

Appendix D

Noise Analysis Supporting Information

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**TABLE NOI-1
SUMMARY OF LONG-TERM NOISE MEASUREMENTS
FOR THE PROPOSED POTRERO POWER STATION MIXED-USE DEVELOPMENT (dBA)**

Hour ^a	Location ^b					
	LT-1	LT-2	LT-3	LT-4	LT-5	LT-6
Daytime						
7:00 AM	68.6	54.8	54.8	54.1	53.7	50.2
8:00 AM	69.4	59.9	53.4	66.1	52.4	57.6
9:00 AM	67.7	54	51.0	68.1	53.6	57.1
10:00 AM	68.9	57.8	64.0	58.3	53.7	50.8
11:00 AM	67.7	53.4	51.7	56.1	56.6	50.8
12:00 PM	66.6	53.5	50.0	61.7	57.5	51.7
1:00 PM	66.2	53.9	53.8	59.1	52.3	57.7
2:00 PM	67	56.4	53.5	63.8	53.8	52
3:00 PM	65.8	54.9	51.2	58.3	52.7	55.6
4:00 PM	66.3	54.6	50.3	50.6	51.1	50.7
5:00 PM	66.1	53.1	50.0	53.3	50.6	50.9
6:00 PM	65.6	53.4	49.1	50.6	49	48.3
Daytime Leq	67.3	55.5	55.5	61.7	53.7	54.0
Evening						
7:00 PM	65	53.7	50.5	52	50.2	50.8
8:00 PM	64.3	53	49.9	54	52	52.9
9:00 PM	62.6	51.5	47.6	50.4	48.4	49
Evening Leq	64.1	52.8	49.5	52.4	50.4	51.2
Nighttime						
10:00 PM	61.4	51.4	47.9	48.6	48.1	47.7
11:00 PM	61.5	51	48.2	46.5	48.6	47
12:00 AM	61.1	49.8	48.7	43.5	48.6	45
1:00 AM	62.4	48.3	43.0	45.3	44.4	46.1
2:00 AM	62.3	48.2	46.2	46.7	46.8	47.8
3:00 AM	64	48.2	44.5	42.2	46.1	44.6
4:00 AM	63.2	50.2	43.9	39.2	45	42.8
5:00 AM	66.8	51.2	49.8	46.7	48.6	47.9
6:00 AM	68.9	53.9	53.1	52.2	53.6	53.6
Nighttime Leq	64.4	50.6	48.4	47.1	48.6	48.1
24-Hour Summary						
Ldn	71.2	58.0	56.5	60.0	56.1	55.8
L90	47.8	43.3	42.0	43.6	43.0	42.7

NOTES:

- a Noise measures at LT-1, LT-2, and LT-3 collected on January 9 to 10, 2018.
Noise measures at LT-4, LT-5, and LT-6 collected on January 11 to 12, 2018.
- b See Figure NOI-1 for noise measurement locations, which are described below.
- LT-1: Western project site boundary on the east side of Illinois Street between Humboldt and 23rd Streets (southwest side of proposed Block 13A), approximately 27 feet from roadway centerline. Audible noise sources: traffic on Illinois & Third Streets.
- LT-2: Northern project site boundary on south side of 22nd Street (between proposed Buildings 1 and 14), approximately 55 feet from the roadway centerline. Audible noise sources: distant diesel engine with occasional back-up alarm.
- LT-3: West central part of project site (east side of proposed Block 6), approximately 360 feet north of 23rd Street centerline and 120 feet south of Humboldt Street centerline. Audible noise sources: distant diesel engine with occasional back-up alarm, and aircraft.
- LT-4: East central part of the project site (east side of Block 8), approximately 400 feet north of 23rd Street and 100 feet south of Humboldt Street.
- LT-5: Southeast corner of project site, approximately 150 feet north of 23rd Street centerline (95 feet west of bay).
- LT-6: Northeast corner of project site, approximately 575 feet north of 23rd Street centerline (110 feet west of bay).

SOURCE: ESA, 2018

TABLE NOI-2
SUMMARY OF SHORT-TERM NOISE MEASUREMENTS
FOR THE PROPOSED POTRERO POWER STATION MIXED-USE DEVELOPMENT (DB)

Parameter ^a	Location ^b				
	ST-1	ST-2	ST-3	ST-4	ST-5
Leq	68.0	60.0	55.0	49.5	67.6
L max	83.1	74.5	70.0	58.4	85.9
Lmin	52.4	53.4	49.3	45.1	50.5

NOTES:

^a All short-term noise measurements collected on January 16, 2018.

^b See Figure NOI-1 for noise measurement locations, which are described below.

ST-1: Southwest corner of project site at northeast corner of Illinois Street/23rd Street intersection, approximately 50 feet from the Illinois Street centerline and 50 feet from the 23rd Street centerline; primary noise sources were truck traffic on both of these streets and muni light rail and vehicle traffic on 3rd Street; measured 2:33 p.m. to 2:49 p.m. (16.5 minutes).

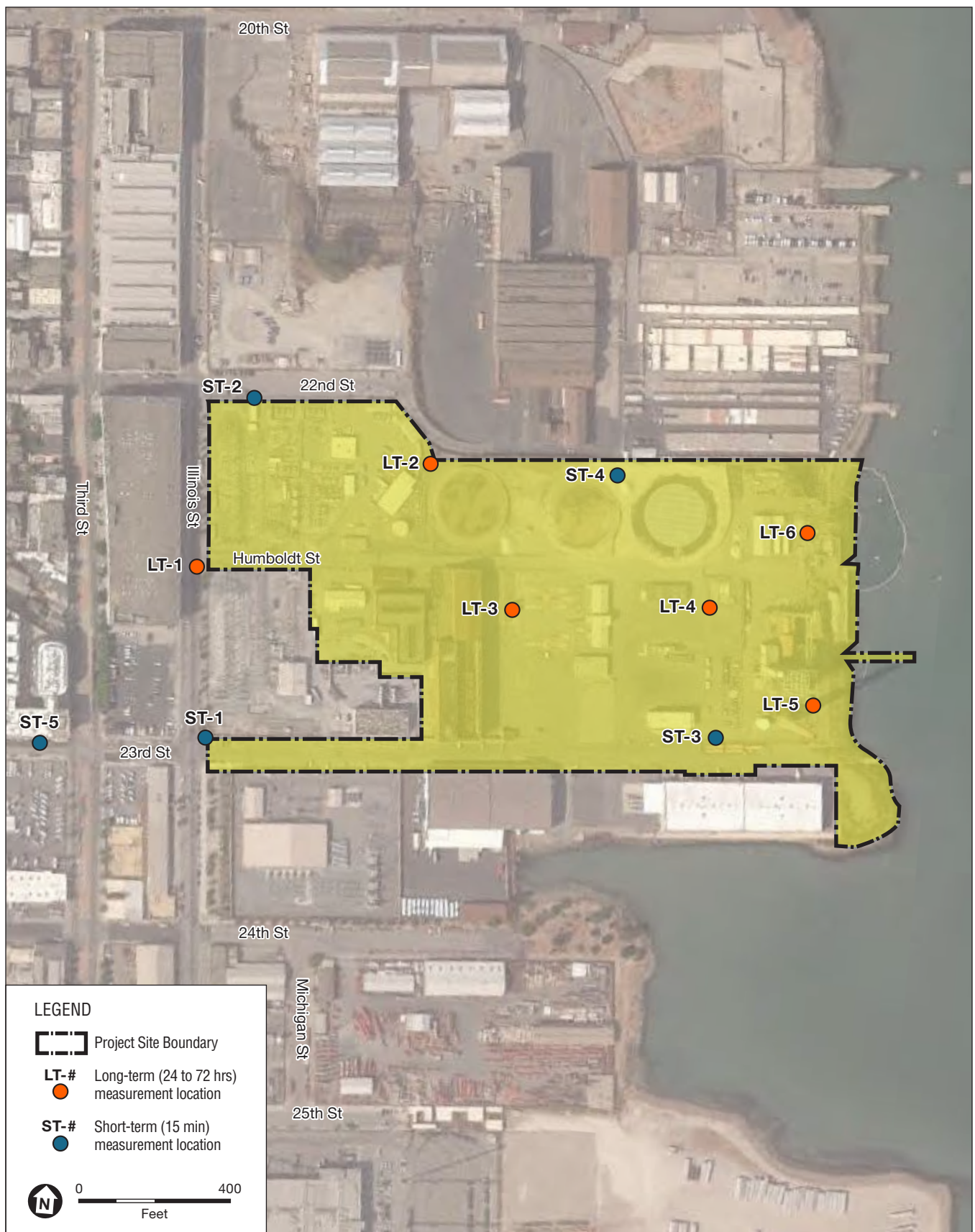
ST-2: Northwest corner of project site at the north edge of proposed Building 13B, approximately 38 feet south of 22nd Street centerline; audible noise sources: vehicle traffic on Illinois Street, 22nd Street, and HVAC unit on portable building; measured 2:54 p.m. to 3:09 p.m. (15 minutes).

ST-3: Southeast corner of project site (southeast corner of proposed Block 12), approximately 65 feet north of 23rd Street centerline; audible noise sources were distant back-up alarm, distant HVAC, and fog horn; measured 1:48 p.m. to 2:03 p.m. (15 minutes).

ST-4: Northeastern project site boundary; audible noise sources were distant diesel motor and distant back-up alarm; measured 2:08 p.m. to 2:23 p.m. (15 minutes).

ST-5: Northwest corner of Third Street/23rd Street intersection, approximately 30 feet north of the 23rd Street centerline and 100 feet west of the 3rd Street centerline; primary noise sources were vehicle traffic on both of these streets and muni light rail traffic on Third Street; measured 2:16 p.m. to 2:31 p.m. (15 minutes).

SOURCE: ESA, 2018



SOURCE: Perkins+Will 2017; Google Earth, 2017; ESA, 2018

Potrero Power Station Mixed-Use Development Project

Figure NOI-1
Noise Measurement Locations

Table NOI-3: Existing, Existing+Project, and Existing+Project+Pier 70 Traffic Noise Levels

			Peak Hour Volumes					Noise Level (in dBA, CNEL) at 50 feet from CL						Difference From Existing (in dBA, Ldn)						
Peak Hour to Daily Conversion Factor 12			Existing Peak Hour Volumes	Existing + PPS Project Trips	Existing + PPS Trips After Diversions	Existing + PPS + Pier 70 Trips	Existing + PPS + Pier 70 Trips After Diversions	Existing Peak Hour Volumes	Existing + PPS Project Trips	Existing + PPS Trips After Diversions	Existing + PPS + Pier 70 Trips	Existing + PPS + Pier 70 Trips After	Project Change from Existing	Project Change After Diversions	Adjacent Land Use & Acceptability	PPS+Pier 70 Change from Existing	PPS + Pier 70 Trips Change After Diversions	Adjacent Land Use & Acceptability		
Street	Segment																			
Illinois	North...	20th	422	729	729	1542	1542	59.3	61.7	61.7	65.0	65.0	2.4	2.4	LS	5.6	5.6	S		
	20th	22nd	409	989	1011	2311	2349	59.2	63.0	63.1	66.7	66.8	3.8	3.9	S-R-CA	7.5	7.6	S		
	22nd	Humboldt	408	1088	1096	2050	2064	59.2	63.5	63.5	66.2	66.2	4.3	4.3	S-R-CA	7.0	7.0	S		
	Humboldt	23rd	413	1156	1161	2109	2119	59.2	63.7	63.7	66.3	66.4	4.5	4.5	LS-I-A	7.1	7.1	S		
	Illinois/23rd	23rd	388	916	922	1665	1674	59.0	62.7	62.7	65.3	65.3	3.7	3.8	LS-I-A	6.3	6.3	S		
	Illinois/24th	24th	370	898	898	1646	1646	58.8	62.6	62.6	65.3	65.3	3.8	3.8	LS-I-A	6.5	6.5	S		
	Illinois/25th	25th	CesarChavez	355	765	765	1305	1305	58.6	61.9	61.9	64.2	64.2	3.3	3.3	LS-I-A	5.7	5.7	S	
	Illinois/CesarChavez	CesarChavez	South...	420	420	420	420	59.3	59.3	59.3	59.3	59.3	0.0	0.0	NI	0.0	0.0	NI		
	Third	North...	16th	1767	2080	2080	2398	2398	67.0	67.7	67.7	68.3	68.3	0.7	0.7	LS	1.3	1.3	LS	
	Third/16th	16th	18th	1585	2245	2108	2900	2664	66.5	68.0	67.8	69.2	68.8	1.5	1.2	LS	2.6	2.3	LS	
Third/18th	18th	19th	1315	2122	1985	3068	2832	65.7	67.8	67.5	69.4	69.0	2.1	1.8	LS	3.7	3.3	S-R-CA		
Third/19th	19th	20th	1310	2036	1899	2630	2394	65.7	67.6	67.3	68.7	68.3	1.9	1.6	LS	3.0	2.6	LS		
Third/20th	20th	22nd	1358	1829	1761	2131	2074	65.9	67.1	67.0	67.8	67.7	1.3	1.1	LS	2.0	1.8	LS		
Third/22nd	22nd	23rd	1397	1979	1917	2883	2835	66.0	67.5	67.4	69.1	69.1	1.5	1.4	LS	3.1	3.1	S-R-CA		
Third/23rd	23rd	24th	1430	2193	2198	3076	3086	66.1	67.9	67.9	69.4	69.4	1.9	1.9	LS	3.3	3.3	LS-I-A		
Third/24th	24th	25th	1482	2246	2246	3128	3128	66.2	68.0	68.0	69.5	69.5	1.8	1.8	LS	3.2	3.2	LS-I-A		
Third/25th	25th	26th	1466	2044	2044	2711	2711	66.2	67.6	67.6	68.9	68.9	1.4	1.4	LS	2.7	2.7	LS		
Third/26th	26th	CesarChavez	1387	1965	1965	2632	2632	65.9	67.5	67.5	68.7	68.7	1.5	1.5	LS	2.8	2.8	LS		
Third/CesarChavez	CesarChavez	South...	1477	1527	1527	1593	1593	66.2	66.4	66.4	66.5	66.5	0.1	0.1	LS	0.3	0.3	LS		
Indiana	North...	22nd	139	139	156	139	168	54.5	54.5	55.0	54.5	55.3	0.0	0.5	LS	0.0	0.8	LS		
Indiana/22nd	22nd	23rd	243	243	276	243	300	56.9	56.9	57.5	56.9	57.9	0.0	0.6	LS	0.0	0.9	LS		
Indiana/23rd	23rd	25th	267	318	318	396	396	57.3	58.1	58.1	59.1	59.1	0.8	0.8	LS	1.7	1.7	LS		
Indiana/25th	25th	South...	272	272	272	272	272	57.4	57.4	57.4	57.4	57.4	0.0	0.0	NI	0.0	0.0	NI		
Pennsylvania	North...	22nd	351	351	379	351	398	58.5	58.5	58.9	58.5	59.1	0.0	0.3	LS	0.0	0.5	LS		
Pennsylvania/22nd	22nd	23rd	558	658	685	791	838	60.6	61.3	61.4	62.1	62.3	0.7	0.9	LS	1.5	1.8	LS		
Pennsylvania/23rd	23rd	25th	891	1165	1165	1547	1547	62.6	63.8	63.8	65.0	65.0	1.2	1.2	LS	2.4	2.4	LS		
Pennsylvania/25th	25th	CesarChavez	1327	1714	1714	2249	2249	64.3	65.4	65.4	66.6	66.6	1.1	1.1	LS	2.3	2.3	LS		
Pennsylvania/CesarChavez	CesarChavez	South...	965	1388	1388	1952	1952	62.9	64.5	64.5	66.0	66.0	1.6	1.6	LS	3.1	3.1	LS		
Tennessee	North...	18th	77	77	99	77	115	52.0	52.0	53.0	52.0	53.7	0.0	1.1	LS	0.0	1.7	LS		
Tennessee/18th	18th	19th	155	155	177	155	193	55.0	55.0	55.6	55.0	55.9	0.0	0.6	LS	0.0	1.0	LS		
Tennessee/19th	19th	20th	158	158	180	158	195.5	55.1	55.1	55.6	55.1	56.0	0.0	0.6	LS	0.0	0.9	LS		
Tennessee/20th	20th	22nd	122	131	142	142	160.5	54.0	54.3	54.6	54.6	55.1	0.3	0.7	LS	0.6	1.2	LS		
Tennessee/22nd	22nd	South...	52	52	52	52	52	50.3	50.3	50.3	50.3	50.3	0.0	0.0	LS	0.0	0.0	LS		
Minnesota	North...	18th	128	128	134	128	137.5	54.2	54.2	54.3	54.2	54.5	0.0	0.2	LS	0.0	0.3	LS		
Minnesota/18th	18th	22nd	198	198	203	198	207	56.0	56.0	56.2	56.0	56.3	0.0	0.1	LS	0.0	0.2	LS		
Minnesota/22nd	22nd	South...	42	42	42	42	42	49.3	49.3	49.3	49.3	49.3	0.0	0.0	NI	0.0	0.0	NI		
16th	East...	Third	298	346	346	630	630	59.3	59.9	59.9	62.5	62.5	0.6	0.6	LS	3.3	3.3	LS-R&D-A		
Third/16th	Third	West...	1096	1457	1320	1916	1680	64.9	66.2	65.7	67.4	66.8	1.2	0.8	LS	2.4	1.9	LS		
18th	East...	Third	170	269	269	386	386	55.4	57.4	57.4	59.0	59.0	2.0	2.0	LS	3.6	3.6	LS-R-A		
Third/18th	Third	Tennessee	321	533	533	779	779	58.2	60.4	60.4	62.0	62.0	2.2	2.2	LS	3.9	3.9	LS-I-A		
Tennessee/18th	Tennessee	Minnesota	410	516	516	639	639	59.2	60.2	60.2	61.1	61.1	1.0	1.0	LS	1.9	1.9	LS		
Minnesota/18th	Minnesota	West...	613	613	613	613	613	61.0	61.0	61.0	61.0	61.0	0.0	0.0	NI	0.0	0.0	NI		
19th	East...	Third	37	117	117	209	209	48.8	53.8	53.8	56.3	56.3	5.0	5.0	LS-I/O-A	7.5	7.5	S		
Third/19th	Third	Tennessee	59	59	59	59	59	50.8	50.8	50.8	50.8	50.8	0.0	0.0	NI	0.0	0.0	NI		
Tennessee/19th	Tennessee	West...	49	49	49	49	49	50.0	50.0	50.0	50.0	50.0	0.0	0.0	NI	0.0	0.0	NI		
20th	East...	Illinois	44	44	44	921	921	49.5	49.5	49.5	62.7	62.7	0.0	0.0	NI	13.2	13.2	S		
Illinois/20th	Illinois	Third	210	483	476	1016	974	56.3	59.9	59.9	63.2	63.0	3.6	3.6	LS-R-A	6.9	6.7	S		
Third/20th	Third	Tennessee	291	309	337	328	376	57.7	58.0	58.4	58.3	58.8	0.3	0.6	LS	0.5	1.1	LS		
Tennessee/20th	Tennessee	West...	320	320	337	320	349	58.1	58.1	58.4	58.1	58.5	0.0	0.2	LS	0.0	0.4	LS		
22nd	East...	Illinois	65	859	909	1631	1716	51.2	62.4	62.7	65.2	65.4	11.2	11.5	S	14.0	14.2	S		
Illinois/22nd	Illinois	Third	190	624	673	1599	1684	55.9	61.0	61.4	65.1	65.4	5.2	5.5	S	9.3	9.5	S		
Third/22nd	Third	Tennessee	244	359	408	510	595	57.0	58.6	59.2	60.2	60.8	1.7	2.2	LS	3.2	3.9	S-R-CA		
Tennessee/22nd	Tennessee	Minnesota	259	374	413	509	575	57.2	58.8	59.2	60.2	60.7	1.6	2.0	LS	2.9	3.5	S-R-CA		
Minnesota/22nd	Minnesota	Indiana	277	392	425	527	583	57.5	59.0	59.4	60.3	60.7	1.5	1.9	LS	2.8	3.2	S-R-CA		
Indiana/22nd	Indiana	Pennsylvania	255	370	419	505	590	57.1	58.8	59.3	60.1	60.8	1.6	2.2	LS	3.0	3.6	S-R-CA		
Pennsylvania/22nd	Pennsylvania	West...	246	261	311	279	364	57.0	57.3	58.0	57.5	58.7	0.3	1.0	LS	0.5	1.7	LS-P-A		
Humboldt	East...	Illinois	7	536	536	466	466	41.5	60.4	60.4	59.8	59.8	18.8	18.8	S	18.2	18.2	S		

Table NOI-3: Existing, Existing+Project, and Existing+Project+Pier 70 Traffic Noise Levels

			Peak Hour Volumes					Noise Level (in dBA, CNEL) at 50 feet from CL						Difference From Existing (in dBA, Ldn)								
Peak Hour to Daily Conversion Factor 12			Existing Peak Hour Volumes	Existing + PPS Project Trips	Existing + PPS Trips After Diversions	Existing + PPS + Pier 70 Trips	Existing + PPS + Pier 70 Trips After Diversions		Existing Peak Hour Volumes	Existing + PPS Project Trips	Existing + PPS Trips After Diversions	Existing + PPS + Pier 70 Trips	Existing + PPS + Pier 70 Trips After Diversions		Project Change from Existing	Project Change After Diversions	Adjacent Land Use & Acceptability	PPS+Pier 70 Change from Existing	PPS + Pier 70 Trips Change After Diversions	Adjacent Land Use & Acceptability		
Street	Segment																					
23rd	East...	Illinois	121	1446	1496	1273	1358		53.9	64.7	64.8	64.1	64.4		10.8	10.9	S	10.2	10.5	S		
Illinois/23rd	Illinois	Third	157	1261	1276	1350	1406		55.0	64.1	64.2	64.4	64.6		9.1	9.1	S	9.4	9.5	S		
Third/23rd	Third	Indiana	258	447	502	696	791		57.2	59.6	60.1	61.5	62.1		2.4	2.9	LS	4.3	4.9	S-R-CA		
Indiana/23rd	Indiana	Pennsylvania	281	470	497	719	766		57.6	59.8	60.1	61.7	61.9		2.2	2.5	LS	4.1	4.4	LS-I-A		
Pennsylvania/23rd	Pennsylvania	West...	25	25	25	25	25		47.1	47.1	47.1	47.1	47.1		0.0	0.0	NI	0.0	0.0	NI		
24th	East...	Illinois	20	20	20	20	20		46.1	46.1	46.1	46.1	46.1		0.0	0.0	NI	0.0	0.0	NI		
Illinois/24th	Illinois	Third	29	29	29	29	29		47.6	47.6	47.6	47.6	47.6		0.0	0.0	NI	0.0	0.0	NI		
Third/24th	Third	West...	57	57	57	57	57		50.7	50.7	50.7	50.7	50.7		0.0	0.0	NI	0.0	0.0	NI		
25th	East...	Illinois	46	46	46	46	46		49.7	49.7	49.7	49.7	49.7		0.0	0.0	NI	0.0	0.0	NI		
Illinois/25th	Illinois	Third	97	155	155	260	260		52.9	55.0	55.0	57.2	57.2		2.1	2.1	LS	4.3	4.3	S		
Third/25th	Third	Indiana	520	823	823	1247	1247		60.3	62.2	62.2	64.1	64.1		2.0	2.0	LS	3.8	3.8	LS-I-A		
Indiana/25th	Indiana	Pennsylvania	505	705	705	973	973		60.1	61.6	61.6	63.0	63.0		1.5	1.5	LS	2.9	2.9	LS		
Pennsylvania/25th	Pennsylvania	West...	374	374	374	374	374		58.8	58.8	58.8	58.8	58.8		0.0	0.0	NI	0.0	0.0	NI		
26th	East...	Third	1	1	1	1	1		33.1	33.1	33.1	33.1	33.1		0.0	0.0	NI	0.0	0.0	NI		
Third/26th	Third	West...	40	40	40	40	40		49.1	49.1	49.1	49.1	49.1		0.0	0.0	NI	0.0	0.0	NI		
CesarChavez	East...	Illinois	166	166	166	166	166		56.7	56.7	56.7	56.7	56.7		0.0	0.0	NI	0.0	0.0	NI		
Illinois/CesarChavez	Illinois	Third	483	894	894	1433	1433		61.4	64.0	64.0	66.1	66.1		2.7	2.7	LS	4.7	4.7	LS-I-A		
Third/CesarChavez	Third	Pennsylvania	1598	2536	2536	3625	3625		66.6	68.6	68.6	70.1	70.1		2.0	2.0	LS	3.6	3.6	S-R-CA		
Pennsylvania/CesarChavez	Pennsylvania	West...	1479	1866	1866	2349	2349		66.2	67.2	67.2	68.2	68.2		1.0	1.0	LS	2.0	2.0	LS		
NOTES: Traffic noise modeling was completed using the Federal Highway Administration <i>Traffic Noise Model, Version 2, Look Up Tables, Final Report, FHWA-HEP-05-008</i> , December 2004 (available online at https://www.fhwa.dot.gov/Environment/noise/traffic_noise_model/tnm_v25_lookup/lu03.cfm) and the California Department of Transportation (Caltrans), <i>Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol</i> , September 2013 (available online at http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf). Modeling parameters include: speed limit on all streets is 25 mph except on 16th, Third, and Cesar Chavez where the posted speed limit is 30 mph; vehicle mix is 98% Autos/1.5% Medium Trucks/0.5% Heavy Trucks; day-night split: 76% day (7 a.m. to 7 p.m.), 12% evening (7 p.m. to 10 p.m.), and 12% night (10 p.m. to 7 a.m.).																						
<div><div><div>>5 dBA Noise Increase</div><div>>3 but ≤5 dBA Noise Increase</div></div><div><div>S = Significant</div><div>PS = Potentially significant</div><div>LS = Less than significant</div><div>NI = No Impact</div></div><div><div>CA = Conditionally Acceptable</div><div>A = Acceptable</div></div><div><div>R = Residential</div><div>I = industrial</div><div>O = Office</div><div>R&D = Research & Development</div><div>P = Park</div></div></div> <div>Noise levels may vary by up to one-tenth of a decibel due to rounding.</div>																						

Table NOI-4
Cumulative Traffic Noise Levels on Local Roadways

Street	Segment		Pk Hr Volumes	Peak Hour Conversion to Daily (x12)	Cumulative Noise Level (in dBA, CNEL) at 50 feet from CL	Existing Noise Level (in dBA, CNEL) at 50 feet from CL	Change From Existing (in dBA, Ldn)	Adjacent Land Use & Acceptability	Existing + Project Noise Level (in dBA, CNEL) at 50 feet from CL	Project Change From Existing (in dBA, Ldn)	Percent Increase Attributable to Project
Illinois	North...	20th	2181	26172	66.5	59.3	7.1	S	61.7	2.4	33%
	20th	22nd	2791	33492	67.5	59.2	8.4	S	63.1	3.9	47%
	22nd	Humboldt	2464.5	29574	67.0	59.2	7.8	S	63.5	4.3	55%
	Humboldt	23rd	2513.75	30165	67.1	59.2	7.9	S	63.7	4.5	57%
	23rd	24th	1841	22092	65.7	59.0	6.8	S	62.7	3.7	55%
	24th	25th	1872.5	22470	65.8	58.8	7.0	S	62.6	3.8	55%
	25th	CesarChavez	1525.5	18306	64.9	58.6	6.3	S	61.9	3.3	53%
	CesarChavez	South...	597	7164	60.9	59.3	1.5	LS	59.3	0.0	0%
Third	North...	16th	3258	39096	69.7	67.0	2.7	LS	67.7	0.7	27%
	16th	20th	3587	43044	70.1	66.5	3.6	S-R-CA	67.8	1.3	36%
	20th	22nd	3248.5	38982	69.6	65.9	3.7	S-R-CA	67.0	1.1	29%
	22nd	23rd	4043	48516	70.6	66.0	4.6	S-R-CA	67.4	1.4	30%
	23rd	25th	3978.5	47742	70.5	66.1	4.4	LS-I-A	67.9	1.8	41%
	25th	CesarChavez	3682.5	44190	70.2	66.2	4.0	LS-I-A	67.6	1.4	35%
	CesarChavez	South...	2373	28476	68.3	66.2	2.1	LS	66.4	0.1	7%
Indiana	North...	23rd	274	3288	57.5	56.9	0.6	LS	57.5	0.6	105%
	23rd	25th	663.5	7962	61.3	57.3	4.0	S-R-CA	58.1	0.8	19%
	25th	South...	619	7428	61.0	57.4	3.6	S-R-CA	57.4	0.0	0%
Pennsylvania	North...	23rd	1070	12840	63.4	60.6	2.8	LS	61.4	0.8	30%
	23rd	25th	1909	22908	65.9	62.6	3.3	LS-I-A	63.8	1.2	37%
	25th	CesarChavez	2670.5	32046	67.4	64.3	3.0	LS	65.4	1.1	37%
	CesarChavez	South...	1956	23472	66.0	62.9	3.1	LS-I-A	64.5	1.6	51%
16th	East...	Third	1195	14340	65.3	59.3	6.0	S	59.9	0.6	11%
	Third	West...	2781	33372	69.0	64.9	4.1	LS-H-CA	65.7	0.8	19%
20th	East...	Illinois	1661	19932	65.3	49.5	15.8	S	49.5	0.0	0%
	Illinois	Third	1312	15744	64.3	56.3	8.0	S	59.9	3.6	45%
	Third	West...	335	4020	58.3	58.1	0.2	LS	58.4	0.3	124%
22nd	East...	Illinois	1867	22404	65.8	51.2	14.6	S	62.7	11.5	79%
	Illinois	Third	1696	20346	65.4	55.9	9.5	S	61.4	5.5	58%
	Third	West...	565	6780	60.6	57.5	3.1	S-R-CA	59.4	1.9	61%
Humboldt	East...	Illinois	470	5637	59.8	41.5	18.3	S	60.4	18.9	100%
23rd	East...	Illinois	1324	15891	64.3	53.9	10.4	S	64.8	10.9	100%
	Illinois	Third	1597	19158	65.1	55.0	10.1	S	64.2	9.2	90%

Table NOI-4

Street	Segment		Pk Hr Volumes	Peak Hour Conversion to Daily (x12)	Cumulative Noise Level (in dBA, CNEL) at 50 feet from CL	Existing Noise Level (in dBA, CNEL) at 50 feet from CL	Change From Existing (in dBA, Ldn)	Adjacent Land Use & Acceptability	Existing + Project Noise Level (in dBA, CNEL) at 50 feet from CL	Project Change From Existing (in dBA, Ldn)	Percent Increase Attributable to Project
23rd	Third	Indiana	885	10614	62.6	57.2	5.4	S	60.1	2.9	54%
	Indiana	Pennsylvania	878	10536	62.5	57.6	5.0	LS-I-A	60.1	2.5	51%
	Pennsylvania	West...	57	684	50.7	47.1	3.6	LS-I-A	47.1	0.0	0%
24th	East...	Illinois	149	1788	54.8	46.1	8.7	S	46.1	0.0	0%
	Illinois	West...	105	1260	53.3	47.6	5.7	S	47.6	0.0	0%
25th	East...	Illinois	147	1764	54.8	49.7	5.0	LS-I-A	49.7	0.0	0%
	Illinois	Third	673	8076	61.4	54.6	6.8	S	57.2	2.6	38%
	Third	Indiana	1445	17340	64.7	60.3	4.4	LS-I-A	62.2	1.9	43%
	Indiana	Pennsylvania	1183	14196	63.8	60.1	3.7	LS-I-A	61.6	1.5	39%
	Pennsylvania	West...	526	6312	60.3	58.8	1.5	LS	58.8	0.0	0%
	Cesar Chavez	East...	Illinois	195	2340	57.4	56.7	0.7	LS	56.7	0.0
	Illinois	Third	1621	19452	66.6	61.4	5.3	S	64.0	2.7	51%
	Third	Pennsylvania	3844	46128	70.4	66.6	3.8	LS-I-A	68.6	2.0	53%
	Pennsylvania	West...	2985	35820	69.3	66.2	3.1	S-R-CA	67.2	1.0	33%

NOTES: Traffic noise modeling was completed using the Federal Highway Administration *Traffic Noise Model, Version 2, Look Up Tables, Final Report, FHWA-HEP-05-008*, December 2004 (available online at https://www.fhwa.dot.gov/Environment/noise/traffic_noise_model/tnm_v25_lookup/lu03.cfm) and the California Department of Transportation (Caltrans), *Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol*, September 2013 (available online at http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf). Modeling parameters include: speed limit on all streets is 25 mph except on 16th, Third, and Cesar Chavez where the posted speed limit is 30 mph; vehicle mix is 98% Autos/1.5% Medium Trucks/0.5% Heavy Trucks; day-night split: 76% day (7 a.m. to 7 p.m.), 12% evening (7 p.m. to 10 p.m.), and 12% night (10 p.m. to 7 a.m.).

KEY

>5 dBA Noise Increase CA = Conditionally Acceptable
>3 but ≤5 dBA Noise Increase A = Acceptable

S = Significant R = Residential P = Park
LS = Less than significant I = industrial
NI = No Impact O = Office

Noise levels may vary by up to one-tenth of a decibel due to rounding.

R&D = Research & Development

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