

APPENDIX D: NOISE

- Description of Speaker Array Used for Concert Noise Modeling

- Traffic Noise Levels

- Noise Levels at Modeled Sensitive Receptors

Description of Speaker Array Used for Concert Noise Modeling for the Seaside Park and Community Arts Center Project

The noise analysis shown in Chapter 12, "Noise" is based on the results of acoustical modeling that utilizes a stereo line array sound system comprised of sixteen individual cabinets articulated as an arc. A line array, in concept, is a column of identical speakers closely coupled that together form a system. Line array systems may be configured to optimally direct acoustic energy into desired locations by choosing the number of cabinets and the angles between them.

A line array of length (Approx. 18ft) offers the benefit of increased directivity of acoustic energy in the vertical plane. As such this maintains focus of audio output towards defined audience areas and minimizes off-axis sound pressure in non-audience areas.

The speaker array configurations used in the acoustic modeling are illustrated in the two figures below.

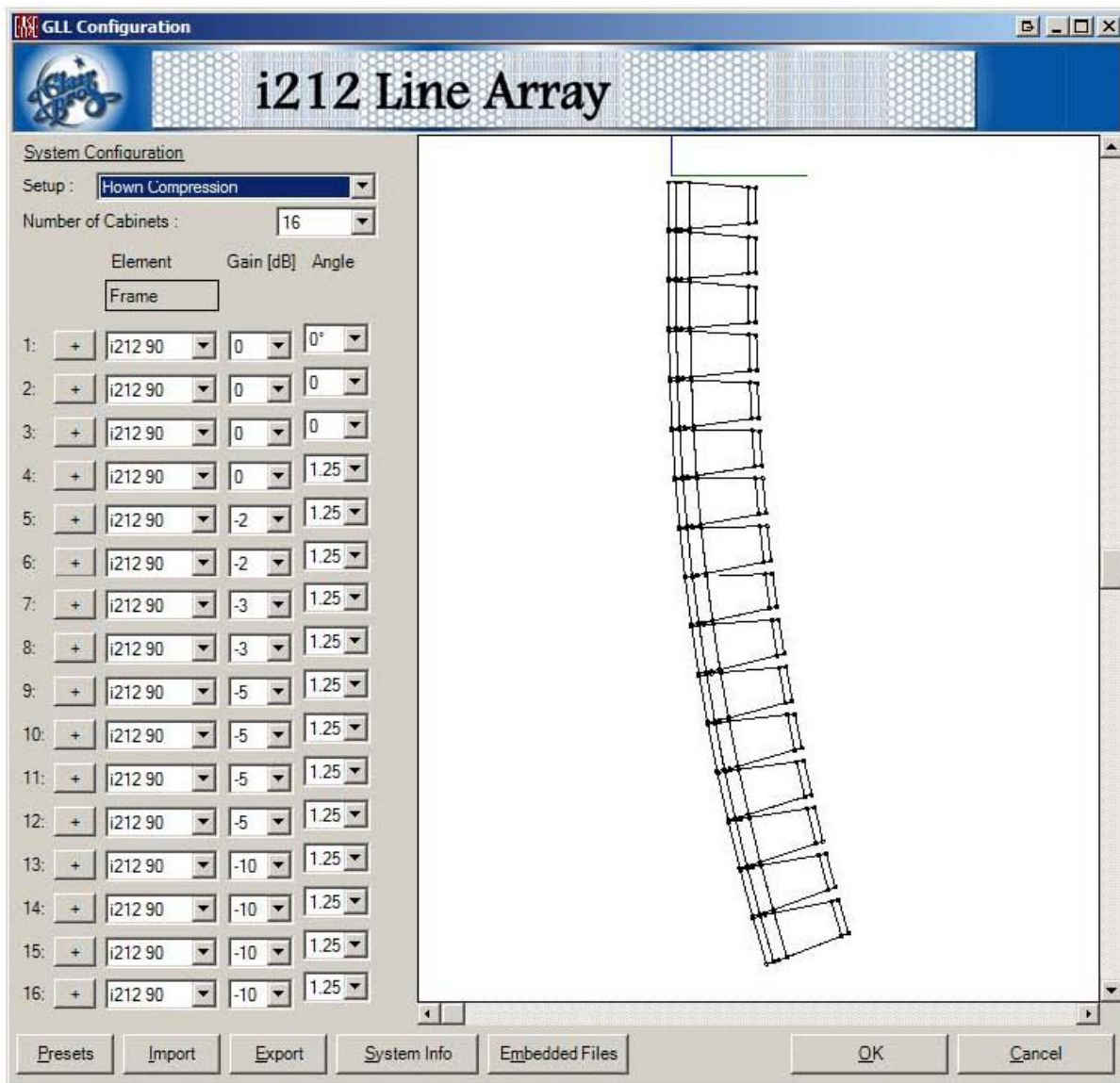


Figure 1.2.2 – Stage Left Cluster Configuration: Front center of top grid located at $x=38\text{ft}$, $y=-10\text{ft}$, $z=44\text{ft}$ (relative to origin). Top grid is angled down 6.0 degrees.

Source: Clair Brothers

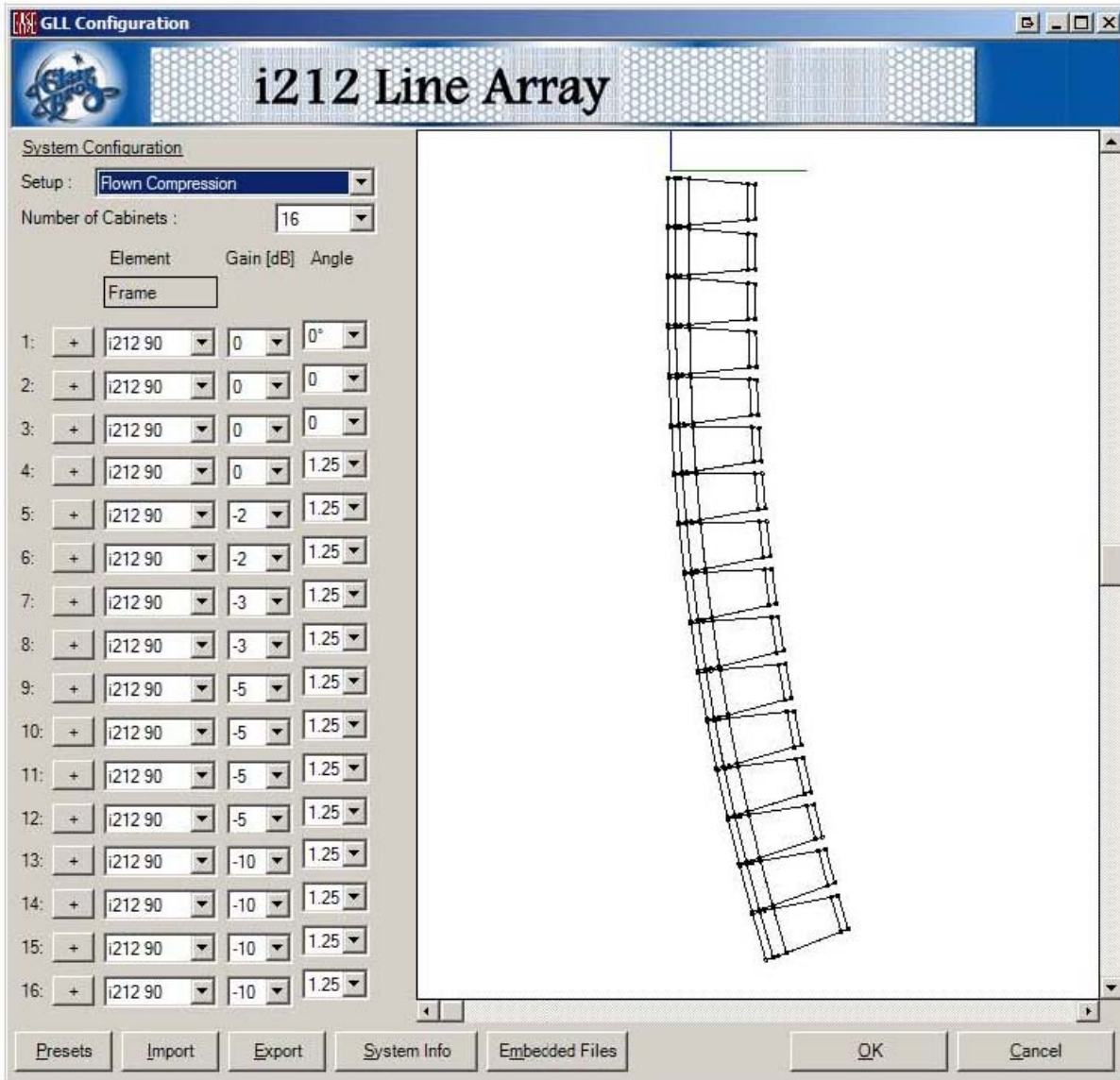


Figure 1.2.3 – Stage Right Cluster Configuration: Front center of top grid located at $x = -29.53\text{ft}$, $y = 2\text{ft}$, $z = 44\text{ft}$ (relative to origin). Top grid is angled down 6.0 degrees.

Source: Clair Brothers

TRAFFIC VOLUMES AND NOISE LEVELS

Intersection	Period	Intersection Totals			No Build			Build		
		Existing	No Build	Build	Traffic Increment	% Diff	Noise Increase (dBA)	Traffic Increment	% Diff	Noise Increase (dBA)
Shore Parking NB Off Ramp@ Cropsey/Bay 52nd St.	Pre-event	2,998	3,172	3,479	174	5.5%	0.25	307	9.7%	0.40
	Post-event	1,894	1,970	2,456	76	3.9%	0.17	486	24.6%	0.96
	Sat Pre-event	3,051	3,215	3,464	164	5.1%	0.23	249	7.7%	0.32
	Sat Post-event	2,466	2,561	2,942	95	3.7%	0.16	381	14.6%	0.60
Shore Parking SB Off Ramp@ Cropsey/Bay 50th St	Pre-event	2,477	2,588	2,668	111	4.3%	0.19	80	0.3%	0.13
	Post-event	1,519	1,569	1,958	50	3.2%	0.14	389	24.7%	0.96
	Sat Pre-event	2,518	2,629	2,690	111	4.2%	0.19	61	0.2%	0.10
	Sat Post-event	1,944	2,004	2,315	60	3.0%	0.13	311	15.3%	0.63
Shore Parking NB Off Ramp@ Shell Rd	Pre-event	1,525	1,592	1,720	67	4.2%	0.19	128	8.0%	0.34
	Post-event	796	825	853	29	3.5%	0.16	28	3.4%	0.14
	Sat Pre-event	1,383	1,439	1,546	56	3.9%	0.17	107	7.4%	0.31
	Sat Post-event	907	936	958	29	3.1%	0.14	22	2.2%	0.10
Shore Parking SB On Ramp@ Shell Rd	Pre-event	1,479	1,553	1,690	74	4.8%	0.21	137	8.8%	0.37
	Post-event	838	870	1,090	32	3.7%	0.16	220	25.9%	0.98
	Sat Pre-event	1,475	1,544	1,658	69	4.5%	0.20	114	7.4%	0.31
	Sat Post-event	983	1,016	1,200	33	3.2%	0.14	184	18.4%	0.72
Neptune Ave @ West 22nd St	Pre-event	1,547	1,728	1,779	181	10.5%	0.48	51	2.4%	0.13
	Post-event	799	882	1,004	83	9.4%	0.43	122	11.8%	0.56
	Sat Pre-event	1,364	1,530	1,553	166	10.8%	0.50	23	1.1%	0.06
	Sat Post-event	996	1,092	1,178	96	8.8%	0.40	86	5.9%	0.33
Neptune Ave @ West 21th St	Pre-event	1,647	1,857	1,960	210	11.3%	0.52	103	5.7%	0.23
	Post-event	835	925	1,060	90	9.7%	0.44	135	13.2%	0.59
	Sat Pre-event	1,465	1,656	1,724	191	11.5%	0.53	68	4.2%	0.17
	Sat Post-event	1,050	1,152	1,245	102	8.9%	0.40	93	6.8%	0.34
Neptune Ave @ West 20th St	Pre-event	1,707	2,165	2,275	458	21.2%	1.03	110	5.5%	0.22
	Post-event	901	1,311	1,595	410	31.3%	1.63	284	22.1%	0.85
	Sat Pre-event	1,545	2,002	2,074	457	22.8%	1.13	72	4.0%	0.15
	Sat Post-event	1,163	1,641	1,859	478	29.1%	1.50	218	12.5%	0.54
Neptune Ave @ West 19th St	Pre-event	1,968	2,088	2,198	120	5.7%	0.26	110	4.8%	0.22
	Post-event	1,247	1,290	1,574	43	3.3%	0.15	284	21.8%	0.86
	Sat Pre-event	1,830	1,963	2,035	133	6.8%	0.30	72	3.4%	0.16
	Sat Post-event	1,572	1,616	1,834	44	2.7%	0.12	218	13.3%	0.55
Neptune Ave @ Cropsey Ave	Pre-event	2,955	3,181	3,521	226	7.1%	0.32	340	10.6%	0.44
	Post-event	1,839	1,901	2,399	62	3.3%	0.14	498	25.9%	1.01
	Sat Pre-event	2,960	3,149	3,419	189	6.0%	0.27	270	8.4%	0.36
	Sat Post-event	2,361	2,437	2,827	76	3.1%	0.14	390	15.8%	0.64
Neptune Ave @ Stillwell Ave	Pre-event	1,632	1,752	1,837	120	6.8%	0.31	85	4.9%	0.21
	Post-event	807	847	1,056	40	4.7%	0.21	209	24.5%	0.96
	Sat Pre-event	1,730	1,840	1,904	110	6.0%	0.27	64	3.5%	0.15
	Sat Post-event	1,172	1,220	1,396	48	3.9%	0.17	176	14.2%	0.59
Neptune Ave @ West 12th St	Pre-event	1,338	1,434	1,488	96	6.7%	0.30	54	3.8%	0.16
	Post-event	573	603	768	30	5.0%	0.22	165	27.0%	1.05
	Sat Pre-event	1,356	1,446	1,488	90	6.2%	0.28	42	2.9%	0.12
	Sat Post-event	896	935	1,072	39	4.2%	0.19	137	14.4%	0.59
Neptune Ave @ West 8th St	Pre-event	1,743	1,851	2,020	108	5.8%	0.26	169	9.1%	0.38
	Post-event	757	792	1,129	35	4.4%	0.20	337	42.2%	1.54
	Sat Pre-event	1,781	1,883	2,021	102	5.4%	0.24	138	7.3%	0.31
	Sat Post-event	1,155	1,201	1,481	46	3.8%	0.17	280	23.1%	0.91
Mermaid Ave @ West 22nd St	Pre-event	573	652	699	79	12.1%	0.56	47	7.6%	0.30
	Post-event	269	313	385	44	14.1%	0.66	72	15.0%	0.90
	Sat Pre-event	520	600	621	80	13.3%	0.62	21	3.7%	0.15
	Sat Post-event	389	441	494	52	11.8%	0.54	53	6.4%	0.49
Mermaid Ave @ West 21st St	Pre-event	580	621	700	41	6.6%	0.30	79	14.9%	0.52
	Post-event	288	298	299	10	3.4%	0.15	1	1.4%	0.01
	Sat Pre-event	572	610	678	38	6.2%	0.28	68	12.8%	0.46
	Sat Post-event	402	418	417	16	3.8%	0.17	(1)	0.7%	-0.01
Mermaid Ave @ West 20th St	Pre-event	535	873	916	338	38.7%	2.13	43	5.3%	0.21
	Post-event	323	655	794	332	50.7%	3.07	139	21.8%	0.84
	Sat Pre-event	533	858	893	325	37.9%	2.07	35	4.9%	0.17
	Sat Post-event	474	888	1,007	414	46.6%	2.73	119	12.8%	0.55
Mermaid Ave @ West 19th St	Pre-event	814	546	575	(268)	-49.1%	(1.73)	29	3.5%	0.22
	Post-event	608	277	287	(331)	-119.5%	(3.41)	10	10.2%	0.15
	Sat Pre-event	787	552	578	(235)	-42.6%	(1.54)	26	3.2%	0.20
	Sat Post-event	853	464	471	(389)	-83.8%	(2.64)	7	6.8%	0.07
Mermaid Ave @ West 17th St	Pre-event	963	996	1,177	33	3.3%	0.15	181	17.7%	0.73
	Post-event	442	425	441	(17)	-4.0%	(0.17)	16	2.4%	0.16

	Sat Pre-event	1,014	1,026	1,178	12	1.2%	0.05	152	14.3%	0.60
	Sat Post-event	709	685	693	(24)	-3.5%	(0.15)	8	0.5%	0.05
Surf Ave @ West 22nd St	Pre-event	934	1,092	1,177	158	14.5%	0.68	85	9.1%	0.33
	Post-event	562	616	712	54	8.8%	0.40	96	11.8%	0.63
	Sat Pre-event	902	1,054	1,085	152	14.4%	0.68	31	4.5%	0.13
	Sat Post-event	805	862	920	57	6.6%	0.30	58	4.2%	0.28
Surf Ave @ West 21st St	Pre-event	915	1,062	1,307	147	13.8%	0.65	245	23.9%	0.90
	Post-event	568	600	795	32	5.3%	0.24	195	30.9%	1.22
	Sat Pre-event	907	1,042	1,223	135	13.0%	0.60	181	18.4%	0.70
	Sat Post-event	800	839	1,001	39	4.6%	0.21	162	18.5%	0.77
Surf Ave @ West 20th St	Pre-event	902	1,213	1,418	311	25.6%	1.29	205	19.5%	0.68
	Post-event	578	838	1,028	260	31.0%	1.61	190	29.9%	0.89
	Sat Pre-event	880	1,169	1,307	289	24.7%	1.23	138	14.0%	0.48
	Sat Post-event	796	1,099	1,254	303	27.6%	1.40	155	18.3%	0.57
Surf Ave @ West 19th St	Pre-event	1,201	1,235	1,412	34	2.8%	0.12	177	14.1%	0.58
	Post-event	930	908	984	(22)	-2.4%	(0.10)	76	11.6%	0.35
	Sat Pre-event	1,290	1,343	1,467	53	3.9%	0.17	124	9.2%	0.38
	Sat Post-event	1,209	1,170	1,224	(39)	-3.3%	(0.14)	54	7.4%	0.20
Surf Ave @ West 17th St	Pre-event	1,211	1,335	1,569	124	9.3%	0.42	234	17.2%	0.70
	Post-event	742	807	873	65	8.1%	0.36	66	7.7%	0.34
	Sat Pre-event	1,284	1,414	1,588	130	9.2%	0.42	174	12.2%	0.50
	Sat Post-event	1,034	1,124	1,171	90	8.0%	0.36	47	3.9%	0.18
Surf Ave @ West 16th St	Pre-event	997	1,100	1,243	103	9.4%	0.43	143	12.9%	0.53
	Post-event	683	752	807	69	9.2%	0.42	55	7.0%	0.31
	Sat Pre-event	1,068	1,191	1,294	123	10.3%	0.47	103	8.0%	0.36
	Sat Post-event	988	1,085	1,128	97	8.9%	0.41	43	3.7%	0.17
Surf Ave @ West 15th St	Pre-event	1,099	1,231	1,374	132	10.7%	0.49	143	11.8%	0.48
	Post-event	755	830	931	75	9.0%	0.41	101	12.1%	0.50
	Sat Pre-event	1,280	1,423	1,526	143	10.0%	0.46	103	7.4%	0.30
	Sat Post-event	1,149	1,264	1,345	115	9.1%	0.41	81	6.3%	0.27
Surf Ave @ Stillwell Ave	Pre-event	1,250	1,386	1,531	136	9.8%	0.45	145	10.6%	0.43
	Post-event	844	923	1,071	79	8.6%	0.39	148	16.1%	0.65
	Sat Pre-event	1,295	1,436	1,543	141	9.8%	0.45	107	7.6%	0.31
	Sat Post-event	1,133	1,247	1,366	114	9.1%	0.42	119	9.6%	0.40
Surf Ave @ West 12th St	Pre-event	1,000	1,095	1,239	95	8.7%	0.39	144	12.2%	0.54
	Post-event	708	745	909	37	5.0%	0.22	164	21.4%	0.86
	Sat Pre-event	1,254	1,350	1,462	96	7.1%	0.32	112	7.6%	0.35
	Sat Post-event	1,075	1,127	1,261	52	4.6%	0.21	134	11.5%	0.49
Surf Ave @ West 10th St	Pre-event	982	1,072	1,216	90	8.4%	0.38	144	13.4%	0.55
	Post-event	679	713	877	34	4.8%	0.21	164	22.3%	0.90
	Sat Pre-event	1,212	1,304	1,416	92	7.1%	0.32	112	8.6%	0.36
	Sat Post-event	1,027	1,074	1,208	47	4.4%	0.19	134	12.1%	0.51
Surf Ave @ West 8th St	Pre-event	1,141	1,237	1,516	96	7.8%	0.35	279	22.6%	0.88
	Post-event	720	756	1,183	36	4.8%	0.21	427	8.2%	1.94
	Sat Pre-event	1,447	1,547	1,780	100	6.5%	0.29	233	15.1%	0.61
	Sat Post-event	1,044	1,095	1,456	51	4.7%	0.21	361	3.9%	1.24

SENSITIVE RECEPTORS A THROUGH Q, BUILD NOISE LEVELS, LMAX CONCERT NOISE AT MIX POSITION LIMITED TO 98 DBA BEFORE 10 PM AND 92 AFTER 10 PM

ID	Address	Block	Lot	# Floors	# DUs	Monitoring Site ID	Period	No Action Leq	No Action L10	Action with Traffic Leq	Action with Traffic L10	Increment	Concert Noise LEQ	Total Action LEQ	Difference	Concert Lmax	Concert Lmax - Bid Leq
A	3035 W. 24 th St.	7070	148	5	NA	8	Wkday < 10 pm	57.0	59.2	57.0	59.2	0.0	46.2	57.3	0.3	51.2	-5.8
							Wkday >10 pm	55.2	56.0	55.2	56.0	0.0	40.2	55.4	0.1	45.2	-10.0
							Sat < 10 pm	58.2	60.0	58.2	60.0	0.0	46.2	58.5	0.3	51.2	-7.0
							Sat > 10 pm	61.4	57.6	61.4	57.6	0.0	40.2	61.4	0.0	45.2	-16.2
B	2316 Surf Ave.	7070	120	4	100	9	Wkday < 10 pm	67.2	70.3	67.4	70.5	0.2	23.9	67.4	0.2	28.9	-38.5
							Wkday >10 pm	68.9	71.4	69.2	71.7	0.3	17.9	69.2	0.3	22.9	-46.3
							Sat < 10 pm	65.4	68.1	65.6	68.3	0.2	23.9	65.6	0.2	28.9	-36.7
							Sat > 10 pm	66.1	68.6	66.3	68.8	0.2	17.9	66.3	0.2	22.9	-43.4
C	3024 W. 24 th St.	7070	1	NA	NA	9	Wkday < 10 pm	67.2	70.3	67.4	70.5	0.2	31.9	67.4	0.2	36.9	-30.5
							Wkday >10 pm	68.9	71.4	69.2	71.7	0.3	25.9	69.2	0.3	30.9	-38.3
							Sat < 10 pm	65.4	68.1	65.6	68.3	0.2	31.9	65.6	0.2	36.9	-28.7
							Sat > 10 pm	66.1	68.6	66.3	68.8	0.2	25.9	66.3	0.2	30.9	-35.4
D1	3021 W. 25 th St.	7070	1	14	380	9	Wkday < 10 pm	60.2	63.3	60.4	63.5	0.2	33.2	60.4	0.2	38.2	-22.2
							Wkday >10 pm	61.9	64.4	62.2	64.7	0.3	27.2	62.2	0.3	32.2	-30.0
							Sat < 10 pm	58.4	61.1	58.6	61.3	0.2	33.2	58.6	0.2	38.2	-20.4
							Sat > 10 pm	59.1	61.6	59.3	61.8	0.2	27.2	59.3	0.2	32.2	-27.1
D2	3021 W. 25 th St.	7070	1	14	380	10	Wkday < 10 pm	56.8	57.1	59.2	59.5	2.4	24.4	59.2	2.4	29.4	-29.8
							Wkday >10 pm	51.5	52.3	53.5	54.3	2.0	18.4	53.5	2.0	23.4	-30.1
							Sat < 10 pm	57.2	58.8	57.2	58.8	0.0	24.4	57.2	0.0	29.4	-27.8
							Sat > 10 pm	55.6	57.5	55.6	57.5	0.0	18.4	55.6	0.0	23.4	-32.2
E	3046 W. 22 nd St.	7071	24	3	15	5	Wkday < 10 pm	59.8	62.5	58.6	61.3	-1.3	57.3	61.0	1.2	62.3	3.7
							Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	51.3	53.6	0.9	56.3	6.6
							Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	57.3	66.8	-2.1	62.3	-4.0
							Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	51.3	56.9	-1.6	56.3	0.8
F	3040 W. 22 nd St.	7071	19	7	40	5	Wkday < 10 pm	59.8	62.5	58.6	61.3	-1.3	51.3	59.3	-0.5	56.3	-2.3
							Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	45.3	51.0	-1.6	50.3	0.6
							Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	51.3	66.4	-2.5	56.3	-10.0
							Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	45.3	55.9	-2.6	50.3	-5.2
G	3018-3022 W. 22 nd St.	7071	114	3	21	4	Wkday < 10 pm	66.6	70.3	67.1	70.8	0.4	45.5	67.1	0.5	50.5	-16.6
							Wkday >10 pm	62.9	65.5	63.9	66.5	1.0	39.5	63.9	1.0	44.5	-19.4
							Sat < 10 pm	68.9	69.4	69.3	69.8	0.4	45.5	69.3	0.4	50.5	-18.8
							Sat > 10 pm	64.7	67.5	65.3	68.1	0.6	39.5	65.3	0.6	44.5	-20.8
H	3024 W. 23 rd St.	7070	133	3	10	5	Wkday < 10 pm	59.8	62.5	58.6	61.3	-1.3	37.1	58.6	-1.2	42.1	-16.5
							Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	31.1	49.7	-2.9	36.1	-13.6
							Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	37.1	66.3	-2.6	42.1	-24.2
							Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	31.1	55.5	-3.0	36.1	-19.4
I	3027 W. 24 th St.	7070	175	3	6	9	Wkday < 10 pm	60.2	63.3	60.4	63.5	0.2	38.2	60.4	0.2	43.2	-17.2
							Wkday >10 pm	61.9	64.4	62.2	64.7	0.3	32.2	62.2	0.3	37.2	-25.0
							Sat < 10 pm	58.4	61.1	58.6	61.3	0.2	38.2	58.6	0.2	43.2	-15.4
							Sat > 10 pm	59.1	61.6	59.3	61.8	0.2	32.2	59.3	0.2	37.2	-22.1
J	3039 W. 24 th St.	7070	174	3	6	9	Wkday < 10 pm	60.2	63.3	60.4	63.5	0.2	40.0	60.5	0.3	45.0	-15.4
							Wkday >10 pm	61.9	64.4	62.2	64.7	0.3	34.0	62.2	0.3	39.0	-23.2
							Sat < 10 pm	58.4	61.1	58.6	61.3	0.2	40.0	58.6	0.2	45.0	-13.6
							Sat > 10 pm	59.1	61.6	59.3	61.8	0.2	34.0	59.3	0.2	39.0	-20.3
K	3008 W, 22 nd St.	7071	9	2	20	4	Wkday < 10 pm	66.6	70.3	67.1	70.8	0.4	43.3	67.1	0.5	48.3	-18.8
							Wkday >10 pm	62.9	65.5	63.9	66.5	1.0	37.3	63.9	1.0	42.3	-21.6
							Sat < 10 pm	68.9	69.4	69.3	69.8	0.4	43.3	69.3	0.4	48.3	-21.0

							Sat > 10 pm	64.7	67.5	65.3	68.1	0.6	37.3	65.3	0.6	42.3	-23.0
L	3016 W. 22 nd St.	7071	13	1	4	4	<u>Wkday < 10 pm</u>	66.6	70.3	67.1	70.8	0.4	44.5	67.1	0.5	49.5	-17.6
							Wkday >10 pm	62.9	65.5	63.9	66.5	1.0	38.5	63.9	1.0	43.5	-20.4
							Sat < 10 pm	68.9	69.4	69.3	69.8	0.4	44.5	69.3	0.4	49.5	-19.8
							Sat > 10 pm	64.7	67.5	65.3	68.1	0.6	38.5	65.3	0.6	43.5	-21.8
M	3017 W. 23 rd St.	7071	94	2	6	8	<u>Wkday < 10 pm</u>	59.8	62.5	58.6	61.3	-1.3	26.0	58.6	-1.2	31.0	-27.6
							Wkday >10 pm	52.7	55.	49.7	52.4	-3.0	20.0	49.7	-3.0	25.0	-24.7
							Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	26.0	66.3	-2.6	31.0	-35.3
							Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	20.0	55.5	-3.0	25.0	-30.5
N	3023 W. 23 rd St.	7071	93	2	3	8	<u>Wkday < 10 pm</u>	59.8	62.5	58.6	61.3	-1.3	28.7	58.6	-1.2	33.7	-24.9
							Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	22.7	49.7	-3.0	27.7	-22.0
							Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	28.7	66.3	-2.6	33.7	-32.6
							Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	22.7	55.5	-3.0	27.7	-27.8
O	3029 W. 23 rd St.	7071	90	3	3	8	<u>Wkday < 10 pm</u>	59.8	62.5	58.6	61.3	-1.3	27.3	58.6	-1.2	32.3	-26.3
							Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	21.3	49.7	-3.0	26.3	-23.4
							Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	27.3	66.3	-2.6	32.3	-34.0
							Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	21.3	55.5	-3.0	26.3	-29.2
P	3031 W. 23 rd St.	7071	89	3	3	8	<u>Wkday < 10 pm</u>	59.8	62.5	58.6	61.3	-1.3	33.4	58.6	-1.2	38.4	-20.2
							Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	27.4	49.7	-3.0	32.4	-17.3
							Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	33.4	66.3	-2.6	38.4	-27.9
							Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	27.4	55.5	-3.0	32.4	-23.1
Q	2226 Surf Ave.	7071	1	2	2	4	<u>Wkday < 10 pm</u>	67.2	70.3	67.4	70.5	0.2	37.6	67.4	0.2	42.6	-24.8
							Wkday >10 pm	68.9	71.4	69.2	71.7	0.3	31.6	69.2	0.3	36.6	-32.6
							Sat < 10 pm	65.4	68.1	65.6	68.3	0.2	37.6	65.6	0.2	42.6	-23.0
Q							Sat > 10 pm	66.1	68.6	66.3	68.8	0.2	31.6	66.3	0.2	36.6	-29.7

Modeled by Cerami 11/12/13		
	Lmax	Leq
R-A	51.2	46.2
R-B	28.9	23.9
R-C	36.9	31.9
R-D(middle bldg)	38.2	33.2
R-D(South bldg)	29.4	24.4
R-E	62.3	57.3
R-F	56.3	51.3
R-G	50.5	45.5
R-H	42.1	37.1
R-I	43.2	38.2
R-J	45.0	40.0
R-K	48.3	43.3
R-L	49.5	44.5
R-M	31.0	26.0
R-N	33.7	28.7
R-O	32.3	27.3
R-P	38.4	33.4
R-Q	42.6	37.6

SENSITIVE RECEPTORS A THROUGH Q, BUILD NOISE LEVELS, LMAX CONCERT NOISE AT MIX POSTION LIMITED TO 98 AND 92 dBA Without Human Resources Building

ID	Address	Block	Lot	# Floors	# DUs	Monitoring Site ID	Period	No Action Leq	No Action L10	Action with Traffic Leq	Action with Traffic L10	Increment	Concert Noise LEQ	Total Action LEQ	Difference	Concert Lmax	Concert Lmax - Bid Leq
A	3035 W. 24 th St.	7070	148	5	NA	8	Wkday < 10 pm	57.0	59.2	57.0	59.2	0.0	46.2	57.3	0.3	51.2	-5.8
							Wkday >10 pm	55.2	56.0	55.2	56.0	0.0	40.2	55.4	0.1	45.2	-10.0
							Sat < 10 pm	58.2	60.0	58.2	60.0	0.0	46.2	58.5	0.3	51.2	-7.0
							Sat > 10 pm	61.4	57.6	61.4	57.6	0.0	40.2	61.4	0.0	45.2	-16.2
B	2316 Surf Ave.	7070	120	4	100	9	Wkday < 10 pm	67.2	70.3	67.4	70.5	0.2	23.9	67.4	0.2	28.9	-38.5
							Wkday >10 pm	68.9	71.4	69.2	71.7	0.3	17.9	69.2	0.3	22.9	-46.3
							Sat < 10 pm	65.4	68.1	65.6	68.3	0.2	23.9	65.6	0.2	28.9	-36.7
							Sat > 10 pm	66.1	68.6	66.3	68.8	0.2	17.9	66.3	0.2	22.9	-43.4
C	3024 W. 24 th St.	7070	1	NA	NA	9	Wkday < 10 pm	67.2	70.3	67.4	70.5	0.2	31.9	67.4	0.2	36.9	-30.5
							Wkday >10 pm	68.9	71.4	69.2	71.7	0.3	25.9	69.2	0.3	30.9	-38.3
							Sat < 10 pm	65.4	68.1	65.6	68.3	0.2	31.9	65.6	0.2	36.9	-28.7
							Sat > 10 pm	66.1	68.6	66.3	68.8	0.2	25.9	66.3	0.2	30.9	-35.4
D1	3021 W. 25 th St.	7070	1	14	380	9	Wkday < 10 pm	60.2	63.3	60.4	63.5	0.2	33.2	60.4	0.2	38.2	-22.2
							Wkday >10 pm	61.9	64.4	62.2	64.7	0.3	27.2	62.2	0.3	32.2	-30.0
							Sat < 10 pm	58.4	61.1	58.6	61.3	0.2	33.2	58.6	0.2	38.2	-20.4
							Sat > 10 pm	59.1	61.6	59.3	61.8	0.2	27.2	59.3	0.2	32.2	-27.1
D2	3021 W. 25 th St.	7070	1	14	380	10	Wkday < 10 pm	56.8	57.1	59.2	59.5	2.4	24.4	59.2	2.4	29.4	-29.8
							Wkday >10 pm	51.5	52.3	53.5	54.3	2.0	18.4	53.5	2.0	23.4	-30.1
							Sat < 10 pm	57.2	58.8	57.2	58.8	0.0	24.4	57.2	0.0	29.4	-27.8
							Sat > 10 pm	55.6	57.5	55.6	57.5	0.0	18.4	55.6	0.0	23.4	-32.2
E	3046 W. 22 nd St.	7071	24	3	15	5	Wkday < 10 pm	59.8	62.5	58.6	61.3	-1.3	57.3	61.0	1.2	62.3	3.7
							Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	51.3	53.6	0.9	56.3	6.6
							Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	57.3	66.8	-2.1	62.3	-4.0
							Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	51.3	56.9	-1.6	56.3	0.8
F	3040 W. 22 nd St.	7071	19	7	40	5	Wkday < 10 pm	59.8	62.5	58.6	61.3	-1.3	51.3	59.3	-0.5	56.3	-2.3
							Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	45.3	51.0	-1.6	50.3	0.6
							Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	51.3	66.4	-2.5	56.3	-10.0
							Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	45.3	55.9	-2.6	50.3	-5.2
G	3018-3022 W. 22 nd St.	7071	114	3	21	4	Wkday < 10 pm	66.6	70.3	67.1	70.8	0.4	45.5	67.1	0.5	50.5	-16.6
							Wkday >10 pm	62.9	65.5	63.9	66.5	1.0	39.5	63.9	1.0	44.5	-19.4
							Sat < 10 pm	68.9	69.4	69.3	69.8	0.4	45.5	69.3	0.4	50.5	-18.8
							Sat > 10 pm	64.7	67.5	65.3	68.1	0.6	39.5	65.3	0.6	44.5	-20.8
H	3024 W. 23 rd St.	7070	133	3	10	5	Wkday < 10 pm	59.8	62.5	58.6	61.3	-1.3	37.1	58.6	-1.2	42.1	-16.5
							Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	31.1	49.7	-2.9	36.1	-13.6
							Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	37.1	66.3	-2.6	42.1	-24.2
							Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	31.1	55.5	-3.0	36.1	-19.4
I	3027 W. 24 th St.	7070	175	3	6	9	Wkday < 10 pm	60.2	63.3	60.4	63.5	0.2	38.2	60.4	0.2	43.2	-17.2
							Wkday >10 pm	61.9	64.4	62.2	64.7	0.3	32.2	62.2	0.3	37.2	-25.0
							Sat < 10 pm	58.4	61.1	58.6	61.3	0.2	38.2	58.6	0.2	43.2	-15.4
							Sat > 10 pm	59.1	61.6	59.3	61.8	0.2	32.2	59.3	0.2	37.2	-22.1
J	3039 W. 24 th St.	7070	174	3	6	9	Wkday < 10 pm	60.2	63.3	60.4	63.5	0.2	40.0	60.5	0.3	45.0	-15.4
							Wkday >10 pm	61.9	64.4	62.2	64.7	0.3	34.0	62.2	0.3	39.0	-23.2
							Sat < 10 pm	58.4	61.1	58.6	61.3	0.2	40.0	58.6	0.2	45.0	-13.6
							Sat > 10 pm	59.1	61.6	59.3	61.8	0.2	34.0	59.3	0.2	39.0	-20.3
K	3008 W. 22 nd St.	7071	9	2	20	4	Wkday < 10 pm	66.6	70.3	67.1	70.8	0.4	43.3	67.1	0.5	48.3	-18.8
							Wkday >10 pm	62.9	65.5	63.9	66.5	1.0	37.3	63.9	1.0	42.3	-21.6
							Sat < 10 pm	68.9	69.4	69.3	69.8	0.4	43.3	69.3	0.4	48.3	-21.0
							Sat > 10 pm	64.7	67.5	65.3	68.1	0.6	37.3	65.3	0.6	42.3	-23.0

L 3016 W. 22 nd St.	7071	13	1	4	4	Wkday < 10 pm	66.6	70.3	67.1	70.8	0.4	44.5	67.1	0.5	49.5	-17.6
						Wkday >10 pm	62.9	65.5	63.9	66.5	1.0	38.5	63.9	1.0	43.5	-20.4
						Sat < 10 pm	68.9	69.4	69.3	69.8	0.4	44.5	69.3	0.4	49.5	-19.8
						Sat > 10 pm	64.7	67.5	65.3	68.1	0.6	38.5	65.3	0.6	43.5	-21.8
M 3017 W. 23 rd St.	7071	94	2	6	8	Wkday < 10 pm	59.8	62.5	58.6	61.3	-1.3	26.0	58.6	-1.2	31.0	-27.6
						Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	20.0	49.7	-3.0	25.0	-24.7
						Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	26.0	66.3	-2.6	31.0	-35.3
						Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	20.0	55.5	-3.0	25.0	-30.5
N 3023 W. 23 rd St.	7071	93	2	3	8	Wkday < 10 pm	59.8	62.5	58.6	61.3	-1.3	28.7	58.6	-1.2	33.7	-24.9
						Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	22.7	49.7	-3.0	27.7	-22.0
						Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	28.7	66.3	-2.6	33.7	-32.6
						Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	22.7	55.5	-3.0	27.7	-27.8
O 3029 W. 23 rd St.	7071	90	3	3	8	Wkday < 10 pm	59.8	62.5	58.6	61.3	-1.3	27.3	58.6	-1.2	32.3	-26.3
						Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	21.3	49.7	-3.0	26.3	-23.4
						Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	27.3	66.3	-2.6	32.3	-34.0
						Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	21.3	55.5	-3.0	26.3	-29.2
P 3031 W. 23 rd St.	7071	89	3	3	8	Wkday < 10 pm	59.8	62.5	58.6	61.3	-1.3	33.4	58.6	-1.2	38.4	-20.2
						Wkday >10 pm	52.7	55.4	49.7	52.4	-3.0	27.4	49.7	-3.0	32.4	-17.3
						Sat < 10 pm	68.9	68.0	66.3	65.4	-2.6	33.4	66.3	-2.6	38.4	-27.9
						Sat > 10 pm	58.5	59.9	55.5	56.9	-3.0	27.4	55.5	-3.0	32.4	-23.1
Q 2226 Surf Ave.	7071	1	2	2	4	Wkday < 10 pm	67.2	70.3	67.4	70.5	0.2	37.6	67.4	0.2	42.6	-24.8
						Wkday >10 pm	68.9	71.4	69.2	71.7	0.3	31.6	69.2	0.3	36.6	-32.6
						Sat < 10 pm	65.4	68.1	65.6	68.3	0.2	37.6	65.6	0.2	42.6	-23.0
						Sat > 10 pm	66.1	68.6	66.3	68.8	0.2	31.6	66.3	0.2	36.6	-29.7

Modeled by Cerami 11/12/13		
	Lmax	Leq
R-A	51.2	46.2
R-B	28.9	23.9
R-C	36.9	31.9
R-D(middle bldg)	38.2	33.2
R-D(South bldg)	29.4	24.4
R-E	62.3	57.3
R-F	56.3	51.3
R-G	50.5	45.5
R-H	42.1	37.1
R-I	43.2	38.2
R-J	45.0	40.0
R-K	48.3	43.3
R-L	49.5	44.5
R-M	31.0	26.0
R-N	33.7	28.7
R-O	32.3	27.3
R-P	38.4	33.4
R-Q	42.6	37.6