and geographic location. The applicable eligibility standards, character-defining features, and integrity considerations for both individual significance and significance as a historic district are provided in the LAUSD HCS (Sapphos Environmental, Inc., 2014:141-143). The context and theme that apply to Collins Street ES are as follows:

Area of Significance: A/1

Context: Public and Private Institutional Development/Education

Theme: LAUSD/Educating the Baby Boom: Postwar Expansion and the Modern, Functional School Plant, 1945 to 1969

Property Type: Institutional/Educational
Property Subtypes: Elementary Schools, Junior High Schools, and High Schools
Period of Significance: 1945 to 1969
Area of Significance: Education
Geographic Location: Citywide; with concentrations in the San Fernando Valley and West Los Angeles

Area of Significance: C/3

The character-defining features of Mid-Century Modernism as expressed in LAUSD school buildings and campuses are outlined in the LAUSD HCS (Sapphos Environmental, Inc., 2014:126-127) and listed below:

- Horizontal design composition and massing; generally one or two stories
- Simple, geometric volumes
- Flat or shed roof, often with wide, cantilevered overhangs
- Exterior materials include stucco, brick, or concrete
- Modular design and planning
- Aesthetic qualities derive from use of simply treated materials and excellent craftsmanship
- Direct expression of structural systems, often in wood or steel post-and-beam
- Lack of historicizing ornament
- Generous expanses of fenestration, including bands of grouped multi-light windows
- Extensive use of sheltered exterior corridors, with flat or slightly sloped roofs supported by posts, piers, or pipe columns

EVALUATION OF ELIGIBILITY

ASM carefully considered whether Collins Street ES is eligible for listing in the NRHP and the CRHR under Criteria A/1, B/2, C/3, and D/4, as a City of Los Angeles HCM, and under the criteria outlined in the LAUSD HCS.

Under A/1, no evidence was found that the campus or its individual buildings are associated with events that have made a significant contribution to the broad patterns of history of the city, region, state, or nation. Collins Street ES displays many of the eligibility standards associated with a postwar, modernist LAUSD campus under Criteria A/1, such as a unified, functional site design with buildings oriented to outdoor spaces and one-story massing that is typical of elementary schools of the era in the District. The campus also retains most of the character-defining features from the period of significance, including interconnection of classrooms and other buildings through the incorporation of courtyards and open arcades for circulation, and expression of informality on a domestic scale that integrates with the surrounding residential neighborhood. The campus displays low horizontal massing, geometric ordering of buildings as related to outdoor spaces, a lack of historicizing elements, and association with post-World War II suburbanization with a large expanse of land utilized for landscaping and playing fields. However, the campus does not display a particular pattern of relationships among the buildings or between the buildings and the landscape. The rather ordinary site plan also does not express the functions of the individual buildings in any specific manner. Additionally, the back-to-back classroom configuration and the moderate fenestration do not typify LAUSD campuses under this context and theme, which often express a strong connection with the outdoors through doors and wide expanses of windows on two sides of single-classroom buildings oriented to the sun and to admit plentiful fresh air. The campus is not an outstanding example of a functionalist school plant and is not a good representation of this era in LAUSD school development. Therefore, Collins Street ES is recommended not eligible under Criteria A/1.

The campus was not found to be associated with the lives of significant persons; therefore, Collins Street ES is recommended not eligible under Criteria B/2.

The campus site plan and its individual buildings display character-defining elements of the Mid-Century Modern architectural style, as described in the LAUSD HCS. Features present include horizontal orientation, use of simple geometric forms, lack of historicizing ornament, smooth stucco exterior walls, low-pitched gabled roofs with cantilevered overhangs, and extensive use of sheltered corridors with flat roofs minimally supported by pipe columns. However, the campus does not embody the characteristics of the Mid-Century-Modern style, or of the period, region, or method of construction and is not a good representation of the style in comparison with other schools in LAUSD. The architect, Harry Thomas MacDonald, was not particularly prolific and could not be considered a master architect. Carefully considering all of this, ASM recommends Collins Street ES not eligible under Criteria C/3.

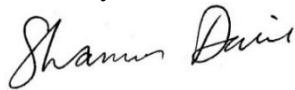
Additionally, Collins Street ES is not eligible as a City of Los Angeles HCM under the comparable criteria a, b, or c, following the same rationale outlined above.

CONCLUSION

ASM carefully considered the potential significance of Collins Street ES under the criteria described in this report. ASM recommends the campus not eligible either individually or as a historic district for the NRHP, the CRHR, or as a Los Angeles HCM. The campus does not rise to the level of historic significance under the guidelines set forth by the LAUSD HCS. As such, ASM finds that Collins Street ES is not a historic resource in accordance with CEQA.

Please contact me as needed, if you have questions or concerns.

Sincerely,



Shannon Davis
Director, Architectural Historian
ASM Affiliates, Inc.
20 North Raymond Avenue, Suite 220
Pasadena, California 91103
(626) 793-7395
sdavis@asmaffiliates.com

Attachment A: Figures
Attachment B: DPR Forms

REFERENCES

Architectural Resources Group, Inc.

- 2013 *Historic Resources Survey Report: Canoga Park – Winnetka – Woodland Hills – West Hills Community Plan Area*. Prepared for City of Los Angeles Department of City Planning Office of Historic Resources. March 12, 2013.

Los Angeles Daily News

- 2013 “LAUSD Revives Effort to Reopen Four Blighted West Valley Schools.” September 8.

Los Angeles Times

- 1959 “4 Schools Ready for Construction.” *Los Angeles Times*. August 23.
1960 “12 New Schools to Open Doors Next September.” *Los Angeles Times*. April 19, 1960.

Moreland, Pamela

- 1984 “Closed Because of Low Enrollment: 1 of 2 Canoga Park Schools Sold at Auction.” *Los Angeles Times*. November 14, 1984.

National Park Service, National Register of Historic Places

- 1997 *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin No. 15. Washington, D.C.

Office of Historic Preservation

- 1995 *Instructions for Recording Historical Resources*.
2001 *How to Nominate a Resource to the California Register of Historical Resources*. Technical Assistance Series #7.

Pacific Coast Architecture Database (PCAD); available at <http://pcad.lib.washington.edu/>; accessed January 26, 2017.

Sapphos Environmental, Inc.

- 2014 *LAUSD Historic Context Statement, 1870-1969*. Prepared for LAUSD by Sapphos Environmental, Inc.

Wilcox, Gregory J.

- 2014 “4 Shuttered LAUSD Schools in West San Fernando Valley May House Charters.” *Los Angeles Daily News*, October 27, 2014.

Attachment A. FIGURES



Figure 1. Project location map within Los Angeles County.

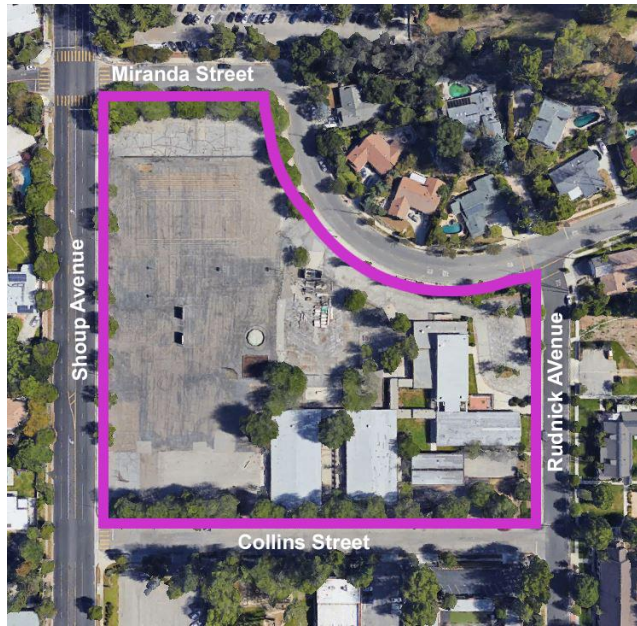


Figure 2. Location map of project vicinity.

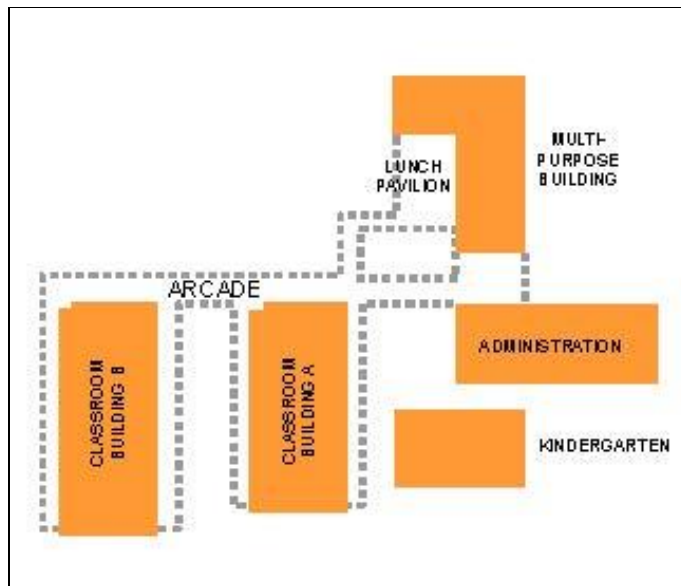


Figure 3. Site plan of historic district contributors.



Figure 4. View looking southwest at the east and north façades of the Multi-Purpose Building. Source: ASM. February 9, 2017



Figure 5. Detail view of the entrance on the east façade of the Multi-Purpose Building.
Source: ASM. February 9, 2017



Figure 6. View looking north at the south entrance to the assembly room in the Multi-Purpose Building. Source: ASM. February 9, 2017



Figure 7. View looking northwest at the main entrance to the school, with the Main Building on the left and the Multi-Purpose Building on the right.
Source: ASM. February 9, 2017



Figure 8. View looking southeast at the west side of the main entrance from the interior of the campus. Source: ASM. February 9, 2017



Figure 9. View looking southwest at the interior of the assembly room.
Source: ASM. February 9, 2017



Figure 10. View looking northwest of the interior of the teachers' dining area.
Source: ASM. February 9, 2017



Figure 11. View looking northeast at the lunch pavilion, with the two wings of the Multi-Purpose Building to the rear. Source: ASM. February 9, 2017



Figure 12. View looking southwest at the planters west of the Multi-Purpose Building.
Source: ASM. February 9, 2017



Figure 13. View looking west at the east façade of the Main Building.
Source: ASM. February 9, 2017



Figure 14. View looking northeast at the patio north of the Main Building.
Source: ASM. February 9, 2017



Figure 15. View looking southeast at the north façade of the Main Building.
Source: ASM. February 9, 2017



Figure 16. View looking northwest at the south façade of the Main Building.
Source: ASM. February 9, 2017



Figure 17. View looking northeast at the west and south façades of the Main Building.
Source: ASM. February 9, 2017



Figure 18. View looking northwest at the east façade of Classroom Building A.
Source: ASM. February 9, 2017



Figure 19. View looking northwest at the south and east façades of Classroom Building B.
Source: ASM. February 9, 2017



Figure 20. View looking northwest at the landscaped area between Classroom Buildings A and B. Source: ASM. February 9, 2017



Figure 21. View looking northeast at the west façade of Classroom Building A.
Source: ASM. February 9, 2017



Figure 22. View looking southeast at the west façade of Classroom Building A.
Source: ASM. February 9, 2017



Figure 23. View looking south at the north façade of Classroom Building A.
Source: ASM. February 9, 2017



Figure 24. View looking northeast at the west façade of Classroom Building B.
Source: ASM. February 9, 2017



Figure 25. View looking east at the west façade of Classroom Building B.
Source: ASM. February 9, 2017



Figure 26. View of interior of Classroom Building A.
Source: ASM. February 9, 2017



Figure 27. View looking northwest at the south and east façades of the Kindergarten Building. Source: ASM. February 9, 2017



Figure 28. View looking southwest at the east and north façades of the Kindergarten Building. Source: ASM. February 9, 2017



Figure 29. View looking south at the arcade system.
Source: ASM. February 9, 2017



Figure 30. View looking southeast at the arcade system.
Source: ASM. February 9, 2017



Figure 31. View looking northeast at the central arcade.
Source: ASM. February 9, 2017



Figure 31. View looking northeast at the arcade system.
Source: ASM. February 9, 2017



Figure 32. View looking east at the central arcade.
Source: ASM. February 9, 2017

Attachment B. DPR FORMS

Page 1 of 5

*Resource Name or #: Collins Street Elementary School

D1. Historic Name: East of Woodlake School

D2. Common Name: _____

*D3. Detailed Description: (Describe overall coherence of the district, its setting, visual characteristics, and minor features. List all elements of district.)

Collins Street Elementary School (ES) is a Los Angeles Unified School District (LAUSD) school at 5717 Rudnick Avenue in the Woodland Hills neighborhood of Los Angeles, Los Angeles County, California.

*D4. Boundary Description: (Describe limits of district and attach map showing boundary and district elements.)

The approximately 6.56-acre Collins Street Elementary School campus is located on the western side of the San Fernando Valley, bounded by Miranda Street to the north,¹ Rudnick Avenue to the east, Collins Street to the south, and Shoup Avenue to the west.

*D5. Boundary Justification:

N/A

D6. Significance: Theme N/A

Area Los Angeles, California

Period of Significance N/A

Applicable Criteria N/A

(Discuss district's importance in terms of its historical context as defined by theme, period of significance, and geographic scope. Also address the integrity of the district as a whole.)

ASM carefully considered whether Collins Street Elementary School (ES) is eligible for listing as a historic district in the NRHP and the CRHR under Criteria A/1, B/2, and C/3 and under the registration requirements outlined in the LAUSD HCS.

Under A/1, no evidence was found that the campus or its individual buildings are associated with events that have made a significant contribution to the broad patterns of our history. Collins Street ES displays many of the eligibility standards associated with a postwar, modernist LAUSD campus under Criterion A/1, such as a unified, functional site design with buildings oriented to outdoor spaces and one-story massing that is typical of elementary schools of the era in the District. The campus consists of a collection of related buildings, landscape, and hardscape that together exhibit many of the site plan features and components typical of postwar campuses from this era, as described in the LAUSD HCS. These features include interconnection of classrooms and other buildings through the incorporation of courtyards and open arcades for circulation, and expression of informality on a domestic scale that integrates with the surrounding residential neighborhood. The campus displays low horizontal massing, geometric ordering of buildings as related to outdoor spaces, a lack of historicizing elements, and association with post-World War II suburbanization with a large expanse of land utilized for landscaping and playing fields. However, the campus does not display a particular pattern of relationships among the buildings or between the buildings and the landscape. The rather ordinary site plan also does not express the functions of the individual buildings in any specific manner. Additionally, the back-to-back classroom configuration and the moderate fenestration do not typify LAUSD campuses under this context and theme, which often express a strong connection with the outdoors through doors and wide expanses of windows on two sides of single-classroom buildings oriented according to the sun and admit plentiful fresh air. The campus is not an outstanding example of a functionalist school plant and is not a good representation of this era in LAUSD school development. Therefore, Collins Street ES is recommended not eligible as a historic district under Criteria A/1.

The campus was not found to be associated with the lives of significant persons; therefore, Collins Street ES is recommended not eligible as a historic district under Criteria B/2.

(Continued on page 6)

D7. References (Give full citations including the names and addresses of any informants, where possible.):

Historic Resource Evaluation Report for Collins Street Elementary School, Los Angeles, Los Angeles County, California. Prepared for LAUSD by ASM Affiliates, Inc. June 2016.

Los Angeles Unified School District. *Los Angeles Unified School District Historic Context Statement, 1870-1969*. Prepared for LAUSD by Sapphos Environmental, Inc. March 2014.

*D8. Evaluator: Shannon Davis and Marilyn Novell Date: March 2017

Affiliation and Address: ASM Affiliates, Inc., 20 N. Raymond Ave., Suite 220, Pasadena, CA

¹ The northeastern, curved segment of Miranda Street was labeled Nita Avenue in original architectural drawings of the school. Miranda Street currently refers to both segments.

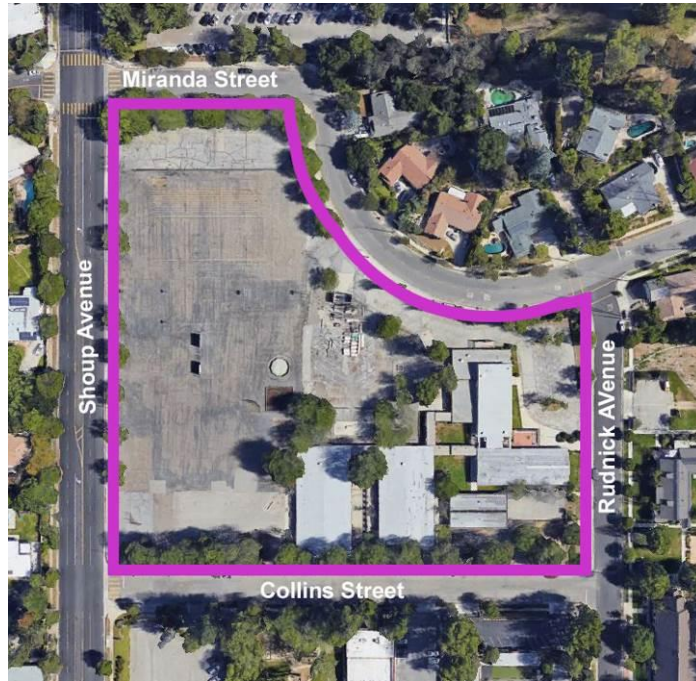
*Map Name: Collins Street Elementary School
Location Map. Source: ASM Affiliates

*Resource Name or # (Assigned by recorder)

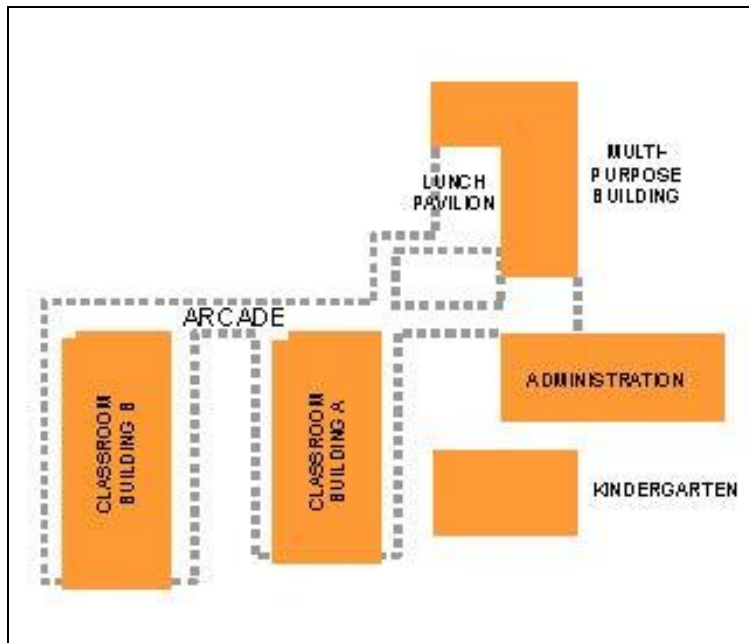
*Scale: N/A

Collins Street Elementary School

*Date of Map: March 2017



Collins Street Elementary School location map.



Site plan of Collins Street Elementary School.



Image 1. Overview of the campus, looking southwest.
Source: ASM, February 9, 2017



Image 2. Circular drive at entrance to school, looking north from the Main Building.
Source: ASM, February 9, 2017



Image 3. Overview of the campus looking south.



Image 4. Overview of the campus looking west.

CONTINUATION SHEET

Primary # _____

HRI # _____

Trinomial _____

Page 5 of 5

*Resource Name or # (Assigned by recorder)

Collins Street Elementary School

Recorded by: Shannon Davis and Marilyn Novell

Date: March 2017

Continuation Update

D6. Significance: (Continued from page 1)

The campus site plan and its individual buildings display typical elements of the Mid-Century Modern architectural style, as described in the LAUSD HCS. Features present include horizontal orientation, use of simple geometric forms, lack of historicizing ornament, smooth stucco exterior walls, low-pitched gabled roofs with cantilevered overhangs, and extensive use of sheltered corridors with flat roofs minimally supported by pipe columns. However, the campus does not embody the characteristics of the Mid-Century-Modern style, or of the period, region, or method of construction and is not a good representation of the style in comparison with other schools in LAUSD. The architect, Harry Thomas MacDonald, was not particularly prolific and could not be considered a master architect. Carefully considering all of this, ASM recommends Collins Street ES not eligible as a historic district under Criteria C/3.

State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
 HRI # _____
 Trinomial _____
 NRHP Status Code _____

Other Listings _____
 Review Code _____ Reviewer _____ Date _____

Page 1 of 4 *Resource Name or #: Multi-Purpose Building, Collins Street Elementary School

P1. Other Identifier: Building 7

*P2. Location: Not for Publication Unrestricted

*a. County: Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Canoga Park Date 2015 T 2N R 16W; SE ¼ of NE ¼ of Sec 34; S.B. B.M.

c. Address 5717 Rudnick Avenue City Los Angeles Zip _____

d. UTM: (give more than one for large and/or linear resources) Zone 11 S 351346.45 mE/ 3782604.87 mN; _____

e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 2146-004-904

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Multi-Purpose Building is a 6,742-square-foot, stucco-clad L-shaped building near the corner of Miranda Street and Rudnick Avenue adjacent to the Collins Street Elementary School parking areas. As the tallest and most distinct building, it anchors the small complex of campus buildings and bears the sign identifying the school and address in Mid-Century-Modern–style cut-out aluminum letters. The main mass of the building, which houses an assembly room, a kitchen, and faculty dining area, is capped with a moderately pitched shed roof. A set of double flat metal doors sheltered by a small flat cantilevered canopy with an upward-canted fascia is located at the east façade, and there is an additional entrance at the west façade. The primary entrance is recessed at the south façade and is set into walls clad in one-inch ceramic tile in random patterns of gray, white, and maroon. A wood grille to the left of the entrance provides access to the interior of the campus. The interior of the assembly room is organized in a combination of a classic proscenium-type theater with raked fixed

(continued on page 2)

*P3b. Resource Attributes: (List attributes and codes) HP15. Educational Building. HP29. Landscape architecture

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
 View looking southwest at the east and north façades of the Multi-Purpose Building. Source: ASM, February 9, 2017

*P6. Date Constructed/Age and Source:
 Historic Prehistoric Both
 1959
 LAUSD records

*P7. Owner and Address:
 Los Angeles Unified School District
 333 S Beaudry Ave, Los Angeles, CA 90017

*P8. Recorded by: (Name, affiliation, and address)
 Shannon Davis and Marilyn Novell
 ASM Affiliates, Inc.
 20 N. Raymond Ave., Suite 220
 Pasadena, CA 91103

*P9. Date Recorded: February 9, 2017

*P10. Survey Type: (Describe) Intensive pedestrian survey

*P11. Report Citation: (cite survey report and sources, or enter "none.") Historic Resource Evaluation Report for Collins Street Elementary School, Woodland Hills, Los Angeles County, California. ASM Affiliates, Inc., March 2017.

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List): _____

Page 2 of 4
Recorded by: Shannon Davis and Marilyn Novell

*Resource Name or # (Assigned by recorder)

Multi-Purpose Building, Collins Street Elementary School

Date: March 2017

Continuation Update

***P3a. Description** (continued from page 1):

folding plywood seating and a raised stage, along with a flat area toward the front to allow flexible use of the space as a cafeteria, assembly room, and theater. Folding cafeteria-style tables and benches are stored in closets lining the sides of the room. The ceiling is smooth stucco with recessed round lighting fixtures and large circular vents. Walls are smooth stucco, and floors are covered in one-foot-square vinyl tiles. The stage floor is composed of wood planks. Modifications include an extension of the stage into the auditorium space.

A single-story shed-roof wing visually intersects the main part of the Multi-Purpose Building and houses the teachers' dining room and a kitchen. In the teachers' dining area, a flat metal door and four sets of two-light sliding steel windows are grouped within a narrow wood surround. A red-brick patio screened by a wood grille is located to the north outside of the area. A kitchen is located in the west end of the wing. Five horizontally oriented windows, which have been covered in plywood, are aligned on the west façade.

A lunch pavilion is connected to the west façade of the assembly room. It consists of a deep flat roof with stucco-clad sides that cant outward at the top. It is supported by steel columns and has a poured-concrete floor. To the west is an asphalt and concrete patio area with rectangular and square concrete masonry unit planters containing mature trees.



Image 1. Detail view of the entrance on the east façade of the Multi-Purpose Building.
Source: ASM, February 9, 2017

Primary # _____

HRI # _____

Trinomial _____

Page 3 of 4 *Resource Name or # (Assigned by recorder)
Recorded by: Shannon Davis and Marilyn Novell

Multi-Purpose Building, Collins Street Elementary School

Date: March 2017

Continuation Update



Image 2. View looking north at the south entrance to the assembly room in the Multi-Purpose Building. Source: ASM, February 9, 2017



Image 3. View looking northwest at the main entrance to the school, with the Main Building on the left and the Multi-Purpose Building on the right. Source: ASM, February 9, 2017

Primary # _____

HRI # _____

Trinomial _____

Page 4 of 4 *Resource Name or # (Assigned by recorder)
Recorded by: Shannon Davis and Marilyn Novell

Multi-Purpose Building, Collins Street Elementary School

Date: March 2017

Continuation Update



Image 4. View looking northeast at the lunch pavilion, with the two wings of the Multi-Purpose Building to the rear. Source: ASM. February 9, 2017



Image 5. View looking southwest at the interior of the assembly room. Source: ASM. February 9, 2017

State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
 HRI # _____
 Trinomial _____
 NRHP Status Code _____

Other Listings _____
 Review Code _____ Reviewer _____ Date _____

Page 1 of 4 *Resource Name or #: Main Building, Collins Street Elementary School

P1. Other Identifier: Building 8

*P2. Location: Not for Publication Unrestricted

*a. County: Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Canoga Park Date 2015 T 2N R 16W; SE ¼ of NE ¼ of Sec 34; S.B. B.M.

c. Address 5717 Rudnick Avenue City Los Angeles Zip _____

d. UTM: (give more than one for large and/or linear resources) Zone 11 S 351346.45 mE/ 3782604.87 mN; _____

e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 2146-004-904

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The 4,106-square-foot Main Building, located south of the Multi-Purpose Building, houses the library, the nurse's offices, and administrative offices. The low-pitched side-gabled building is clad in smooth stucco and has wide cantilevered overhanging eaves on the north and south façades forming shelters for the walkways beneath. On the north façade is a series of flat metal doors, providing access to both offices and utility rooms. On the south façade are three flat metal doors with low concrete porches. Each door is grouped with sets of two-light sliding and fixed steel windows. A wood grille screens the windows on the east façade, and a patio to the north of the Main Building is screened by an additional wood grille.

(continued on page 2)

*P3b. Resource Attributes: (List attributes and codes) HP15. Educational Building. HP29. Landscape architecture

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
 View looking west at the east façade of the Main Building.
 Source: ASM, February 9, 2017

*P6. Date Constructed/Age and Source:
 Historic Prehistoric Both
 1959
 LAUSD records

*P7. Owner and Address:
 Los Angeles Unified School District
 333 S Beaudry Ave, Los Angeles, CA 90017

*P8. Recorded by: (Name, affiliation, and address)
 Shannon Davis and Marilyn Novell
 ASM Affiliates, Inc.
 20 N. Raymond Ave., Suite 220
 Pasadena, CA 91103

*P9. Date Recorded: February 9, 2017

*P10. Survey Type: (Describe) Intensive pedestrian survey

*P11. Report Citation: (cite survey report and sources, or enter "none.") Historic Resource Evaluation Report for Collins Street Elementary School, Woodland Hills, Los Angeles County, California. ASM Affiliates, Inc., March 2017.

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List):

Primary # _____

HRI # _____

Trinomial _____

Page 2 of 4

*Resource Name or # (Assigned by recorder)

Recorded by: Shannon Davis and Marilyn Novell

Main Building, Collins Street Elementary School

Date: March 2017

Continuation Update

***P3a. Description** (continued from page 1):

The interior spaces include a moderately sized library with a separate textbook room, a supply room, a work room, storage for audio-visual equipment, utility rooms, the principal's office, a conference room, a clerk's area separated from the public entrance by a counter, a conference room, the nurse's area, and restrooms.



Image 1. View looking northeast at the patio north of the Main Building.
Source: ASM, February 9, 2017

Primary # _____

HRI # _____

Trinomial _____

Page 3 of 4

Recorded by: Shannon Davis and Marilyn Novell

*Resource Name or # (Assigned by recorder)

Main Building, Collins Street Elementary School

Date: March 2017

Continuation Update



Image 2. View looking southeast at the north façade of the Main Building.
Source: ASM, February 9, 2017



Image 3. View looking northwest at the south façade of the Main Building.
Source: ASM, February 9, 2017

Primary # _____

HRI # _____

Trinomial _____

Page 4 of 4

Recorded by: Shannon Davis and Marilyn Novell

*Resource Name or # (Assigned by recorder)

Main Building, Collins Street Elementary School

Date: March 2017

Continuation Update



Image 4. View looking northeast at the west and south façades of the Main Building.
Source: ASM. February 9, 2017

State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
 HRI # _____
 Trinomial _____
 NRHP Status Code _____

Other Listings _____
 Review Code _____ Reviewer _____ Date _____

Page 1 of 4 *Resource Name or #: Classroom Building A, Collins Street Elementary School

P1. Other Identifier: Building 5

*P2. Location: Not for Publication Unrestricted

*a. County: Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Canoga Park Date 2015 T 2N R 16W; SE ¼ of NE ¼ of Sec 34; S.B. B.M.

c. Address 5717 Rudnick Avenue City Los Angeles Zip _____

d. UTM: (give more than one for large and/or linear resources) Zone 11 S 351346.45 mE/ 3782604.87 mN; _____

e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 2146-004-904

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Classroom Building A (Building 5) is a Mid-Century-Modern-style building with a rectangular sitting on a poured-concrete foundation. It is clad in smooth stucco and capped with a low-pitched side-gabled roof covered in asphalt roll material with generous cantilevered overhangs and deep, flat wood fascias. Back-to-back classrooms open onto two primary façades. The wide cantilevered eaves have minimal metal cylindrical supports and provide shelter for the corridors below. Steel-framed windows are grouped in four sets of four, with fixed and horizontally sliding portions. Below the windows is a row of wood paneling. Windows are generally arranged in groups with a flat wood door at each end. The gable ends of the building lack fenestration other than doors to restrooms and utility rooms.

(continued on page 2)

*P3b. Resource Attributes: (List attributes and codes) HP15. Educational Building. HP29. Landscape architecture

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
 View looking northwest at the east façade of Classroom Building A.
 Source: ASM, February 9, 2017

*P6. Date Constructed/Age and Source:
 Historic Prehistoric Both
 1959
 LAUSD records

*P7. Owner and Address:
 Los Angeles Unified School District
 333 S Beaudry Ave, Los Angeles, CA 90017

*P8. Recorded by: (Name, affiliation, and address)
 Shannon Davis and Marilyn Novell
 ASM Affiliates, Inc.
 20 N. Raymond Ave., Suite 220
 Pasadena, CA 91103

*P9. Date Recorded: February 9, 2017

*P10. Survey Type: (Describe) Intensive pedestrian survey

*P11. Report Citation: (cite survey report and sources, or enter "none.") Historic Resource Evaluation Report for Collins Street Elementary School, Woodland Hills, Los Angeles County, California. ASM Affiliates, Inc., March 2017.

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List):

Primary # _____

HRI # _____

Trinomial _____

Page 2 of 4

*Resource Name or # (Assigned by recorder)

Recorded by: Shannon Davis and Marilyn Novell

Classroom Building A, Collins Street Elementary School

Date: March 2017

Continuation Update

***P3a. Description** (continued from page 1):

At the interior, the classrooms have 12 x 12-inch vinyl tile flooring and acoustical tile ceilings. The classrooms that were accessible during the survey had built-in wood cabinets.



Image 1. View looking northeast at the west façade of Classroom Building A.
Source: ASM, February 9, 2017

Primary # _____

HRI # _____

Trinomial _____

Page 3 of 4

*Resource Name or # (Assigned by recorder)

Classroom Building A, Collins Street Elementary School

Recorded by: Shannon Davis and Marilyn Novell

Date: March 2017

Continuation Update



Image 2. View looking southeast at the west façade of Classroom Building A.
Source: ASM, February 9, 2017



Image 3. View looking south at the north façade of Classroom Building A.
Source: ASM, February 9, 2017

Primary # _____

HRI # _____

Trinomial _____

Page 4 of 4

Recorded by: Shannon Davis and Marilyn Novell

*Resource Name or # (Assigned by recorder)

Classroom Building A, Collins Street Elementary School

Date: March 2017

Continuation Update



Image 4. View of interior of Classroom Building A.
Source: ASM. February 9, 2017

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 2 *Resource Name or #: Classroom Building B, Collins Street Elementary School

P1. Other Identifier: Building 3

*P2. Location: Not for Publication Unrestricted

*a. County: Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Canoga Park Date 2015 T 2N R 16W; SE ¼ of NE ¼ of Sec 34; S.B. B.M.

c. Address 5717 Rudnick Avenue City Los Angeles Zip _____

d. UTM: (give more than one for large and/or linear resources) Zone 11 S 351346.45 mE/ 3782604.87 mN; _____

e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 2146-004-904

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Classroom Building B (Building 3) is a Mid-Century-Modern-style building with a rectangular plan sitting on a poured-concrete foundation. It is clad in smooth stucco and capped with a low-pitched side-gabled roof covered in asphalt roll material with generous cantilevered overhangs and deep, flat wood fascias. Back-to-back classrooms open onto two primary façades. The wide cantilevered eaves have minimal metal cylindrical supports and provide shelter for the corridors below. Steel-framed windows are grouped in four sets of four, with fixed and horizontally sliding portions. Below the windows is a row of wood paneling. Windows are generally arranged in groups with a flat wood door at each end. The gable ends of the building lack fenestration other than doors to restrooms or utility rooms.

(continued on page 2)

*P3b. Resource Attributes: (List attributes and codes) HP15. Educational Building. HP29. Landscape architecture

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking northeast at the west façade of Classroom Building B.
Source: ASM, February 9, 2017

*P6. Date Constructed/Age and Source:

Historic Prehistoric Both
1959
LAUSD records

*P7. Owner and Address:

Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

*P8. Recorded by: (Name, affiliation, and address)

Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

*P9. Date Recorded: February 9, 2017

*P10. Survey Type: (Describe) Intensive pedestrian survey

*P11. Report Citation: (cite survey report and sources, or enter "none.") Historic Resource Evaluation Report for Collins Street Elementary School, Woodland Hills, Los Angeles County, California. ASM Affiliates, Inc., March 2017.

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List):

Primary # _____

HRI # _____

Trinomial _____

Page 2 of 2

*Resource Name or # (Assigned by recorder)

Recorded by: Shannon Davis and Marilyn Novell

Classroom Building B, Collins Street Elementary School

Date: March 2017

Continuation Update

***P3a. Description** (continued from page 1):

At the interior, the classrooms have 12 x 12-inch vinyl tile flooring and acoustical tile ceilings. The classrooms that were accessible during the survey had built-in wood cabinets.



Image 1. View looking east at the west façade of Classroom Building B.
Source: ASM, February 9, 2017

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 2 *Resource Name or #: Kindergarten Building, Collins Street Elementary School

P1. Other Identifier: Building 6

*P2. Location: Not for Publication Unrestricted

*a. County: Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Canoga Park Date 2015 T 2N R 16W; SE ¼ of NE ¼ of Sec 34; S.B. B.M.

c. Address 5717 Rudnick Avenue City Los Angeles Zip _____

d. UTM: (give more than one for large and/or linear resources) Zone 11 S 351346.45 mE/ 3782604.87 mN; _____

e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 2146-004-904

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Kindergarten Building (Building 6) is a Mid-Century-Modern-style building with a rectangular plan sitting on a poured-concrete foundation. It is clad in smooth stucco and capped with a low-pitched side-gabled roof covered in asphalt roll material with generous cantilevered overhangs and deep, flat wood fascias. It houses two large side-by-side classrooms. The windows and primary entrance doors are on the south façade, where they open onto a fenced play area. At the north façade are two doors and a row of lockers. The gable ends lack fenestration.

(continued on page 2)

*P3b. Resource Attributes: (List attributes and codes) HP15. Educational Building. HP29. Landscape architecture

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking northwest at the south and east façades of the Kindergarten Building.
Source: ASM, February 9, 2017

*P6. Date Constructed/Age and Source:

Historic Prehistoric Both
1959
LAUSD records

*P7. Owner and Address:

Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

*P8. Recorded by: (Name, affiliation, and address)

Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

*P9. Date Recorded: February 9, 2017

*P10. Survey Type: (Describe) Intensive pedestrian survey

*P11. Report Citation: (cite survey report and sources, or enter "none.") Historic Resource Evaluation Report for Collins Street Elementary School, Woodland Hills, Los Angeles County, California. ASM Affiliates, Inc., March 2017.

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List):

Primary # _____

HRI # _____

Trinomial _____

Page 2 of 2

*Resource Name or # (Assigned by recorder)

Recorded by: Shannon Davis and Marilyn Novell

Kindergarten Building, Collins Street Elementary School

Date: March 2017

Continuation Update

***P3a. Description** (continued from page 1):

At the interior, the classrooms have 12 x 12-inch vinyl tile flooring and acoustical tile ceilings. The classrooms that were accessible during the survey had built-in wood cabinets.



Image 1. View looking northeast at the west façade of Classroom Building A.
Source: ASM, February 9, 2017

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 3 *Resource Name or #: Arcade, Collins Street Elementary School

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted

*a. County: Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Canoga Park Date 2015 T 2N R 16W; SE ¼ of NE ¼ of Sec 34; S.B. B.M.

c. Address 5717 Rudnick Avenue City Los Angeles Zip _____

d. UTM: (give more than one for large and/or linear resources) Zone 11 S 351346.45 mE/ 3782604.87 mN; _____

e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 2146-004-904

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Arcade consists of multiple segments of flat-roofed canopies with cylindrical metal supports and flat wood fascias that connect to the overhanging eaves of the buildings and together provide shelter for circulation throughout the campus. The ceilings of the arcade are clad in smooth stucco. Between the Multi-Purpose Building and the Main Building, the arcade is cut out to allow natural light to the walkway below.

(continued on page 2)

*P3b. Resource Attributes: (List attributes and codes) HP15. Educational Building

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking northeast at the central arcade. Source: ASM, February 9, 2017

*P6. Date Constructed/Age and Source:
 Historic Prehistoric Both
1959
LAUSD records

*P7. Owner and Address:
Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

*P8. Recorded by: (Name, affiliation, and address)
Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

*P9. Date Recorded: February 9, 2017

*P10. Survey Type: (Describe) Intensive pedestrian survey

*P11. Report Citation: (cite survey report and sources, or enter "none.") Historic Resource Evaluation Report for Collins Street Elementary School, Woodland Hills, Los Angeles County, California. ASM Affiliates, Inc., March 2017.

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List): _____

Primary # _____

HRI # _____

Trinomial _____

Page 2 of 3

Recorded by: Shannon Davis and Marilyn Novell

*Resource Name or # (Assigned by recorder)

Arcade, Collins Street Elementary School

Date: March 2017

Continuation Update



Image 1. View looking southeast at the arcade system.
Source: ASM, February 9, 2017



Image 2. View looking east at the central arcade.
Source: ASM, February 9, 2017

Primary # _____

HRI # _____

Trinomial _____

Page 3 of 3

*Resource Name or # (Assigned by recorder)

Arcade, Collins Street Elementary School

Recorded by: Shannon Davis and Marilyn Novell

Date: March 2017

Continuation Update



Image 3. View looking southeast at the arcade system.
Source: ASM, February 9, 2017



Image 4. View looking south at the system of arcades.
Source: ASM. February 9, 2017

APPENDIX D

**Traffic Impact Study for LAUSD Collins Street Elementary School
Demolition**

**Traffic Study for
LAUSD Collins Street Elementary School Demolition
Los Angeles, California**

April 28, 2017

Prepared For:

Impact Sciences, Inc.
638 E. Colorado Boulevard, Suite 301
Pasadena, CA 91101

Prepared by:



1100 Corporate Center Drive, Suite 201
Monterey Park, California 91754
(323) 260-4703

JB11057-004

Table of Contents

EXECUTIVE SUMMARY	1
ANALYSIS CONCLUSIONS	1
I. INTRODUCTION	1
PROJECT STUDY AREA.....	1
PROJECT ACCESS.....	4
ANALYSIS METHODOLOGY.....	4
2. EXISTING CONDITIONS.....	8
EXISTING ROADWAY SYSTEM.....	8
EXISTING TRAFFIC VOLUMES.....	10
EXISTING INTERSECTION LEVELS OF SERVICE.....	10
3. PROJECT TRAFFIC	13
PROJECT TRIP GENERATION.....	13
PROJECT TRIP DISTRIBUTION	14
PROJECT TRIP ASSIGNMENT.....	14
4. EXISTING PLUS-PROJECT CONDITIONS.....	18
5. PROJECT TRAFFIC IMPACTS AND SITE ACCESS	21
DETERMINATION OF TRAFFIC IMPACTS	21
RESULTS OF IMPACT ANALYSIS FOR EXISTING BASELINE CONDITIONS.....	21

List of Figures

FIGURE 1: STUDY AREA AND INTERSECTIONS	2
FIGURE 2: PRELIMINARY SITE PLAN	3
FIGURE 3: EXISTING INTERSECTION GEOMETRY	9
FIGURE 4: EXISTING (2017) AM PEAK HOUR TRAFFIC VOLUMES	11
FIGURE 5: EXISTING (2017) PM PEAK HOUR TRAFFIC VOLUMES	12
FIGURE 6: PROJECT TRIP DISTRIBUTION	15
FIGURE 7: PROJECT ONLY AM PEAK HOUR TRAFFIC VOLUMES	16
FIGURE 8: PROJECT ONLY PM PEAK HOUR TRAFFIC VOLUMES	17
FIGURE 9: EXISTING PLUS-PROJECT AM PEAK HOUR TRAFFIC VOLUMES	19
FIGURE 10: EXISTING PLUS-PROJECT PM PEAK HOUR TRAFFIC VOLUMES	20

List of Tables

TABLE 1: LEVEL OF SERVICE DEFINITIONS	6
TABLE 2: STUDY AREA ROADWAY DESCRIPTIONS	8
TABLE 3: EXISTING PEAK-HOUR LEVEL OF SERVICE SUMMARY	10
TABLE 4: PROJECT TRIP GENERATION	13
TABLE 5: EXISTING PLUS-PROJECT PEAK-HOUR	18
TABLE 6: PROJECT IMPACT SUMMARY FOR EXISTING BASELINE CONDITIONS	22

Appendices

APPENDIX A – TRAFFIC COUNT DATA	
APPENDIX B – SIGNALIZED INTERSECTION ANALYSIS WORKSHEETS - LADOT CRITICAL MOVEMENT ANALYSIS SPREADSHEET	
APPENDIX C – INTERSECTION ANALYSIS WORKSHEETS – EXISTING CONDITIONS	
APPENDIX D – INTERSECTION ANALYSIS WORKSHEETS – EXISTING PLUS-PROJECT CONDITIONS	

Executive Summary

This traffic study report was produced for the Los Angeles Unified School District (LAUSD) by KOA, for use in related environmental documentation for the proposed Collins Street Elementary School campus demolition project. The Project site is located within the City of Los Angeles and therefore the local area falls within the jurisdiction of the City of Los Angeles Department of Transportation (LADOT).

Analysis Conclusions

The following text summarizes the traffic study results and conclusions:

- The proposed Project only focuses on demolition. Thus, no enrollment numbers are included or analyzed in this study because there are no operational components associated with this Project. The project is expected to be completed by the year 2017.
- The study area for this Project traffic impact analysis included four intersections within local jurisdictions on area travel routes and in the vicinity of the proposed Project site.
- Under the existing conditions analysis, three of the study intersections are operating at LOS D or better and one is operating at LOS E or F during the a.m. and p.m. peak hours.
- The four trucks and fifteen employees included in the proposed demolition Project would generate 35 weekday a.m. peak-hour trips (25 inbound and 10 outbound) and 35 weekday p.m. peak-hour trips (10 inbound and 25 outbound).
- An existing plus-Project scenario was included in the impact analysis. Three of the study intersections would operate at LOS D or better and one would operate at LOS E or F with the Project under the existing baseline analysis.
- Based on the applied significant impact criteria, trips generated by construction of the Project would not create a significant traffic impact.

I. Introduction

This study report identifies the potential traffic impacts associated with the proposed demolition of buildings and structures located on the Collins Street Elementary School campus (Project). The proposed Project site is located at 5717 Rudnick Avenue in the City of Los Angeles community of Woodland Hills. The existing campus structures would be removed from the site within the year 2017.

The proposed Project would remove approximately 29,000 square feet of existing buildings on the existing site. The Project would entail the removal of at least 26 hazardous or dead. The remaining healthy trees and landscaping would not be altered. The existing asphalt and pavement would remain. The Project does not entail plans for use or development of the site following demolition. The demolition period will be approximately 50 days.

The Project site is located within the City of Los Angeles and therefore the local area falls within the jurisdiction of the City of Los Angeles Department of Transportation (LADOT).

Traffic impacts were analyzed for weekday AM and PM peak-hour traffic periods at the study intersections. The traffic analysis included the following traffic scenarios:

- Existing Year-2017 Conditions
- Existing plus-Project Construction Conditions

Project Study Area

The Project study area is defined by the following four study intersection locations:

1. Shoup Avenue / Miranda Street
2. Shoup Avenue / Collins Street*
3. Shoup Avenue / Burbank Boulevard
4. Topanga Canyon Boulevard / Burbank Boulevard

* *Unsignalized intersection.*

Figure 1 illustrates the locations of the study intersections and the Project site. Figure 2 provides the preliminary Project site plan.

Figure 1: Study Area and Intersections

Figure 2: Preliminary Site Plan

Project Access

Truck access to the Project would be provided on Miranda Street between Shoup Avenue and Rudnick Avenue and along Rudnick Avenue between Miranda Street and Collins Street. Existing schools are located to the south (Woodland Hills Private School and Creative Children Preschool) of the proposed Project site.

Analysis Methodology

The proposed Project site is located within the community of Woodland Hills in the City of Los Angeles. Definitions within the LADOT “Guidelines for Traffic Impact Analysis Reports” document were utilized to develop this traffic study. KOA coordinated with LADOT to produce and finalize the list of study intersections evaluated in this project. The following text describes the methodology applied to this report.

Existing 2017 Conditions

Fieldwork within the Project study area was undertaken to identify the condition of major roadways, to identify traffic control and approach lane configuration at each study intersection, and to identify the locations of on-street parking.

KOA compiled new manual intersection turn movement counts that were conducted at the study intersections on the following dates:

- Thursday, March 23, 2017
- Tuesday, March 28, 2017

The results of the counts were used to determine existing 2017 weekday AM and PM peak-hour conditions. It is known that the Woodland Hills Recreation Center is undergoing a reconstruction project that is also generating construction truck trips and daily employee trips in the area, primarily on Shoup Avenue. This trip generation was considered in the impact analysis.

Traffic count summaries are provided in Appendix A of this report. Existing level of service values at each of the four study intersections are discussed within Section 2 of this report.

Project Trip Generation and Distribution

Project trip generation calculations included demolition employee vehicle trips and demolition truck trip estimates. The trip generation totals were determined based on the most intense period of demolition activity for the project and assumed commuting patterns. The methodology utilized for Project trip distribution calculations is discussed further within Section 3 of this report.

Level of Service Methodology

For analysis of Level of Service (LOS) at signalized intersections within the City of Los Angeles, LADOT has designated the Circular 212 Planning methodology as the desired tool. The concept of roadway level of service under the Circular 212 method is calculated as the volume of vehicles that pass through the facility divided by the capacity of that facility. A facility is “at capacity” (V/C of 1.00 or greater) whereby extreme congestion occurs. This volume/capacity ratio value is a function of hourly volumes signal phasing, and approach lane configuration on each leg of the intersection.

SB 743 requires that the State Office of Planning and Research (OPR) change State CEQA guidelines for traffic significance thresholds to utilize new metrics, including vehicle miles traveled (VMT), in addition to LOS values. To date, OPR has not issued guidance upon these thresholds; therefore, VMTs were not used as the basis for assessing significance of impacts.

Level of service (LOS) values range from LOS A to LOS F. LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. LOS E is typically defined as the operating “capacity” of a roadway.

Table I defines the level of service criteria applied to the study intersections.

Table I: Level of Service Definitions

LOS	Interpretation	Signalized Intersection Volume to Capacity Ratio (CMA)	Signalized Intersection Average Delay (HCM)	Stop-Controlled Intersection Average Stop Delay (HCM)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.000 - 0.600	< 10 seconds	< 10 seconds
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.601 - 0.700	>10 and 20 sec	>10 and 15 sec
C	Good operation. Occasionally backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701 - 0.800	>20 and 35 sec	>15 and 25 sec
D	Fair operation. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 - 0.900	>35 and 55 sec	>35 and 35 sec
E	Poor operation. Some long standing vehicular queues develop on critical approaches.	0.901 - 1.000	>55 and 80 sec	>35 and 50 sec
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	Over 1.000	>80 seconds	>50 seconds
Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 2000 and Interim Materials on Highway Capacity, NCHRP Circular 212, 1982				

Traffic Signal Synchronization

Automated Traffic Surveillance and Control (ATSAC) is a computer-based traffic signal control system whereby engineers can monitor traffic conditions and system performance as the system selects appropriate signal timing (control) strategies and performs equipment diagnostics and alert functions. Sensors in the street detect the passage of vehicles, vehicle speed, and the level of congestion. This information is received on a real-time basis and is analyzed on a minute-by-minute basis at the ATSAC Operations Center to determine if better traffic flow can be achieved by changing the signal timing.

If required, the signal timing is either automatically changed by the ATSAC computers or manually changed by the operator using communication lines that connect the ATSAC Center with each traffic signal. To supplement the information from electronic detectors, closed-circuit television (CCTV) surveillance equipment has been and continues to be installed at critical locations throughout the City.

Adaptive Traffic Control System (ATCS) is the latest enhancement to ATSAC and uses a personal computer-based traffic signal control software program which provides fully traffic adaptive signal control based on real-time traffic conditions. The ATCS automatically adjusts traffic signal timing in

response to current traffic demands by simultaneously controlling all three critical components of traffic signal timing – namely cycle length, phase split and offset.

For capacity analysis, LADOT guidelines suggest a 0.10 reduction in volume-to-capacity ratio with the implementation of ATSAC/ATCS. This reduction represents field measured benefits in flow and capacity increase by operation of this combined program.

Based on information obtained from LADOT, all signalized study intersections within the City of Los Angeles are currently equipped with both ATSAC and ATCS functionality.

Significant Traffic Impacts

As defined by the LADOT document *Transportation Impact Study Guidelines*, significant impacts of a proposed project at an intersection must be mitigated to a level of insignificance. In cases where capacity increases are possible, KOA analyzed mitigation measures that would restore operations commensurate with the removal of the incremental impacts of the Project.

LADOT does not define impact thresholds for unsignalized intersections, but these locations were included in the analysis to provide a review of operations as requested by LADOT staff. The analysis of these locations focused on LOS values only and specific impact thresholds were not applied. Where LOS values would worsen to or within LOS E or F with the proposed Project, traffic signal warrants were evaluated. The applied traffic signal warrants were based on a peak-hour period analysis defined by the California Edition of the *Manual of Uniform Traffic Control Devices (MUTCD)*. The warrant analysis provides a review of potential signalization and the need for such control upgrades based on major and minor approach vehicle volumes.

2. Existing Conditions

This section describes the existing conditions within the study area, in terms of roadway facilities and operating conditions within the study area.

Existing Roadway System

Fieldwork within the Project study area was undertaken to identify traffic control and approach lane configuration at each study intersection, and to identify the locations of on-street parking availability and the locations of transit stops. Key roadways within the study area are described below in Table 2. The discussion presented here is limited to specific roadways that traverse the study intersections and serve the Project site.

Figure 3 illustrates the existing study intersection approach lane and control configurations.

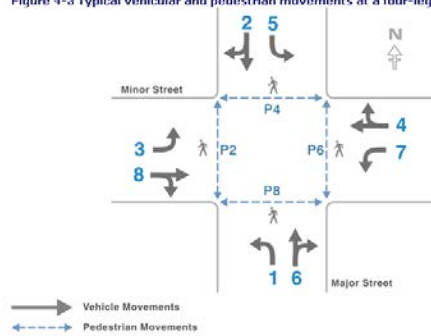
Table 2: Study Area Roadway Descriptions

Segment	From	To	# Lanes		Median Type	Parking Restrictions		General Land Use	Posted Speed Limit
			NB/EB	SB/WB		NB/EB	SB/WB		
Oxnard Street	Shoup Avenue	Topanga Canyon Boulevard	2	1/2	ST	NSAT/Permitted	NSAT/Permitted(2-HR 8AM-6PM except SAT & SUN)	Residential	35
Burbank Boulevard	Shoup Avenue	Topanga Canyon Boulevard	1/2	1	ST	NSAT/Permitted	NSAT/Permitted	Residential	25/35
Ventura Boulevard	Shoup Avenue	Topanga Canyon Boulevard	2	3	RM/ST	NSAT/Permitted(2-HR 9AM-8PM except SUN/No Stopping 6AM-9AM)	NSAT/Permitted(2-HR 8AM-8PM except SUN)	Commercial	35
Miranda Street	Shoup Avenue	Rudnick Avenue	1	1	ST	Permitted (No Stopping 10PM-5AM)	Permitted (No Stopping 10PM-5AM)	Residential	25
Collins Street	Shoup Avenue	Rudnick Avenue	1	1	NS	Permitted (No Stopping 10PM-5AM)	Permitted (No Stopping 10PM-5AM)	Institutions	25
Rudnick Avenue	Miranda Street	Philprim Street	1	1	NS	Permitted (No Stopping 10PM-5AM)	Permitted (No Stopping 10PM-5AM/2-HR 9AM-1:30PM School Days/Passenger Loading Only 6:30AM-9AM,1:30-4PM School Days)	Residential	25
Shoup Avenue	Oxnard Street	Ventura Boulevard	2	2	ST	NSAT/Permitted (No Unattached Trailers)	NSAT/Permitted (No Unattached Trailers)	Residential	25/35
Topanga Canyon Boulevard	Oxnard Street	Ventura Boulevard	3	3	RM/ST	NSAT	NSAT/Permitted (1-HR 10AM-3PM/No Stopping 7-10AM,3-7PM except SUN)	Residential/Commercial	40

DY - Double Yellow
 RM - Raised Median
 ST - Striped
 RM - Raised Median
 NS - Not Striped
 NSAT - No Stopping Any Time
 CTL - Center Turn Lane

Figure 3: Existing Intersection Geometry

Figure 4-3 Typical vehicular and pedestrian movements at a four-leg intersection



Existing Traffic Volumes

KOA compiled new manual intersection turn movement counts that were conducted at the study intersections on Thursday, March 23, 2017 and Tuesday, March 28, 2017 during the timeframes of 7:00 a.m. to 9:00 a.m. and 3:00 p.m. to 5:00 p.m.

The results of the counts were used to determine existing 2017 weekday AM and PM peak-hour conditions.

Existing Intersection Levels of Service

Based on the AM and PM peak period traffic counts at the study area intersections, a volume-to-capacity ratio or average vehicle delay value in seconds and corresponding level of service value were determined for each of the study area intersections. Table 3 provides the level of service results at each study intersection under existing 2017 conditions.

Table 3: Existing Peak-Hour Level of Service Summary

Study Intersections		AM Peak		PM Peak	
		V/C	LOS	V/C	LOS
1	Shoup Avenue & Miranda Street	0.440	A	0.376	A
2	Shoup Avenue & Collins Street*	209.5	F	35.4	E
3	Shoup Avenue & Burbank Boulevard	0.741	C	0.619	B
4	Topanga Canyon Boulevard & Burbank Boulevard	0.762	C	0.885	D

LOS = Level of Service; V/C = Volume-to-Capacity Ratio

*Unsignalized Intersection

Generally, LOS values of E and F are considered poor levels of service. The analysis indicates that three of the four study intersections are currently operating at LOS D or better during the a.m. and p.m. peak hours. The following intersection is operating at worse LOS values during the analyzed peak periods:

- Shoup Avenue / Collins Street (unsignalized intersection) – operates at LOS F in the a.m. peak hour and at LOS E during the p.m. peak hour.

Traffic count summaries are provided in Appendix A of this report. Level of service worksheets for the City of Los Angeles signalized intersections are provided in Appendix B of this report, using the required LADOT spreadsheet with all scenarios included. Existing conditions worksheets for the remaining study intersections are provided in Appendix C.

The existing peak-hour study intersection volumes are illustrated on Figure 4 (a.m. peak) and Figure 5 (p.m. peak).

Figure 4: Existing (2017) AM Peak Hour Traffic Volumes

Figure 4-3 Typical vehicular and pedestrian movements at a four-leg intersection

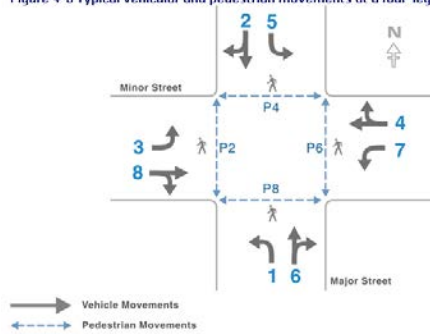
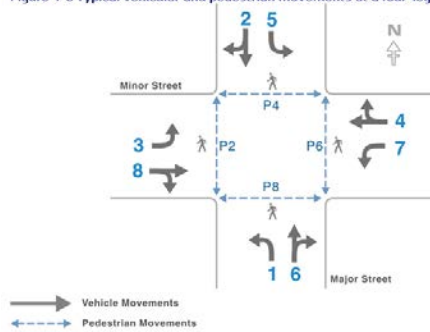


Figure 5: Existing (2017) PM Peak Hour Traffic Volumes

Figure 4-3 Typical vehicular and pedestrian movements at a four-leg intersection



3. Project Traffic

This section summarizes the proposed Project’s uses and the potential traffic generated by those uses. The technical assumptions including trip distribution pattern and traffic assignment are also discussed.

Project Trip Generation

Project trip generation calculations included demolition employee vehicle trips and demolition truck trip estimates. The trip generation totals were determined based on the most intense period of demolition activity for the project.

In converting trucks to passenger car equivalents, a Passenger Car Equivalent (PCE) factor of 2.5 was assumed. The applied value matches typical factors used in area studies that include trips generated by trucking activities. The factor is based on conservative factors defined by the Southern California Association of Governments (SCAG) Heavy Duty Truck Model. For the trucks related to demolition activities, each will generate 2.5 inbound trips and 2.5 outbound trips. The total number of truck trips will be 20 for each peak hour.

The proposed project would require approximately 15 employees for demolition activities. Each worker will generate one inbound trip and one outbound trip.

In calculating peak-hour trips for the project, it is assumed that all employees will arrive and depart the construction work areas by personal vehicles. The morning arrival by employees is assumed to occur during the a.m. peak hour. The same would occur during the p.m. peak hour, with all 15 employees departing the site before 6:00 p.m.

During project demolition activities, daily truck haul activities will occur over an eight-hour period that begins during the a.m. peak period, and is completed during the p.m. peak period. End-of-workday trips were assumed to overlap the traditional peak of street traffic. All of the inbound and outbound truck trips were assumed to occur evenly during the eight hours of daily construction.

Based on these assumptions, the four trucks would generate 20 weekday a.m. peak-hour trips (10 inbound and 10 outbound) and 20 weekday p.m. peak-hour trips (10 inbound and 10 outbound). Employees would generate 15 weekday a.m. peak-hour trips (15 inbound and 0 outbound) and 15 weekday p.m. peak-hour trips (0 inbound and 15 outbound).

Table 4: Project Trip Generation

Land Use	Intensity	Units	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
<i>Trip Generation Estimates</i>								
Construction	4	Trucks	20	10	10	20	10	10
Commuting	15	employees	15	15	0	15	0	15
Total			35	25	10	35	10	25

Note: Construction trip total estimates were determined in coordination with the City of Los Angeles

Project Trip Distribution

Trip distribution is the process of assigning the directions from which traffic will access a project site. Trip distribution is dependent upon the land use characteristics of the project, the local roadway network, and the general locations of other land uses to which project trips would originate or terminate. A trip distribution pattern was developed specifically for this Project, based on direct routes between the site and the US-101 freeway.

Figure 6 illustrates the study intersection trip distribution percentages that were applied for Project traffic.

Project Trip Assignment

Based on the trip generation and distribution assumptions described above, Project traffic was assigned to the roadway system based on the access driveway locations and the roadways that would likely to be used to access the regional highway system.

The Project-only peak-hour trip assignment is illustrated on Figure 7 (a.m. peak) and Figure 8 (p.m. peak).

Figure 6: Project Trip Distribution

Figure 4-3 Typical vehicular and pedestrian movements at a four-leg intersection

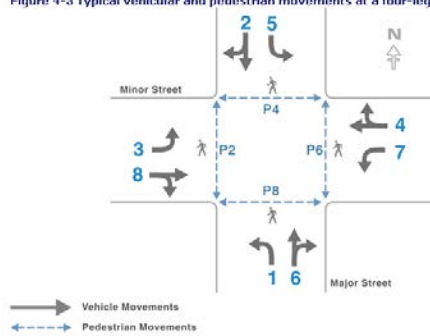


Figure 7: Project Only AM Peak Hour Traffic Volumes

Figure 4-3 Typical vehicular and pedestrian movements at a four-leg intersection

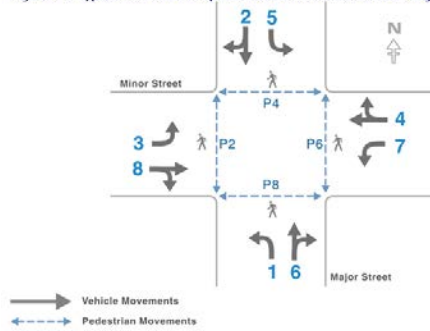
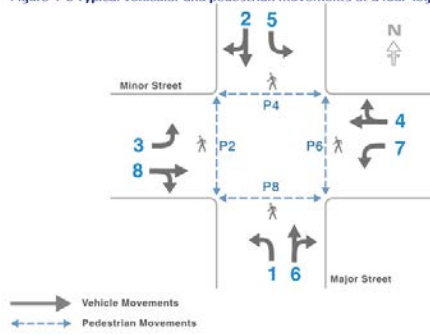


Figure 8: Project Only PM Peak Hour Traffic Volumes

Figure 4-3 Typical vehicular and pedestrian movements at a four-leg intersection



4. Existing plus-Project Conditions

This section documents existing traffic conditions at the study intersections with the addition of Project-generated traffic. Traffic volumes for this scenario were derived by adding the Project construction period trips to the existing study area traffic volumes.

Table 5 summarizes the results of the level of service analysis for this scenario.

Table 5: Existing plus-Project Peak-Hour Level of Service Summary

Study Intersections		AM Peak		PM Peak	
		V/C	LOS	V/C	LOS
1	Shoup Avenue & Miranda Street	0.447	A	0.386	A
2	Shoup Avenue & Collins Street*	223.5	F	36.3	E
3	Shoup Avenue & Burbank Boulevard	0.750	C	0.627	B
4	Topanga Canyon Boulevard & Burbank Boulevard	0.762	C	0.885	D

LOS = Level of Service; V/C = Volume-to-Capacity Ratio

*Unsignalized Intersection

Three of the study intersections would operate at LOS D or better during existing peak hours with operation of the proposed Project:

- Shoup Avenue / Miranda Street –Would continue to operate at LOS A in the a.m. and p.m. peak hour.
- Shoup Avenue / Collins Street (unsignalized intersection) –Would continue to operate at LOS F in the a.m. peak hour and would worsen to LOS E in the p.m. peak hour.
- Shoup Avenue / Burbank Boulevard –Would continue to operate at LOS C in the a.m. and p.m. peak hours.
- Topanga Canyon Boulevard / Burbank Boulevard –Would continue to operate at LOS C in the a.m. peak hour and would worsen to LOS D in the p.m. peak hour.

The study area peak-hour traffic volumes for this scenario are illustrated on Figure 9 (a.m. peak) and Figure 10 (p.m. peak).

City of Los Angeles level of service worksheets for the signalized study intersections under this scenario are provided in Appendix B of this report. Level of service worksheets for the remaining study intersections under this scenario are provided in Appendix D.

Figure 9: Existing plus-Project AM Peak Hour Traffic Volumes

Figure 4-3 Typical vehicular and pedestrian movements at a four-leg intersection

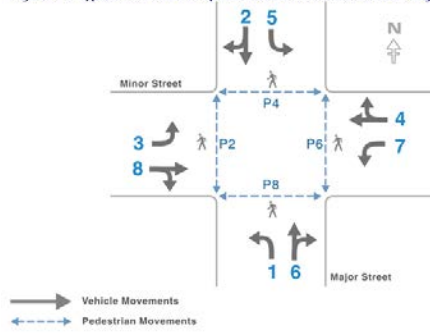
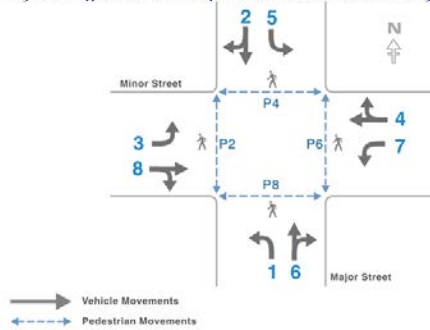


Figure 10: Existing plus-Project PM Peak Hour Traffic Volumes

Figure 1-3 Typical vehicular and pedestrian movements at a four-leg intersection



5. Project Traffic Impacts and Site Access

Determination of Traffic Impacts

Traffic impacts are identified by local agencies if the proposed development will result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. Impacts can also be significant if an intersection is already operating below an acceptable level of service value and project traffic will cause a further decline below the applicable threshold.

City of Los Angeles

The City of Los Angeles Department of Transportation has established specific thresholds for project related increases in the volume-to-capacity ratio (V/C) of signalized study intersections. The following increases in peak-hour V/C ratios are considered “significant” impacts:

Level of Service	Final V/C*	Project Related v/c increase
C	< 0.701 – 0.800	Equal to or greater than 0.040
D	< 0.801 – 0.900	Equal to or greater than 0.020
E	0.901 or 1.000	Equal to or greater than 0.010
F	Greater than 1.000	Equal to or greater than 0.010

Note: Final V/C is the V/C ratio at an intersection, considering impacts from the project, ambient and related project growth, and without proposed traffic impact mitigations.

LADOT does not define impact thresholds for unsignalized intersections, nor does LADOT define impact thresholds for construction activities. The impact standards applied to this analysis were based on conditions worsening to LOS E (approaching or at capacity) or to LOS F (over capacity) due to Project construction activities.

The analysis of these locations focused on level of service values only and more specific LADOT incremental impact thresholds were not applied. The proposed Project involves only site buildings demolition and the activities would be of short duration.

Results of Impact Analysis for Existing Baseline Conditions

Table 9 provides a comparison of the existing and existing with-Project study scenarios. LOS values of E or F are shown in bold text formatting. Traffic impacts created by the project were calculated by subtracting the V/C values in the “Existing (2017)” columns from the values in the “Existing plus-Project (2017)” columns.

The analyzed values at the Shoup Avenue/Collins Street intersection are seconds of delay for this unsignalized location. These values are based primarily on left-turn movements at the uncontrolled approaches and all movements at the stop-sign controlled approaches. Delay values provided by the Highway Capacity Manual methodology for unsignalized intersection increase greatly with each added vehicle, although in real world conditions delay may not be this high.

Table 6: Project Impact Summary for Existing Baseline Conditions

Study Intersections		Peak Hour	Existing Conditions (2017)		Existing plus-Project (2017)	
			V/C	LOS	V/C	LOS
1	Shoup Avenue & Miranda Street	AM	0.440	A	0.447	A
		PM	0.376	A	0.386	A
2	Shoup Avenue & Collins Street*	AM	209.5	F	223.5	F
		PM	35.4	E	36.3	E
3	Shoup Avenue & Burbank Boulevard	AM	0.741	C	0.750	C
		PM	0.619	B	0.627	B
4	Topanga Canyon Boulevard & Burbank Boulevard	AM	0.762	C	0.762	C
		PM	0.885	D	0.885	D

LOS = Level of Service; V/C = Volume-to-Capacity Ratio

*Unsignalized Intersection

The proposed Project would not create significant traffic impacts under existing baseline conditions at the study intersections.

Based on the signal control and configuration of the Shoup Avenue/Collins Street intersection, vehicles approaching the westbound and southbound approaches of the intersection and making left-turn movements would experience increased delays in the existing plus project scenario.

Project trips would use northbound and southbound through lanes and northbound through/right turn lanes at this intersection. The increased delay of 14 seconds on average in the a.m. peak hour and approximately one second on average in the p.m. peak hour were not considered to be significant, as conditions would not change significantly with these delay values and the construction period effects would be temporary in nature.

Consideration of Nearby Construction Project

It is known that the Woodland Hills Recreation Center is undergoing a reconstruction project that is also generating construction truck trips and daily employee trips in the area, primarily on Shoup Avenue. This trip generation of this project was examined. It was assumed that that project would generate similar daily construction trips as the proposed Project.

The addition of these vehicle volumes does not change the level of service of the Project study area intersections closest to the Recreation Center site. The increased delay of the proposed Project at the Shoup Avenue & Collins Street intersection, the poorest performing intersection in the study area and an unsignalized location, would be affected in the same manner in terms of delay changes as that documented in Table 6.

APPENDIX A
Traffic Count Data

APPENDIX B
Signalized Intersection Analysis Worksheets –
LADOT Critical Movement Analysis Spreadsheet

APPENDIX C
Intersection Analysis Worksheets –
Existing Conditions

APPENDIX D
Intersection Analysis Worksheets –
Existing plus-Project Conditions

APPENDIX E

Noise Data

Collins Elementary School Noise Monitoring Report



Monitoring Location: Collins Street approximately 325 feet east of Shoup Avenue. Location #3 on the Sensitive Receptors map.

Ambient Noise Level (dBA L_{eq}): 59.4

Measurement Period: April 11, 2017. 3:15PM to 3:30PM

Notes: Light traffic. Light traffic noise from Shoup Avenue.



Monitoring Location: Rudnick Avenue approximately 110 feet north of Collins Street. Location #2 on the Sensitive Receptors map.

Ambient Noise Level (dBA L_{eq}): 56.5

Measurement Period: April 11, 2017. 3:37PM to 3:52PM

Notes: Light traffic. Small dip in roadway.



Monitoring Location: Miranda Street approximately 140 feet west of Rudnick Avenue. Location #1 on the Sensitive Receptors map.

Ambient Noise Level (dBA L_{eq}): 59.1

Measurement Period: April 11, 2017. 3:54PM to 4:09PM

Notes: Light traffic. Stop sign at Rudnick Avenue.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 4/18/2017

Case Description: Collins Street ES

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
50 Foot Receptor	Residential	59.1	59.1	59.1

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20	89.6	89.6	50	0
Excavator	No	40	80.7	80.7	50	0
Excavator	No	40	80.7	80.7	50	0
Excavator	No	40	80.7	80.7	50	0
Dozer	No	40	81.7	81.7	50	0
Dozer	No	40	81.7	81.7	50	0
Dump Truck	No	40	76.5	76.5	50	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	89.6	82.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	76.5	72.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	89.6	86.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 7/31/2017
 Case Description: Park Rec Center

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
50 Foot Receptor	Residential	59.1	59.1	59.1

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		50	0
Compressor (air)	No	40		77.7	50	0
Concrete Mixer Truck	No	40		78.8	50	0

Equipment	Calculated (dBA)	Results								Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night			
		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq		
Tractor	84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Concrete Mixer Truck	78.8	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	84	81.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

Collins Elementary School

Construction Noise - Unmitigated

Reference Noise Distance

50

Reference Noise Level (from RCNM Output)

86.6

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Adjacent Single Family Residential	80	6	76.5	59.1	76.6	17.5
Prince of Peace Episcopal Church	85	6	76.0	56.5	76.0	19.5
Woodland Hills Korean UMC	90	6	75.5	59.4	75.6	16.2
Woodland Hills Private School	100	6	74.6	56.5	74.6	18.1
Woodland Hills Recreation Center	200	6	68.6	59.1	69.0	9.9

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

Collins Elementary School

Construction Noise - Mitigated

Reference Noise Distance

50

Reference Noise Level (from RCNM Output)

86.6

Sensitive Receptor	Distance (feet)	Mitigation Factor	Maximum Construction Noise Level	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Adjacent Single Family Residential	80	27	55.5	59.1	60.7	1.6
Prince of Peace Episcopal Church	85	27	55.0	56.5	58.8	2.3
Woodland Hills Korean UMC	90	27	54.5	59.4	60.6	1.2
Woodland Hills Private School	100	27	53.6	56.5	58.3	1.8
Woodland Hills Recreation Center	200	27	47.6	59.1	59.4	0.3

A 3 dBA attenuation was given for mufflers.

An 18 dBA attenuation was given for construction sound blankets

A 6 dBA attenuation is included for hard ground surface, and 3 dBA reduction is given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

Woodland Hills Rec Center

Construction Noise - Unmitigated

Reference Noise Distance

50

Reference Noise Level (from RCNM Output)

81.9

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Adjacent Single Family Residential	220	6	63.0	59.1	64.5	5.4
Prince of Peace Episcopal Church	660	6	53.5	56.5	58.3	1.8
Woodland Hills Korean UMC	850	6	51.3	59.4	60.0	0.6
Woodland Hills Private School	890	6	50.9	56.5	57.6	1.1

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

Woodland Hills Rec Center

Construction Noise - Mitigated

Reference Noise Distance

50

Reference Noise Level (from RCNM Output)

81.9

Sensitive Receptor	Distance (feet)	Mitigation Factor	Maximum Construction Noise Level	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Adjacent Single Family Residential	220	9	60.0	59.1	62.6	3.5
Prince of Peace Episcopal Church	660	9	50.5	56.5	57.5	1.0
Woodland Hills Korean UMC	850	9	48.3	59.4	59.7	0.3
Woodland Hills Private School	890	9	47.9	56.5	57.1	0.6

A 3 dBA attenuation was given for mufflers.

A 6 dBA attenuation is included for hard ground surface, and 3 dBA reduction is given (as applicable) for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

Cumulative Construction - Construction Noise - Unmitigated

Reference Noise Distance -

Reference Noise Level -

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Adjacent Single Family Residential			76.7	59.1	76.8	17.7
Prince of Peace Episcopal Church			76.0	56.5	76.1	19.6
Woodland Hills Korean UMC			75.5	59.4	75.6	16.2
Woodland Hills Private School			74.6	56.5	74.7	18.2

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the

Cumulative Construction - Construction Noise - Mitigated

Reference Noise Distance -

Reference Noise Level -

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Adjacent Single Family Residential			61.3	59.1	63.4	4.3
Prince of Peace Episcopal Church			56.3	56.5	59.4	2.9
Woodland Hills Korean UMC			55.4	59.4	60.9	1.5
Woodland Hills Private School			54.6	56.5	58.7	2.2

A 3 dBA attenuation was given for mufflers.

An 18 dBA attenuation was given for construction sound blankets at the proposed project site.

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

Collins Street ES Construction Vibration Woodland Hills Private School

Ref= Reference vibration level (PPV)
RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref= 0.089 Based on type of equipment
RefD= 25
D= 100 Distance from equipment to sensitive receptor
Equip= 0.011

Annoyance VdB

Ref= 87 Based on type of equipment
RefD= 25
D= 100 Distance from equipment to sensitive receptor
Equip= 69

Peak construction vibration based on utilizing a large bulldozer.
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Collins Street ES Construction Vibration Woodland Hills Recreation Center

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref= 0.089 Based on type of equipment

RefD= 25

D= 200 Distance from equipment to sensitive receptor

Equip= 0.004

Annoyance VdB

Ref= 87 Based on type of equipment

RefD= 25

D= 200 Distance from equipment to sensitive receptor

Equip= 60

Peak construction vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Collins Street ES Construction Vibration Adjacent Single Family Residential

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref= 0.089 Based on type of equipment

RefD= 25

D= 80 Distance from equipment to sensitive receptor

Equip= 0.016

Annoyance VdB

Ref= 87 Based on type of equipment

RefD= 25

D= 80 Distance from equipment to sensitive receptor

Equip= 72

Peak construction vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Collins Street ES Construction Vibration Prince of Peace Episcopal Church

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref= 0.089 Based on type of equipment

RefD= 25

D= 85 Distance from equipment to sensitive receptor

Equip= 0.014

Annoyance VdB

Ref= 87 Based on type of equipment

RefD= 25

D= 85 Distance from equipment to sensitive receptor

Equip= 71

Peak construction vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Collins Street ES Construction Vibration Woodland Hills Korean UMC

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref= 0.089 Based on type of equipment

RefD= 25

D= 90 Distance from equipment to sensitive receptor

Equip= 0.013

Annoyance VdB

Ref= 87 Based on type of equipment

RefD= 25

D= 90 Distance from equipment to sensitive receptor

Equip= 70

Peak construction vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Collins Elementary AM Peak Mobile Noise

2017 Existing Conditions AM Peak

ROAD SEGMENT			TOT. # VEH.	VEHICLE TYPE %						Speed	dBA (from TNM)
from:	to:		Auto %	Auto	MT %	MT	HT %	HT			
Shoup Avenue	Miranda Street	Collins Street	2543	98.1	2495	0.7	18	1.3	33	35	63.6
Shoup Avenue	Collins Street	Burbank Boulevard	2576	98.1	2527	0.7	18	1.3	33	35	64.6
Burbank Boulevard	Shoup Avenue	Topanga Canyon Boulevard	951	98.1	933	0.7	7	1.3	12	35	61.6

Existing Plus Demolition AM Peak

ROAD SEGMENT			TOT. # VEH.	VEHICLE TYPE %						Speed	dBA (from TNM)	Increase from Existing
from:	to:		Auto %	Auto	MT %	MT	HT %	HT				
Shoup Avenue	Miranda Street	Collins Street	2562	97.6	2500	0.7	18	1.7	44	35	63.8	0.2
Shoup Avenue	Collins Street	Burbank Boulevard	2604	97.4	2537	0.7	18	1.9	49	35	64.9	0.3
Burbank Boulevard	Shoup Avenue	Topanga Canyon Boulevard	964	97.3	937	0.7	7	2.0	19	35	62	0.4

Demolition-Only Volumes AM Peak

ROAD SEGMENT			TOT. # VEH.	VEHICLE TYPE %						Speed
from:	to:		Auto %	Auto	MT %	MT	HT %	HT		
Shoup Avenue	Miranda Street	Collins Street	19	43	8	0	0	57	11	35
Shoup Avenue	Collins Street	Burbank Boulevard	28	43	12	0	0	57	16	35
Burbank Boulevard	Shoup Avenue	Topanga Canyon Boulevard	13	43	5	0	0	57	7	35

Demolition Fleet Mix AM

ROAD SEGMENT			Auto	MD	HD	Sum	% Auto	%MD	%HD
from:	to:								
Shoup Avenue	Miranda Street	Collins Street	2503	18	44	2565	97.6	0.7	1.7
Shoup Avenue	Collins Street	Burbank Boulevard	2539	18	49	2607	97.4	0.7	1.9
Burbank Boulevard	Shoup Avenue	Topanga Canyon Boulevard	938	7	19	964	97.3	0.7	2.0

Traffic mix from LA County 2035 General Plan EIR Noise Calculations Appendix K

The proposed project would add 35 total new trips in the peak hour. 20 of those would be from haul trucks, 15 from construction employee trips.

Collins Elementary PM Peak Mobile Noise

2017 Existing Conditions PM Peak

ROAD SEGMENT			TOT. # VEH.	VEHICLE TYPE %						Speed	dBA (from TNM)
from:	to:		Auto %	Auto	MT %	MT	HT %	HT			
Shoup Avenue	Miranda Street	Collins Street	2237	98.1	2194	0.7	16	1.3	29	35	63
Shoup Avenue	Collins Street	Burbank Boulevard	2244	98.1	2201	0.7	16	1.3	29	35	64
Burbank Boulevard	Shoup Avenue	Topanga Canyon Boulevard	1115	98.1	1094	0.7	8	1.3	14	35	62.3

Existing Plus Demolition PM Peak

ROAD SEGMENT			TOT. # VEH.	VEHICLE TYPE %						Speed	dBA (from TNM)	Increase from Existing
from:	to:		Auto %	Auto	MT %	MT	HT %	HT				
Shoup Avenue	Miranda Street	Collins Street	2256	97.5	2200	0.7	16	1.8	40	35	63.3	0.3
Shoup Avenue	Collins Street	Burbank Boulevard	2272	97.3	2211	0.7	16	2.0	45	35	64.4	0.4
Burbank Boulevard	Shoup Avenue	Topanga Canyon Boulevard	1128	97.4	1098	0.7	8	1.9	22	35	62.7	0.4

Demolition-Only Volumes PM Peak

ROAD SEGMENT			TOT. # VEH.	VEHICLE TYPE %						Speed
from:	to:		Auto %	Auto	MT %	MT	HT %	HT		
Shoup Avenue	Miranda Street	Collins Street	19	43	8	0	0	57	11	35
Shoup Avenue	Collins Street	Burbank Boulevard	28	43	12	0	0	57	16	35
Burbank Boulevard	Shoup Avenue	Topanga Canyon Boulevard	13	43	5	0	0	57	7	35

Demolition Fleet Mix PM

ROAD SEGMENT			Auto	MD	HD	Sum	% Auto	%MD	%HD
from:	to:								
Shoup Avenue	Miranda Street	Collins Street	2203	16	40	2258	97.5	0.7	1.8
Shoup Avenue	Collins Street	Burbank Boulevard	2213	16	45	2274	97.3	0.7	2.0
Burbank Boulevard	Shoup Avenue	Topanga Canyon Boulevard	1099	8	22	1129	97.4	0.7	1.9

Traffic mix from LA County 2035 General Plan EIR Noise Calculations Appendix K

The proposed project would add 35 total new trips in the peak hour. 20 of those would be from haul trucks, 15 from construction employee trips.

Impact Sciences
jjerome

27-Apr-17
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Collins Elementary School

RUN:

AM Existing Conditions

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver
Name

Receiver Name	No.	#DUs	Existing	No Barrier		Increase over existing		Type	With Barrier		Calculated minus Goal dB	
			LAeq1h	LAeq1h	Crit'n	Calculated	Crit'n	Sub'l Inc	Impact	Calculated		Noise Reduction
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	
Shoup from Miranda to Collins	1	1	0	63.6	66	63.6	10	----	63.6	0	8	-8
Shoup from Collins to Burbank	2	1	0	64.6	66	64.6	10	----	64.6	0	8	-8
Burbank from Shoup to Topanga	4	1	0	61.6	66	61.6	10	----	61.6	0	8	-8

Dwelling Units

	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	3	0	0	0
All Impacted	0	0	0	0
All that meet NR Goal	0	0	0	0

Impact Sciences
jjerome

27-Apr-17
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Collins Elementary School
AM Existing Plus Demolition Conditions
INPUT HEIGHTS

RUN:

BARRIER DESIGN:

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver
Name

Receiver Name	No.	#DUs	Existing	No Barrier		Increase over existing		Type	With Barrier		Calculated Goal	Calculated minus Goal
			L _{Aeq1h}	L _{Aeq1h}	Calculated	Crit'n	Calculated	Crit'n	Impact	L _{Aeq1h}		
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Shoup from Miranda to Collins	1	1	0	63.8	66	63.8	10	----	63.8	0	8	-8
Shoup from Collins to Burbank	2	1	0	64.9	66	64.9	10	----	64.9	0	8	-8
Burbank from Shoup to Topanga	4	1	0	62	66	62	10	----	62	0	8	-8

Dwelling Units

	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	3	0	0	0
All Impacted	0	0	0	0
All that meet NR Goal	0	0	0	0

Impact Sciences
jjerome

27-Apr-17
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

RUN:

BARRIER DESIGN:

Collins Elementary School
PM Existing Conditions
INPUT HEIGHTS

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver
Name

Receiver Name	No.	#DUs	Existing	No Barrier		Increase over existing		Type	With Barrier		Calculated Goal	Calculated minus Goal
			L _{Aeq1h}	L _{Aeq1h}	Calculated	Crit'n	Calculated	Crit'n	Impact	L _{Aeq1h}		
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Shoup from Miranda to Collins	1	1	0	63	66	63	10	----	63	0	8	-8
Shoup from Collins to Burbank	2	1	0	64	66	64	10	----	64	0	8	-8
Burbank from Shoup to Topanga	4	1	0	62.3	66	62.3	10	----	62.3	0	8	-8

Dwelling Units

	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	3	0	0	0
All Impacted	0	0	0	0
All that meet NR Goal	0	0	0	0

Impact Sciences
jjerome

27-Apr-17
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

RUN:

BARRIER DESIGN:

Collins Elementary School
PM Existing Plus Demolition Conditions
INPUT HEIGHTS

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver
Name

Receiver Name	No.	#DUs	Existing	No Barrier		Increase over existing		Type	With Barrier		Calculated Goal	Calculated minus Goal
			L _{Aeq1h}	L _{Aeq1h}	Calculated	Crit'n	Calculated	Crit'n	Impact	L _{Aeq1h}		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Shoup from Miranda to Collins	1	1	0	63.3	66	63.3	10	----	63.3	0	8	-8
Shoup from Collins to Burbank	2	1	0	64.4	66	64.4	10	----	64.4	0	8	-8
Burbank from Shoup to Topanga	4	1	0	62.7	66	62.7	10	----	62.7	0	8	-8

Dwelling Units

	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	3	0	0	0
All Impacted	0	0	0	0
All that meet NR Goal	0	0	0	0

APPENDIX F

Applicable LAUSD Standard Conditions of Approval

As discussed in the Draft Initial Study, the proposed Project is part of the District's School Upgrade Program (Program EIR).¹ Specifically Type 4, Operational and Other Campus Changes, which include demolition and removal of permanent buildings or structures and closure of existing schools. Therefore, the Initial Study, where applicable, incorporated the Program EIR by reference, thereby providing project-level analysis that concentrates on site-specific issues related to the proposed Project.

The Applicable Standard Conditions of Approval (SC) provided below are cited in the Initial Study. The Program EIR is available online at <http://achieve.lausd.net/ceqa> and at LAUSD's OEHS office located at 333 South Beaudry Avenue on the 21st Floor.

SC-AQ-2 LAUSD's construction contractor shall ensure that construction equipment is properly tuned and maintained in accordance with manufacturer's specifications, to ensure excessive emissions are not generated by unmaintained equipment.

SC-AQ-3 LAUSD's construction contractor shall:

- Maintain slow speeds with all vehicles
- Load impacted soil directly into transportation trucks to minimize soil handling
- Water/mist soil as it is being excavated and loaded onto the transportation trucks
- Water/mist and/or apply surfactants to soil placed in transportation trucks prior to exiting the site
- Minimize soil drop height into transportation trucks or stockpiles during dumping
- During transport, cover or enclose trucks transporting soils, increase freeboard requirements, and repair trucks exhibiting spillage due to leaks
- Cover the bottom of the excavated area with polyethylene sheeting when work is not being performed
- Place stockpiled soil on polyethylene sheeting and cover with similar material
- Place stockpiled soil in areas shielded from prevailing winds

¹ LAUSD OEHS. "School Upgrade Program Final Environmental Impact Report," <http://achieve.lausd.net/ceqa>. Adopted by the Board of Education on November 10, 2015.

SC-BIO-3 LAUSD shall comply with the following:

- Project activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of avian breeding season to avoid take of birds or their eggs. Depending on the avian species present, a qualified biologist may determine that a change in the breeding season dates is warranted.
- If avoidance of the avian breeding season is not feasible, beginning 30 days prior to the initiation of the project activities, a qualified biologist with experience in conducting breeding bird surveys shall conduct weekly bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). The surveys shall continue on a weekly basis with the last survey being conducted no more than three days prior to the initiation of project activities. If a protected native bird is found, LAUSD shall delay all project activities within 300 feet of the suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified biologist could continue the surveys in order to locate any nests. If an active nest is located, project activities within 300 feet of the nest (within 500 feet for report nests or as determined by a qualified biologist, shall be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, and/or construction fencing shall be used to demarcate the inside boundary of the 300- or 500-foot buffer between the project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. LAUSD shall provide results of the recommended protective measures to document compliance with applicable State and Federal laws pertaining to the protection of native birds.
- If the qualified biologist determines that a narrower buffer between the project activities and observed active nests is warranted, a written explanation as to why (e.g., species-specific information; ambient conditions and birds' habituation to them; and the terrain, vegetation, and birds' lines of sight between the project activities and the nest and foraging

areas) shall be submitted to LAUSD OEHS project manager. Construction contractors can then reduce the demarcated buffer.

- No construction shall occur within the fenced next zone until the young have fledged, are no longer being bed by the parents, have left the nest, and will no longer be impacted by the construction
- A biological monitor shall be present on site during all grubbing and clearing of vegetation to ensure that these activities remain outside the demarcated buffer and that the flagging, stakes, and/or construction fencing are maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities. The biological monitor shall send weekly monitoring reports to LAUSD OEHS project manager during the grubbing and clearing of vegetation, and shall notify LAUSD immediately if project activities damage avian nests.

SC-HWQ-2 Compliance Checklist for Stormwater Requirements at a Construction Site: This checklist has requirements for compliance with the General Construction Activity Permit and is used by OEHS to evaluate permit compliance. Requirements listed include a SWPPP; BMPs for minimizing stormwater pollution to be specified in a SWPPP; and monitoring stormwater discharges to ensure that sedimentation of downstream waters remains within regulatory limits.

SC-N-6 The LAUSD shall require the construction contractor to minimize blasting for all construction and demolition activities, where feasible. If demolition is necessary adjacent to residential uses or fragile structures, the LAUSD shall require the construction contractor to avoid using impact tools. Alternatives that shall be considered include mechanical methods using hydraulic crushers or deconstruction techniques.

SC-N-7 For projects where pile driving activities are required within 150 feet of a structure, a detailed vibration assessment shall be provided by an acoustical engineer to analyze potential impacts related to vibration to nearby structures and to determine feasible mitigation measures to eliminate potential risk of architectural damage.

- SC-N-9** LAUSD shall prepare a noise assessment. If site-specific review of a school construction project identifies potentially significant adverse construction noise impacts, then LAUSD shall implement all feasible measures to reduce below applicable noise ordinances. Exterior construction noise levels exceed local noise standards, policies, or ordinances at noise-sensitive receptors. LAUSD shall mandate that construction bid contracts include the measures identified in the noise assessment. Specific noise reduction measures include, but are not limited to, the following:
- SC-T-4** LAUSD shall require its contractors to submit a construction worksite traffic control plan to the LADOT for review prior to demolition. The plan will show the location of any haul routes, hours of operation, protective devices, warning signs, and access to abutting properties LAUSD shall encourage its contractor to limit construction-related trucks to off-peak commute periods. As required by Caltrans, applicable transportation related safety measures shall be implemented during construction.
- SC-USS-1** Construction and demolition waste shall be recycled to the maximum extent feasible. LAUSD has established a minimum non-hazardous construction and demolition debris recycling requirement of 75 percent by weight as defined in Specification 01340, Construction & Demolition Waste Management. (School Design Guide. January 2014) Specification 01340, Construction & Demolition Waste Management includes procedures for preparation and implementation, including reporting and documentation, of a Waste Management Plan for reusing, recycling, salvage or disposal of non-hazardous waste materials generated during demolition and/or new construction [Construction & Demolition (C&D) Waste], to foster material recovery and re-use and to minimize disposal in landfills. Requires the collection and separation of all C&D waste materials generated on-site, reuse or recycling on-site, transportation to approved recyclers or reuse organizations, or transportation to legally designated landfills, for the purpose of recycling salvaging and/or reusing a minimum of 75 percent of the C&D waste generated.