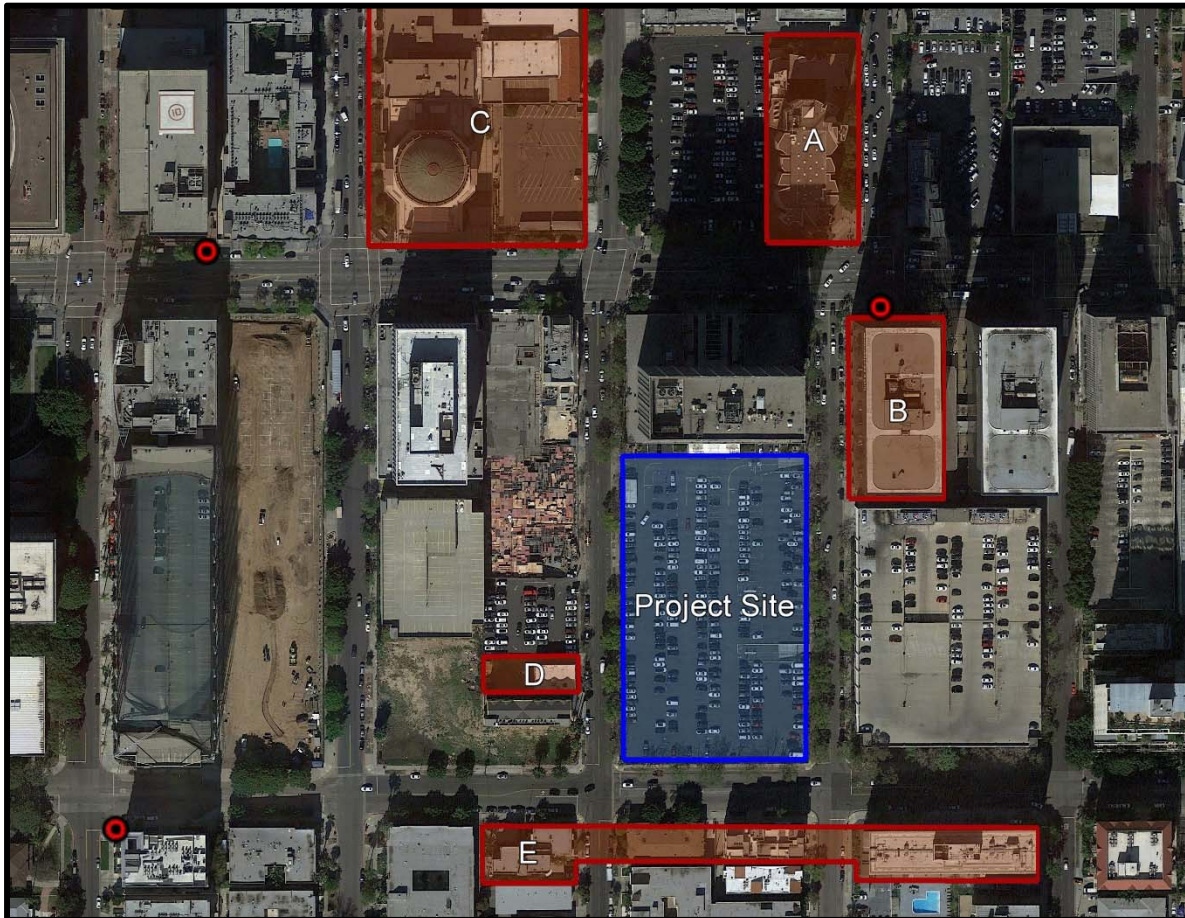


3600 Wilshire – Noise Receptor Map



***Red markers indicate monitoring locations**

- A. St. Basil Catholic Church**
- B. Azusa Pacific University and Bryan College**
- C. Wilshire Boulevard Temple**
- D. Emmaus Village Church**
- E. 7th Street Residences**

Intersection of 7th St. & Serrano Ave.

9/9/2016

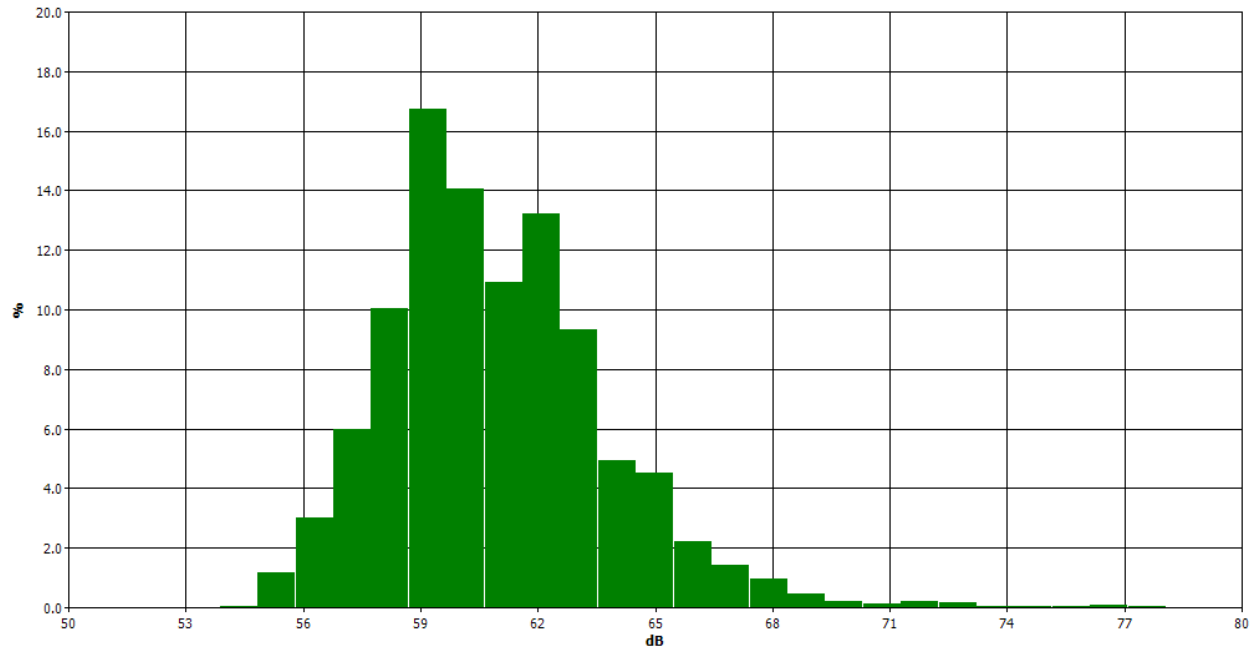
Information Panel

Name S326_BIJ050019_11092016_215654
Start Time Friday, September 9, 2016, 12:40pm
Stop Time Friday, September 9, 2016, 12:55pm
Device Model Type SoundPro DL

General Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	62.6dB	Exchange Rate	1	3dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	OFF	Exchange Rate	2	3dB
Weighting	2	C	Response	2	SLOW

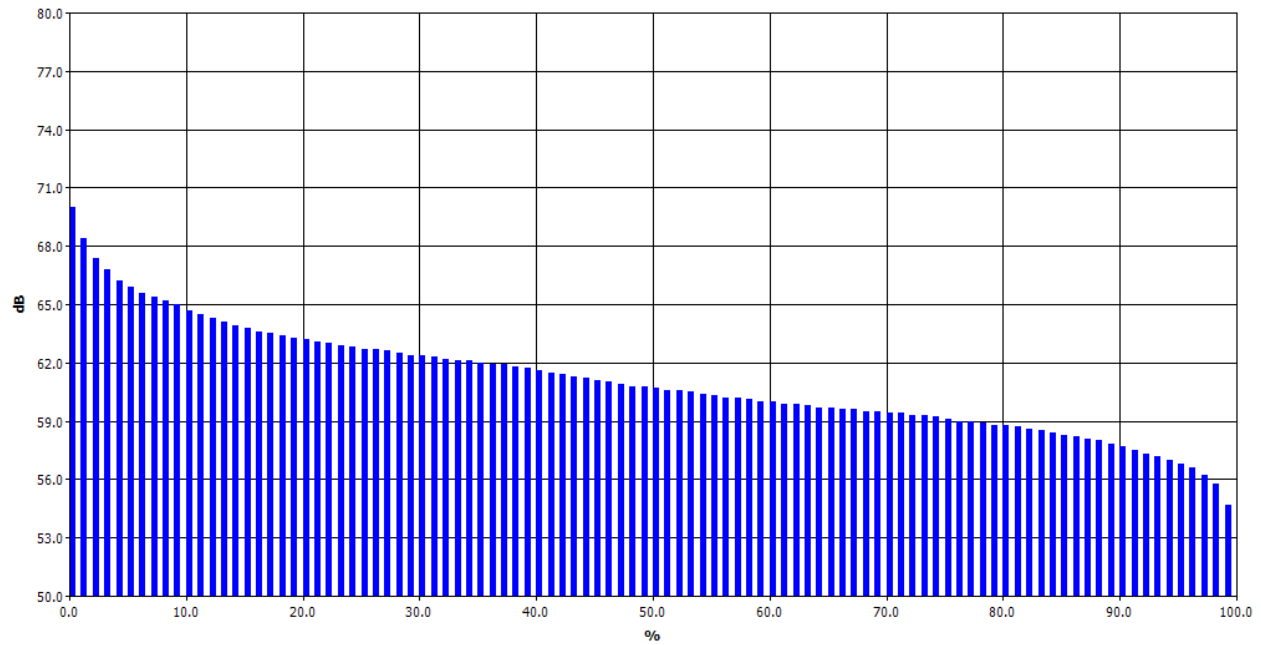
Statistics Chart



Statistics Table

dB	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.05
55	0.05	0.06	0.04	0.03	0.08	0.16	0.18	0.17	0.19	0.21	1.15
56	0.20	0.27	0.26	0.23	0.27	0.22	0.24	0.30	0.40	0.62	3.00
57	0.48	0.56	0.44	0.73	0.60	0.49	0.57	0.65	0.66	0.81	5.99
58	0.71	0.78	0.88	0.92	1.01	0.89	1.00	1.11	1.27	1.47	10.05
59	1.37	1.53	1.42	1.42	1.76	1.79	1.78	1.89	2.07	1.70	16.74
60	1.79	1.72	1.17	1.44	1.32	1.25	1.29	1.56	1.38	1.16	14.07
61	1.17	1.00	0.98	1.00	1.05	0.91	1.05	1.24	1.29	1.21	10.90
62	1.37	1.46	1.38	1.38	1.39	1.36	1.28	1.16	1.28	1.15	13.20
63	1.13	1.32	1.10	1.23	0.99	0.79	0.77	0.71	0.60	0.69	9.32
64	0.55	0.55	0.53	0.57	0.58	0.48	0.43	0.42	0.42	0.38	4.92
65	0.41	0.39	0.44	0.43	0.44	0.55	0.65	0.37	0.43	0.39	4.51
66	0.31	0.31	0.24	0.30	0.28	0.21	0.15	0.12	0.16	0.13	2.21
67	0.15	0.13	0.17	0.20	0.20	0.17	0.14	0.10	0.11	0.06	1.43
68	0.07	0.11	0.08	0.09	0.06	0.11	0.08	0.08	0.12	0.15	0.95
69	0.10	0.08	0.04	0.06	0.05	0.04	0.03	0.02	0.02	0.02	0.47
70	0.03	0.02	0.03	0.02	0.02	0.02	0.03	0.03	0.01	0.01	0.22
71	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.14
72	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.06	0.02	0.02	0.21
73	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.01	0.01	0.00	0.15
74	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.04
75	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.06
76	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05
77	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.10
78	0.01	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.05
79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

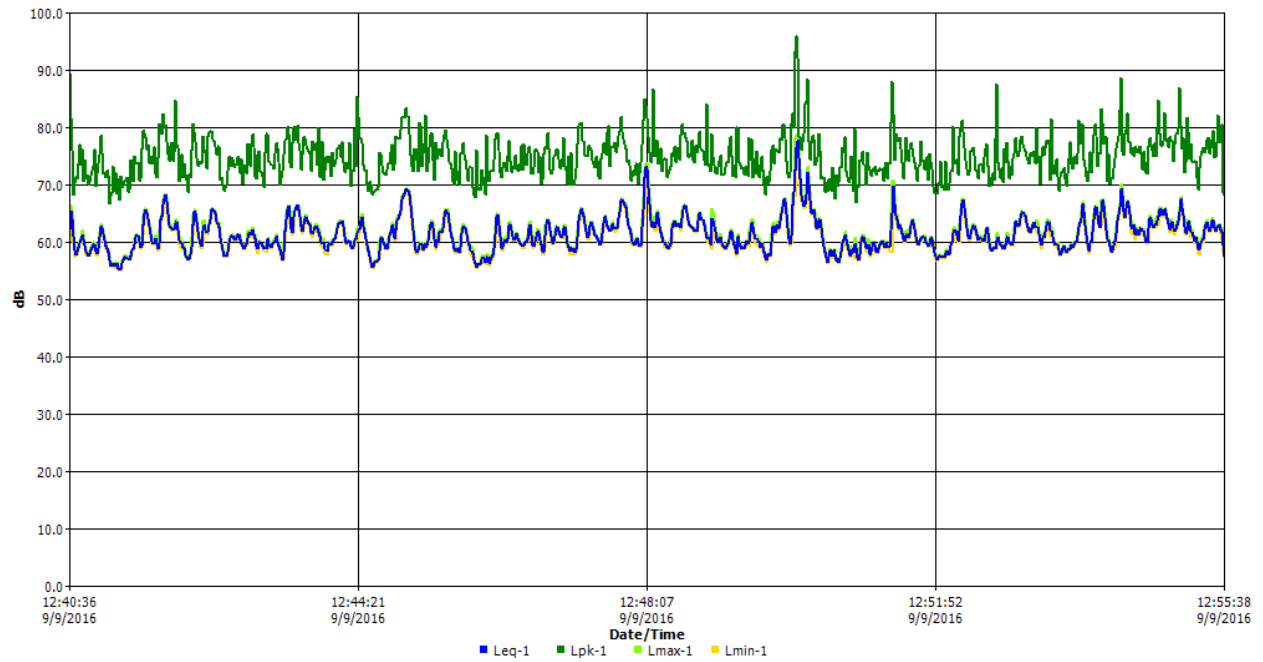
Exceedance Chart



Exceedance Table

	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
0%		70	68.4	67.4	66.8	66.2	65.9	65.6	65.4	65.2
10%	65	64.7	64.5	64.3	64.1	63.9	63.8	63.6	63.5	63.4
20%	63.3	63.2	63.1	63	62.9	62.8	62.7	62.7	62.6	62.5
30%	62.4	62.4	62.3	62.2	62.1	62.1	62	61.9	61.9	61.8
40%	61.7	61.6	61.5	61.4	61.3	61.2	61.1	61	60.9	60.8
50%	60.8	60.7	60.6	60.6	60.5	60.4	60.3	60.2	60.2	60.1
60%	60	60	59.9	59.9	59.8	59.7	59.7	59.6	59.6	59.5
70%	59.5	59.4	59.4	59.3	59.3	59.2	59.1	59	59	58.9
80%	58.8	58.8	58.7	58.6	58.5	58.4	58.3	58.2	58.1	58
90%	57.8	57.7	57.5	57.3	57.2	57	56.8	56.6	56.2	55.8
100%	54.7									

Logged Data Chart



Intersection of Wilshire Blvd. & Kingsley Dr.

1/18/2016

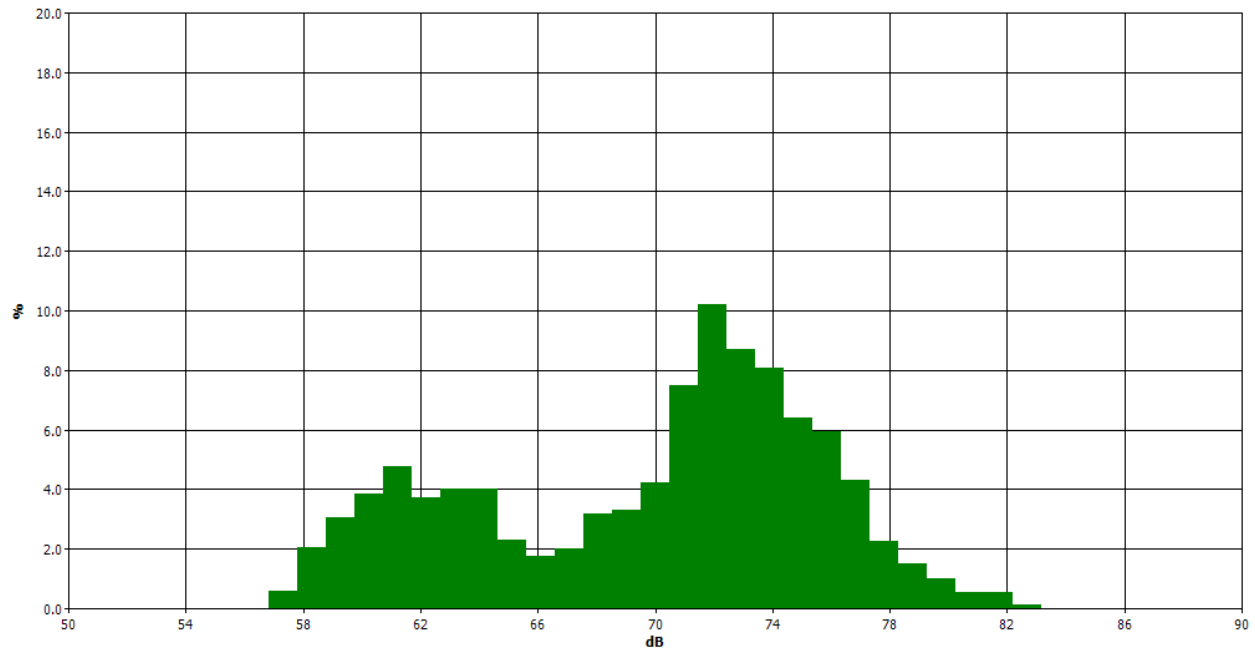
Information Panel

Name S231_BIJ050019_19012016_163826
Start Time Monday, January 18, 2016, 4:25pm
Stop Time Monday, January 18, 2016, 4:40pm
Device Model Type SoundPro DL

General Data Panel

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Leq	1	73.4dB	Exchange Rate	1	3dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	OFF	Exchange Rate	2	3dB
Weighting	2	C	Response	2	SLOW

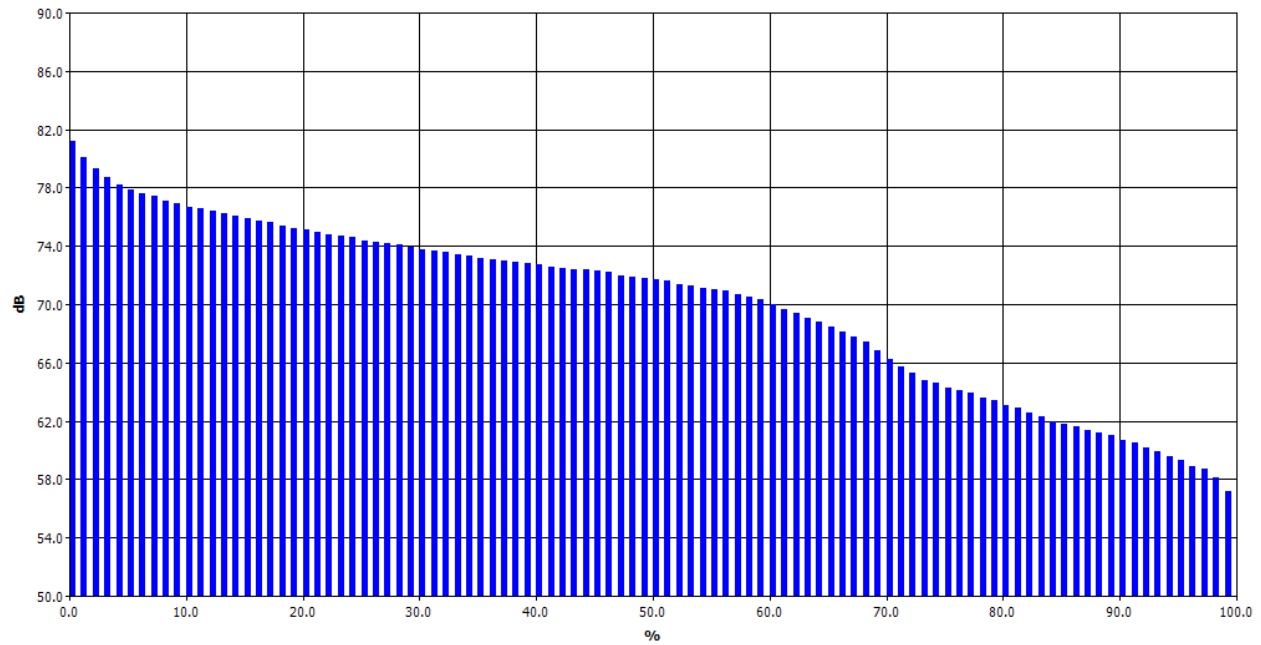
Statistics Chart



Statistics Table

dB	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	0.00	0.00	0.00	0.02	0.04	0.09	0.08	0.07	0.15	0.14	0.58
58	0.10	0.20	0.28	0.27	0.13	0.10	0.16	0.15	0.21	0.43	2.04
59	0.53	0.35	0.26	0.22	0.27	0.31	0.23	0.23	0.28	0.38	3.06
60	0.43	0.36	0.43	0.31	0.39	0.37	0.41	0.40	0.42	0.32	3.84
61	0.38	0.38	0.53	0.47	0.39	0.47	0.64	0.59	0.46	0.46	4.76
62	0.40	0.48	0.42	0.19	0.43	0.40	0.28	0.39	0.37	0.33	3.71
63	0.39	0.37	0.34	0.36	0.37	0.49	0.53	0.38	0.44	0.33	4.02
64	0.37	0.39	0.31	0.40	0.55	0.49	0.36	0.45	0.33	0.36	4.03
65	0.26	0.25	0.27	0.18	0.31	0.23	0.19	0.20	0.25	0.17	2.30
66	0.25	0.24	0.16	0.19	0.17	0.16	0.15	0.14	0.16	0.14	1.75
67	0.15	0.16	0.22	0.19	0.18	0.20	0.16	0.21	0.25	0.29	2.03
68	0.33	0.36	0.31	0.18	0.29	0.23	0.28	0.40	0.36	0.45	3.19
69	0.32	0.27	0.31	0.28	0.28	0.45	0.40	0.31	0.31	0.36	3.30
70	0.30	0.37	0.36	0.34	0.34	0.39	0.41	0.52	0.56	0.66	4.25
71	0.75	0.83	0.79	0.41	0.73	0.70	0.73	0.78	0.83	0.93	7.48
72	0.88	0.92	0.85	0.86	0.98	1.17	1.25	1.05	1.16	1.09	10.21
73	1.00	1.06	1.05	0.80	0.81	0.84	0.76	0.75	0.86	0.78	8.72
74	0.76	0.73	1.00	0.60	0.82	0.84	0.88	0.95	0.86	0.63	8.07
75	0.63	0.76	0.71	0.63	0.60	0.63	0.63	0.55	0.59	0.70	6.42
76	0.66	0.57	0.66	0.55	0.58	0.54	0.51	0.62	0.71	0.54	5.92
77	0.52	0.52	0.48	0.35	0.37	0.46	0.42	0.41	0.43	0.32	4.29
78	0.31	0.23	0.24	0.28	0.24	0.22	0.17	0.17	0.21	0.20	2.27
79	0.16	0.18	0.16	0.15	0.16	0.18	0.14	0.16	0.12	0.09	1.51
80	0.12	0.09	0.12	0.09	0.14	0.14	0.08	0.08	0.10	0.06	1.02
81	0.06	0.08	0.05	0.06	0.05	0.06	0.05	0.05	0.04	0.03	0.53
82	0.05	0.05	0.05	0.08	0.07	0.06	0.06	0.05	0.03	0.06	0.56
83	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.03	0.00	0.00	0.13
84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

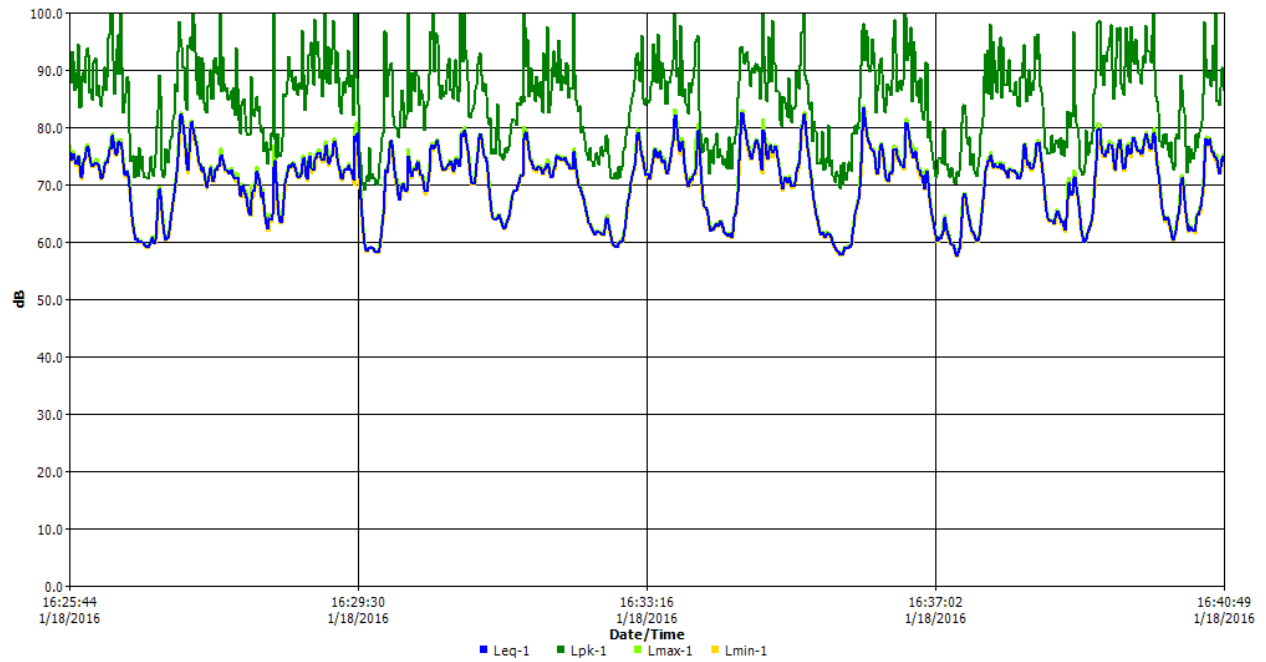
Exceedance Chart



Exceedance Table

	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
0%		81.2	80.1	79.3	78.7	78.2	77.9	77.6	77.4	77.1
10%	76.9	76.7	76.6	76.4	76.2	76.1	75.9	75.7	75.6	75.4
20%	75.2	75.1	75	74.8	74.7	74.6	74.4	74.3	74.2	74.1
30%	73.9	73.8	73.7	73.6	73.4	73.3	73.2	73.1	73	72.9
40%	72.8	72.7	72.6	72.5	72.4	72.4	72.3	72.2	72	71.9
50%	71.8	71.7	71.6	71.4	71.3	71.1	71	70.9	70.7	70.5
60%	70.3	70	69.7	69.4	69.1	68.8	68.5	68.1	67.8	67.4
70%	66.8	66.2	65.7	65.3	64.8	64.6	64.3	64.1	63.9	63.6
80%	63.4	63.1	62.9	62.6	62.3	62	61.8	61.6	61.4	61.2
90%	61	60.7	60.5	60.2	59.9	59.6	59.3	58.9	58.7	58.1
100%	57.2									

Logged Data Chart



Intersection of Wilshire Blvd. & Hobart Blvd.

9/9/2016

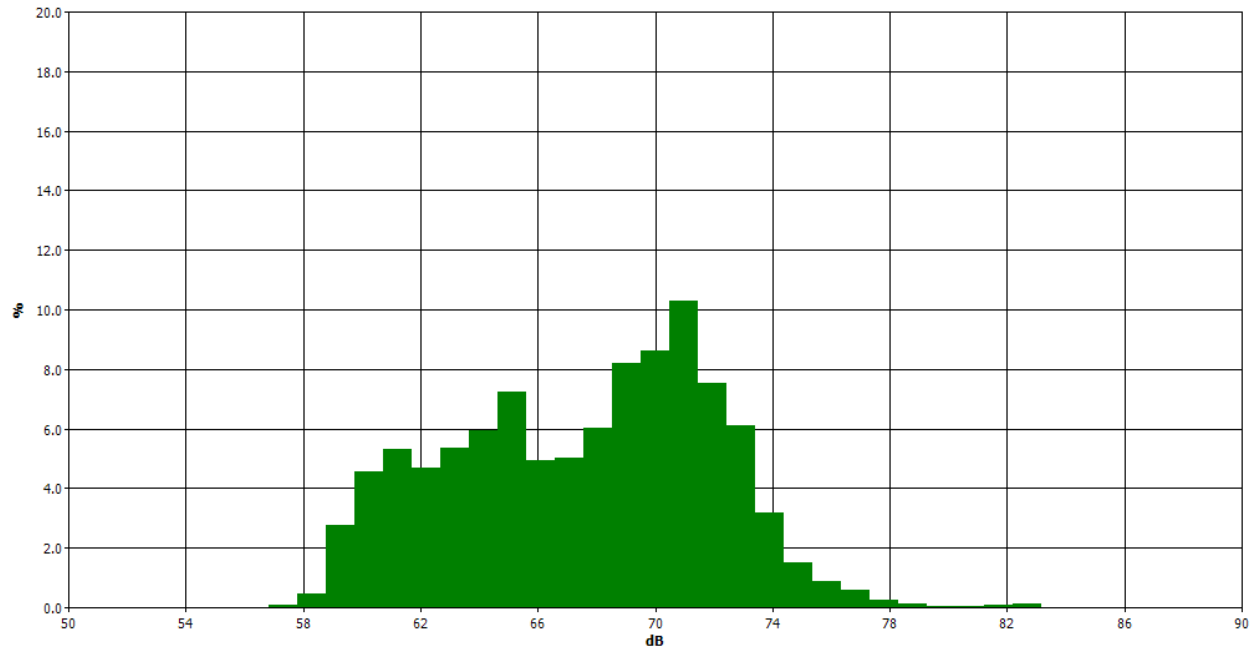
Information Panel

Name S323_BIJ050019_11092016_215653
Start Time Friday, September 9, 2016, 11:36am
Stop Time Friday, September 9, 2016, 11:51am
Device Model Type SoundPro DL

General Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	70.1dB	Exchange Rate	1	3dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	OFF	Exchange Rate	2	3dB
Weighting	2	C	Response	2	SLOW

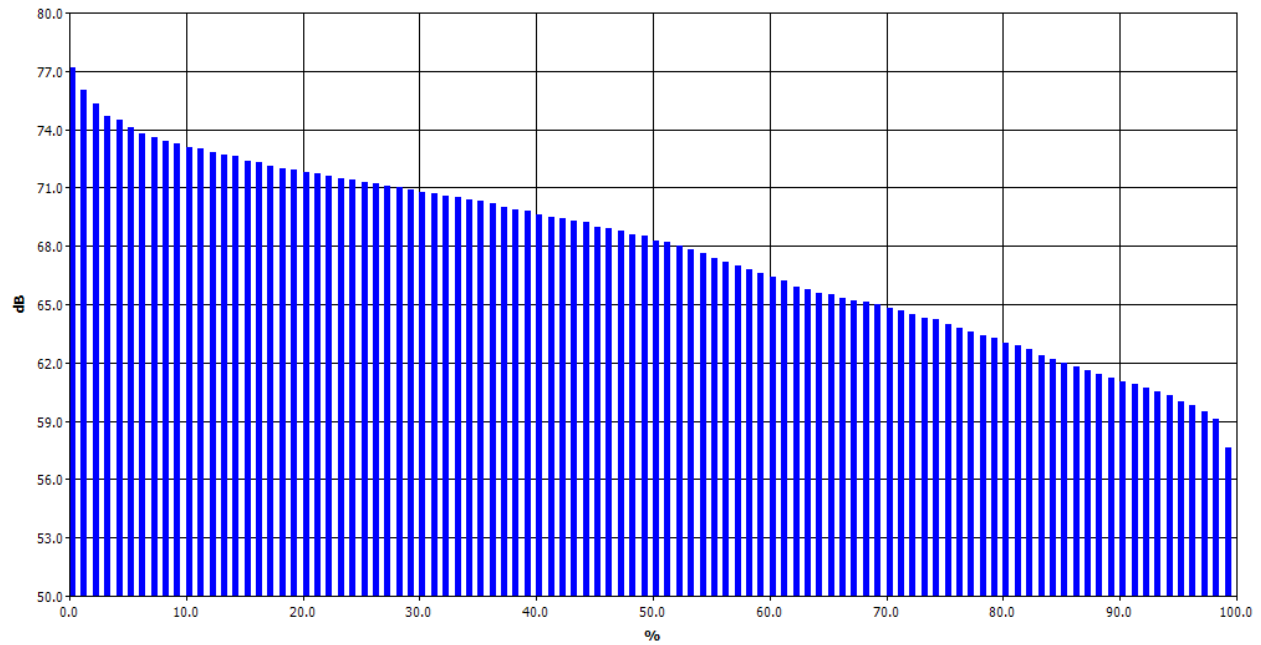
Statistics Chart



Statistics Table

dB	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.02	0.08
58	0.02	0.02	0.01	0.04	0.04	0.03	0.06	0.07	0.10	0.07	0.46
59	0.07	0.16	0.24	0.15	0.19	0.33	0.44	0.40	0.35	0.41	2.75
60	0.43	0.50	0.36	0.39	0.39	0.44	0.43	0.50	0.68	0.47	4.58
61	0.57	0.57	0.60	0.68	0.63	0.41	0.45	0.51	0.46	0.46	5.33
62	0.55	0.46	0.47	0.50	0.43	0.44	0.47	0.38	0.45	0.56	4.69
63	0.62	0.59	0.37	0.50	0.58	0.52	0.48	0.47	0.58	0.66	5.37
64	0.58	0.60	0.53	0.50	0.56	0.61	0.50	0.52	0.75	0.79	5.93
65	0.80	0.73	0.78	0.81	0.77	0.62	0.65	0.76	0.69	0.63	7.23
66	0.60	0.54	0.35	0.43	0.44	0.64	0.55	0.43	0.43	0.54	4.94
67	0.61	0.49	0.44	0.52	0.47	0.46	0.42	0.52	0.63	0.47	5.03
68	0.43	0.50	0.55	0.55	0.72	0.78	0.58	0.57	0.61	0.72	6.01
69	0.84	1.01	0.75	0.78	0.75	0.90	0.92	0.79	0.71	0.77	8.22
70	0.82	0.79	0.74	0.92	0.84	0.77	0.96	0.84	0.92	1.04	8.64
71	1.23	0.99	0.96	1.07	1.09	0.94	0.91	1.13	1.05	0.92	10.28
72	1.08	1.06	0.86	0.45	0.67	0.64	0.64	0.67	0.77	0.68	7.53
73	0.66	0.84	0.75	0.54	0.59	0.83	0.52	0.49	0.48	0.42	6.12
74	0.39	0.34	0.28	0.25	0.23	0.33	0.38	0.26	0.40	0.34	3.19
75	0.20	0.18	0.13	0.10	0.18	0.13	0.10	0.19	0.15	0.13	1.49
76	0.14	0.10	0.17	0.14	0.06	0.05	0.06	0.06	0.06	0.04	0.88
77	0.04	0.13	0.08	0.07	0.06	0.04	0.03	0.03	0.04	0.06	0.57
78	0.06	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.23
79	0.03	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.12
80	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.05
81	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.06
82	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.08
83	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.05	0.02	0.15
84	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

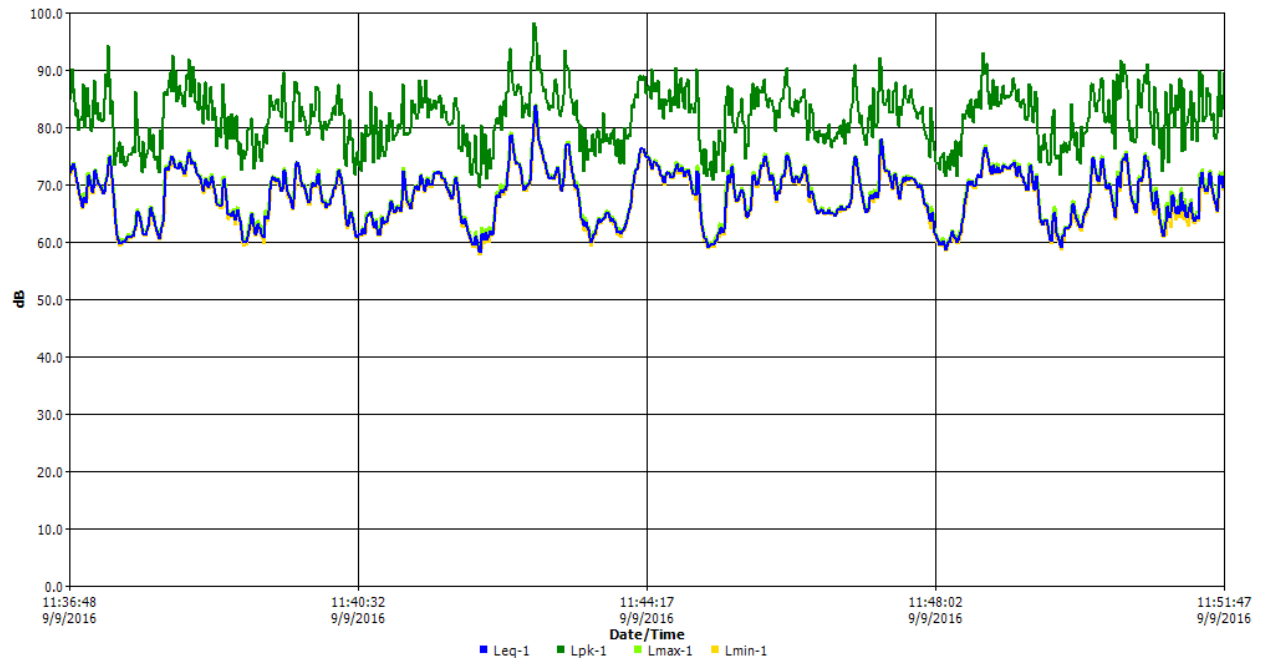
Exceedance Chart



Exceedance Table

	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
0%		77.2	76	75.3	74.7	74.5	74.1	73.8	73.6	73.4
10%	73.3	73.1	73	72.8	72.7	72.6	72.4	72.3	72.1	72
20%	71.9	71.8	71.7	71.6	71.5	71.4	71.3	71.2	71.1	71
30%	70.9	70.8	70.7	70.6	70.5	70.4	70.3	70.2	70	69.9
40%	69.8	69.6	69.5	69.4	69.3	69.2	69	68.9	68.8	68.6
50%	68.5	68.3	68.2	68	67.8	67.6	67.4	67.2	67	66.8
60%	66.6	66.4	66.2	65.9	65.8	65.6	65.5	65.3	65.2	65.1
70%	65	64.8	64.7	64.5	64.3	64.2	64	63.8	63.6	63.4
80%	63.3	63	62.9	62.7	62.4	62.2	62	61.8	61.6	61.4
90%	61.2	61	60.9	60.7	60.5	60.3	60	59.8	59.5	59.1
100%	57.6									

Logged Data Chart



Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Excavator	81	0.4	77.0
Loader	79	0.4	75.0
Combined dBA			79.1

Housing Row Shielding

<i>If gaps in the row of buildings constitute less than 35% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows1)	0	

<i>If gaps in the row of buildings constitute between 35-65% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows2)	0	

<i>If gaps in the row of buildings constitute more than 65% of the length of the row:</i>		
A(rows3)	0	

Tree Zone Shielding

<i>Where at least 100 feet of trees intervene between source and receiver, and if no clear line of sight exists between source and receiver, and if the trees extend 15 feet or more above the line of sight:</i>		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	0	

Cumulative Shielding

Office Building	10	*existing 3600 Wilshire 22-story office building
Axxx	0	
Axxx	0	
A(rows1)	0	
A(rows2)	0	
A(trees)	0	
A(cumulative)	10	

Unmitigated Construction Noise Level

Total Equipment Noise Level	79.1
Cumulative Shielding (A)	10
G	0
Distance	330
Unmitigated Construction Noise	52.8

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	52.8
Existing Ambient Noise	73.4
Unmitigated Ambient Noise	73.4
Unmitigated Increase	0.0

Construction Noise - Mitigated

Construction Equipment Mitigation

Source	Emission Level (dBA)	Usage Factor	Mitigative Attenuation	Adjusted dBA
Excavator	81	0.4	3	74.0
Loader	79	0.4	3	72.0
Combined dBA, Mitigated				76.1

Mitigated Construction Noise Level

Total Equipment Noise Level	76.1
Cumulative Shielding (A)	10
Sound Barrier Shielding	0.0
G	0.0
Distance	330
Mitigated Construction Noise	49.8

Mitigated Receptor Noise Level

Mitigated Construction Noise	49.8
Existing Ambient Noise	73.4
Mitigated Ambient Noise	73.4
Mitigated Increase	0.0

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook*, August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment*, May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Concrete Pump	81	0.2	74.0
Concrete Mixer	79	0.4	75.0
Combined dBA			77.6

Housing Row Shielding

<i>If gaps in the row of buildings constitute less than 35% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows1)	0	

<i>If gaps in the row of buildings constitute between 35-65% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows2)	0	

<i>If gaps in the row of buildings constitute more than 65% of the length of the row:</i>		
A(rows3)	0	

Tree Zone Shielding

<i>Where at least 100 feet of trees intervene between source and receiver, and if no clear line of sight exists between source and receiver, and if the trees extend 15 feet or more above the line of sight:</i>		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	0	

Cumulative Shielding

Office Building	10	*existing 3600 Wilshire 22-story office building
Axxx	0	
Axxx	0	
A(rows1)	0	
A(rows2)	0	
A(trees)	0	
A(cumulative)	10	

Unmitigated Construction Noise Level

Total Equipment Noise Level	77.6
Cumulative Shielding (A)	10
G	0
Distance	315
Unmitigated Construction Noise	51.6

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	51.6
Existing Ambient Noise	73.4
Unmitigated Ambient Noise	73.4
Unmitigated Increase	0.0

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook*, August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment*, May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013

Construction Noise Impact Analysis

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Excavator	81	0.4	77.0
Loader	79	0.4	75.0
Combined dBA			79.1

Housing Row Shielding

If gaps in the row of buildings constitute less than 35% of the length of the row:		
R	0	*number of rows of houses between source and receiver
A(rows1)	0	

If gaps in the row of buildings constitute between 35-65% of the length of the row:		
R	0	*number of rows of houses between source and receiver
A(rows2)	0	

If gaps in the row of buildings constitute more than 65% of the length of the row:		
A(rows3)	0	

Tree Zone Shielding

Where at least 100 feet of trees intervene between source and receiver, and if no clear line of sight exists between source and receiver, and if the trees extend 15 feet or more above the line of sight:		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	0	

Cumulative Shielding

Axxx	0
Axxx	0
Axxx	0
A(rows1)	0
A(rows2)	0
A(trees)	0
A(cumulative)	0

Construction Noise Impact Analysis

Unmitigated Construction Noise Level

Total Equipment Noise Level	79.1
Cumulative Shielding (A)	0
G	0
Distance	70
Unmitigated Construction Noise	76.2

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	76.2
Existing Ambient Noise	73.4
Unmitigated Ambient Noise	78.0
Unmitigated Increase	4.6

Construction Noise - Mitigated

Construction Equipment Mitigation

Source	Emission Level (dBA)	Usage Factor	Mitigative Attenuation	Adjusted dBA
Excavator	81	0.4	3	74.0
Loader	79	0.4	3	72.0
Combined dBA, Mitigated				76.1

Mitigated Construction Noise Level

Total Equipment Noise Level	76.1
Cumulative Shielding (A)	0
Sound Barrier Shielding	0.0
G	0.0
Distance	70
Mitigated Construction Noise	73.2

Mitigated Receptor Noise Level

Mitigated Construction Noise	73.2
Existing Ambient Noise	73.4
Mitigated Ambient Noise	76.3
Mitigated Increase	2.9

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook*, August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment*, May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013

Construction Noise Impact Analysis

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Concrete Pump	81	0.2	74.0
Concrete Mixer	79	0.4	75.0
Combined dBA			77.6

Housing Row Shielding

If gaps in the row of buildings constitute less than 35% of the length of the row:		
R	0	*number of rows of houses between source and receiver
A(rows1)	0	

If gaps in the row of buildings constitute between 35-65% of the length of the row:		
R	0	*number of rows of houses between source and receiver
A(rows2)	0	

If gaps in the row of buildings constitute more than 65% of the length of the row:		
A(rows3)	0	

Tree Zone Shielding

Where at least 100 feet of trees intervene between source and receiver, and if no clear line of sight exists between source and receiver, and if the trees extend 15 feet or more above the line of sight:		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	0	

Cumulative Shielding

Axxx	0
Axxx	0
Axxx	0
A(rows1)	0
A(rows2)	0
A(trees)	0
A(cumulative)	0

Unmitigated Construction Noise Level

Total Equipment Noise Level	77.6
Cumulative Shielding (A)	0
G	0
Distance	60
Unmitigated Construction Noise	76.0

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	76.0
Existing Ambient Noise	73.4
Unmitigated Ambient Noise	77.9
Unmitigated Increase	4.5

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook*, August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment*, May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Excavator	81	0.4	77.0
Loader	79	0.4	75.0
Combined dBA			79.1

Housing Row Shielding

<i>If gaps in the row of buildings constitute less than 35% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows1)	0	

<i>If gaps in the row of buildings constitute between 35-65% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows2)	0	

<i>If gaps in the row of buildings constitute more than 65% of the length of the row:</i>		
A(rows3)	0	

Tree Zone Shielding

<i>Where at least 100 feet of trees intervene between source and receiver, and if no clear line of sight exists between source and receiver, and if the trees extend 15 feet or more above the line of sight:</i>		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	0	

Cumulative Shielding

2-Story Building	5	*existing 2-story building at SW corner of Wilshire Blvd. and Harvard Blvd.
Axxx	0	
Axxx	0	
A(rows1)	0	
A(rows2)	0	
A(trees)	0	
A(cumulative)	5	

Unmitigated Construction Noise Level

Total Equipment Noise Level	79.1
Cumulative Shielding (A)	5
G	0
Distance	380
Unmitigated Construction Noise	56.5

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	56.5
Existing Ambient Noise	70.1
Unmitigated Ambient Noise	70.3
Unmitigated Increase	0.2

Construction Noise - Mitigated

Construction Equipment Mitigation

Source	Emission Level (dBA)	Usage Factor	Mitigative Attenuation	Adjusted dBA
Excavator	81	0.4	3	74.0
Loader	79	0.4	3	72.0
Combined dBA, Mitigated				76.1

Mitigated Construction Noise Level

Total Equipment Noise Level	76.1
Cumulative Shielding (A)	5
Sound Barrier Shielding	0.0
G	0.0
Distance	380
Mitigated Construction Noise	53.5

Mitigated Receptor Noise Level

Mitigated Construction Noise	53.5
Existing Ambient Noise	70.1
Mitigated Ambient Noise	70.2
Mitigated Increase	0.1

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook*, August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment*, May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Concrete Pump	81	0.2	74.0
Concrete Mixer	79	0.4	75.0
Combined dBA			77.6

Housing Row Shielding

<i>If gaps in the row of buildings constitute less than 35% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows1)	0	

<i>If gaps in the row of buildings constitute between 35-65% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows2)	0	

<i>If gaps in the row of buildings constitute more than 65% of the length of the row:</i>		
A(rows3)	0	

Tree Zone Shielding

<i>Where at least 100 feet of trees intervene between source and receiver, and if no clear line of sight exists between source and receiver, and if the trees extend 15 feet or more above the line of sight:</i>		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	0	

Cumulative Shielding

2-Story Building	5	*existing 2-story building at SW corner of Wilshire Blvd. and Harvard Blvd.
Axxx	0	
Axxx	0	
A(rows1)	0	
A(rows2)	0	
A(trees)	0	
A(cumulative)	5	

Unmitigated Construction Noise Level

Total Equipment Noise Level	77.6
Cumulative Shielding (A)	5
G	0
Distance	350
Unmitigated Construction Noise	55.7

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	55.7
Existing Ambient Noise	70.1
Unmitigated Ambient Noise	70.3
Unmitigated Increase	0.2

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook*, August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment*, May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Excavator	81	0.4	77.0
Loader	79	0.4	75.0
Combined dBA			79.1

Housing Row Shielding

<i>If gaps in the row of buildings constitute less than 35% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows1)	0	

<i>If gaps in the row of buildings constitute between 35-65% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows2)	0	

<i>If gaps in the row of buildings constitute more than 65% of the length of the row:</i>		
A(rows3)	0	

Tree Zone Shielding

<i>Where at least 100 feet of trees intervene between source and receiver, and if no clear line of sight exists between source and receiver, and if the trees extend 15 feet or more above the line of sight:</i>		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	0	

Cumulative Shielding

Axxx	0
Axxx	0
Axxx	0
A(rows1)	0
A(rows2)	0
A(trees)	0
A(cumulative)	0

Unmitigated Construction Noise Level

Total Equipment Noise Level	79.1
Cumulative Shielding (A)	0
G	0
Distance	70
Unmitigated Construction Noise	76.2

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	76.2
Existing Ambient Noise	62.4
Unmitigated Ambient Noise	76.4
Unmitigated Increase	14.0

Construction Noise - Mitigated

Construction Equipment Mitigation

Source	Emission Level (dBA)	Usage Factor	Mitigative Attenuation	Adjusted dBA
Excavator	81	0.4	3	74.0
Loader	79	0.4	3	72.0
Combined dBA, Mitigated				76.1

Mitigated Construction Noise Level

Total Equipment Noise Level	76.1
Cumulative Shielding (A)	0
Sound Barrier Shielding	10.0
G	0.0
Distance	70
Mitigated Construction Noise	63.2

Mitigated Receptor Noise Level

Mitigated Construction Noise	63.2
Existing Ambient Noise	62.4
Mitigated Ambient Noise	65.8
Mitigated Increase	3.4

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook*, August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment*, May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Concrete Pump	81	0.2	74.0
Concrete Mixer	79	0.4	75.0
Combined dBA			77.6

Housing Row Shielding

<i>If gaps in the row of buildings constitute less than 35% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows1)	0	

<i>If gaps in the row of buildings constitute between 35-65% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows2)	0	

<i>If gaps in the row of buildings constitute more than 65% of the length of the row:</i>		
A(rows3)	0	

Tree Zone Shielding

<i>Where at least 100 feet of trees intervene between source and receiver, and if no clear line of sight exists between source and receiver, and if the trees extend 15 feet or more above the line of sight:</i>		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	0	

Cumulative Shielding

Axxx	0
Axxx	0
Axxx	0
A(rows1)	0
A(rows2)	0
A(trees)	0
A(cumulative)	0

Unmitigated Construction Noise Level

Total Equipment Noise Level	77.6
Cumulative Shielding (A)	0
G	0
Distance	60
Unmitigated Construction Noise	76.0

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	76.0
Existing Ambient Noise	62.4
Unmitigated Ambient Noise	76.2
Unmitigated Increase	13.8

Construction Noise - Mitigated

Construction Equipment Mitigation

Source	Emission Level (dBA)	Usage Factor	Mitigative Attenuation	Adjusted dBA
Concrete Pump	81	0.2	0	74.0
Concrete Mixer	79	0.4	0	75.0
Combined dBA, Mitigated				77.6

Mitigated Construction Noise Level

Total Equipment Noise Level	77.6
Cumulative Shielding (A)	0
Sound Barrier Shielding	10.0
G	0.0
Distance	65
Mitigated Construction Noise	65.3

Mitigated Receptor Noise Level

Mitigated Construction Noise	65.3
Existing Ambient Noise	62.4
Mitigated Ambient Noise	67.1
Mitigated Increase	4.7

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook*, August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment*, May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Excavator	81	0.4	77.0
Loader	79	0.4	75.0
Combined dBA			79.1

Housing Row Shielding

<i>If gaps in the row of buildings constitute less than 35% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows1)	0	

<i>If gaps in the row of buildings constitute between 35-65% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows2)	0	

<i>If gaps in the row of buildings constitute more than 65% of the length of the row:</i>		
A(rows3)	0	

Tree Zone Shielding

<i>Where at least 100 feet of trees intervene between source and receiver, and if no clear line of sight exists between source and receiver, and if the trees extend 15 feet or more above the line of sight:</i>		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	0	

Cumulative Shielding

Axxx	0
Axxx	0
Axxx	0
A(rows1)	0
A(rows2)	0
A(trees)	0
A(cumulative)	0

Unmitigated Construction Noise Level

Total Equipment Noise Level	79.1
Cumulative Shielding (A)	0
G	0
Distance	85
Unmitigated Construction Noise	74.5

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	74.5
Existing Ambient Noise	62.6
Unmitigated Ambient Noise	74.8
Unmitigated Increase	12.2

Construction Noise - Mitigated

Construction Equipment Mitigation

Source	Emission Level (dBA)	Usage Factor	Mitigative Attenuation	Adjusted dBA
Excavator	81	0.4	3	74.0
Loader	79	0.4	3	72.0
Combined dBA, Mitigated				76.1

Mitigated Construction Noise Level

Total Equipment Noise Level	76.1
Cumulative Shielding (A)	0
Sound Barrier Shielding	10.0
G	0.0
Distance	85
Mitigated Construction Noise	61.5

Mitigated Receptor Noise Level

Mitigated Construction Noise	61.5
Existing Ambient Noise	62.6
Mitigated Ambient Noise	65.1
Mitigated Increase	2.5

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook*, August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment*, May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Concrete Pump	81	0.2	74.0
Concrete Mixer	79	0.4	75.0
Combined dBA			77.6

Housing Row Shielding

<i>If gaps in the row of buildings constitute less than 35% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows1)	0	

<i>If gaps in the row of buildings constitute between 35-65% of the length of the row:</i>		
R	0	*number of rows of houses between source and receiver
A(rows2)	0	

<i>If gaps in the row of buildings constitute more than 65% of the length of the row:</i>		
A(rows3)	0	

Tree Zone Shielding

<i>Where at least 100 feet of trees intervene between source and receiver, and if no clear line of sight exists between source and receiver, and if the trees extend 15 feet or more above the line of sight:</i>		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	0	

Cumulative Shielding

Axxx	0
Axxx	0
Axxx	0
A(rows1)	0
A(rows2)	0
A(trees)	0
A(cumulative)	0

Unmitigated Construction Noise Level

Total Equipment Noise Level	77.6
Cumulative Shielding (A)	0
G	0
Distance	60
Unmitigated Construction Noise	76.0

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	76.0
Existing Ambient Noise	62.6
Unmitigated Ambient Noise	76.2
Unmitigated Increase	13.6

Construction Noise - Mitigated

Construction Equipment Mitigation

Source	Emission Level (dBA)	Usage Factor	Mitigative Attenuation	Adjusted dBA
Concrete Pump	81	0.2	0	74.0
Concrete Mixer	79	0.4	0	75.0
Combined dBA, Mitigated				77.6

Mitigated Construction Noise Level

Total Equipment Noise Level	77.6
Cumulative Shielding (A)	0
Sound Barrier Shielding	10.0
G	0.0
Distance	65
Mitigated Construction Noise	65.3

Mitigated Receptor Noise Level

Mitigated Construction Noise	65.3
Existing Ambient Noise	62.6
Mitigated Ambient Noise	67.2
Mitigated Increase	4.6

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook*, August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment*, May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013

Construction Vibration - PPV: UNMITIGATED

Receptor: St. Basil Catholic Church
Equipment: Large Bulldozer, Auger Drilling

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	330
Unmitigated Vibration Level (in/sec)	0.007

Receptor: 3580 Wilshire Boulevard Building and Parking Structure
Equipment: Large Bulldozer, Auger Drilling

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	70
Unmitigated Vibration Level (in/sec)	0.032

Receptor: Harvard Boulevard Buildings
Equipment: Large Bulldozer, Auger Drilling

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	70
Unmitigated Vibration Level (in/sec)	0.032

Receptor: 7th Street Residences
Equipment: Large Bulldozer, Auger Drilling

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	85
Unmitigated Vibration Level (in/sec)	0.026

Construction Vibration Impact Analysis

3600 Wilshire Boulevard Project

Page 2

Receptor: Wilshire Boulevard Temple
Equipment: Large Bulldozer, Auger Drilling

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	380
Unmitigated Vibration Level (in/sec)	0.006

Sources

California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual*, September 2013.
Federal Transit Administration (FTA), *Transit Noise and Vibration Impact Assessment*, May 2006

RESULTS: SOUND LEVELS

3600 Wilshire

DKA Planning								30 November 2016				
Noah Tanski								TNM 2.5				
								Calculated with TNM 2.5				
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		3600 Wilshire										
RUN:		X11: AM Existing + Project										
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	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over Calculated	existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
EB 7th to Irolo	1	1	0.0	70.6	66	70.6	10	Snd Lvl	70.6	0.0	8	-8.0
WB 7th from Irolo	2	1	0.0	70.4	66	70.4	10	Snd Lvl	70.4	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X11 MASTER\AM Ex

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X11 MASTER\AM Fut PLUS

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X11 MASTER\AM Fut

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X11 MASTER\PM Ex PLUS

3600 Wilshire

30

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X11 MASTER\PM Fut PLUS

3600 Wilshire

30

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X5 MASTER\AM Ex PLUS

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X5 MASTER\AM Ex

3600 Wilshire

30

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X5 MASTER\PM Ex PLUS

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X5 MASTER\PM Ex

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X5 MASTER\PM Fut PLUS

3600 Wilshire

30

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X9 MASTER\AM Ex

3600 Wilshire

30

RESULTS: SOUND LEVELS			3600 Wilshire									
DKA Planning			30 November 2016									
Noah Tanski			TNM 2.5									
			Calculated with TNM 2.5									
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			3600 Wilshire									
RUN:			X9: PM Existing + Project									
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	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal dB
			dB	dB	dB	dB	dB		dB	dB	dB	dB
NB Normandie to 6th	1	1	0.0	68.5	66	68.5	10	Snd Lvl	68.5	0.0	8	-8.0
SB Normandie from 6th	2	1	0.0	68.2	66	68.2	10	Snd Lvl	68.2	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X9 MASTER\PM Ex

3600 Wilshire

C:\USERS\NOJATA\DESKTOP\3600 WILSHIRE TNM\X9 MASTER\PM Fut PLUS

RESULTS: SOUND LEVELS
3600 Wilshire

DKA Planning													
Noah Tanski													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
NB Normandie to 6th	1	1	0.0	69.6	66	69.6	10	Snd Lvl	69.6	0.0	8	-8.0	
SB Normandie from 6th	2	1	0.0	69.8	66	69.8	10	Snd Lvl	69.8	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		2	0.0	0.0	0.0								
All Impacted		2	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								