Appendix F

Noise Calculation Worksheets

Noise Calculations Worksheets

Provided by Acoustical Engineering Services

Ambient Noise Measurements



Location: R1 Date: 6/5/17 (Monday)

10:10:38 PM No

10:11:38 PM No

10:12:38 PM No

10:13:38 PM No

Time	Overload	Leq	Lmax	L10	L90
10:00:26 AM	No	68.2	81.7	69.4	59.3
10:01:26 AM	No	68.9	79.7	71.7	61
10:02:26 AM	No	66.4	74.7	70.3	59.2
10:03:26 AM	No	67.9	75	72.2	58.3
10:04:26 AM	No	63.1	74.8	65.3	58.4
10:05:26 AM	No	67.8	74	71.7	60
10:06:26 AM	No	65.7	75	68.8	59.3
10:07:26 AM	No	65	74.1	68.8	59.5
10:08:26 AM	No	65.6	71.1	69.1	58.7
10:09:26 AM	No	64.8	70.9	67.3	61.6
10:10:26 AM	No	65.5	70	68.2	61.2
10:11:26 AM	No	63.9	71	67.1	59.4
10:12:26 AM	No	63.2	69.4	66.6	58.2
10:13:26 AM	No	70.4	83.2	74.8	59.3
10:14:26 AM	No	67	75.9	69.7	59.2
10:14:26 AM	No	67 66.7	75.9	69.7	59.2
	No Overload	66.7	75.9 Lmax		
10:14:26 AM Time 9:59:38 PM	Overload			69.7 L10 68.3	59.2 L90 52.7
Time	Overload No	66.7 Leq	Lmax	L10	L90
Time 9:59:38 PM	Overload No No	66.7 Leq 63.8	Lmax 75.3	L10 68.3	L90 52.7
Time 9:59:38 PM 10:00:38 PM	Overload No No No	66.7 Leq 63.8 56.7	Lmax 75.3 64.3	L10 68.3 59.3	L90 52.7 52.1
Time 9:59:38 PM 10:00:38 PM 10:01:38 PM	Overload No No No No	66.7 Leq 63.8 56.7 58.4	Lmax 75.3 64.3 70.2	L10 68.3 59.3 60.4	L90 52.7 52.1 53.3
Time 9:59:38 PM 10:00:38 PM 10:01:38 PM 10:02:38 PM	Overload No No No No No	66.7 Leq 63.8 56.7 58.4 62	Lmax 75.3 64.3 70.2 69.1	L10 68.3 59.3 60.4 66.4	L90 52.7 52.1 53.3 53.8
Time 9:59:38 PM 10:00:38 PM 10:01:38 PM 10:02:38 PM 10:03:38 PM	Overload No No No No No No	66.7 Leq 63.8 56.7 58.4 62 60.4	Lmax 75.3 64.3 70.2 69.1 66.3	L10 68.3 59.3 60.4 66.4 64.3	L90 52.7 52.1 53.3 53.8 53.3
Time 9:59:38 PM 10:00:38 PM 10:01:38 PM 10:02:38 PM 10:03:38 PM 10:04:38 PM	Overload No No No No No No No	66.7 Leq 63.8 56.7 58.4 62 60.4 57.6	Lmax 75.3 64.3 70.2 69.1 66.3 64.9	L10 68.3 59.3 60.4 66.4 64.3 59.9	L90 52.7 52.1 53.3 53.8 53.3 53.2
Time 9:59:38 PM 10:00:38 PM 10:01:38 PM 10:02:38 PM 10:03:38 PM 10:04:38 PM 10:05:38 PM	Overload No No No No No No No No	66.7 Leq 63.8 56.7 58.4 62 60.4 57.6 56.5	Lmax 75.3 64.3 70.2 69.1 66.3 64.9 62.9	L10 68.3 59.3 60.4 66.4 64.3 59.9 60.3	L90 52.7 52.1 53.3 53.8 53.3 53.2 51
Time 9:59:38 PM 10:00:38 PM 10:01:38 PM 10:02:38 PM 10:03:38 PM 10:04:38 PM 10:05:38 PM 10:06:38 PM	Overload No No No No No No No No No	66.7 Leq 63.8 56.7 58.4 62 60.4 57.6 56.5 58	Lmax 75.3 64.3 70.2 69.1 66.3 64.9 62.9 64.7	L10 68.3 59.3 60.4 66.4 64.3 59.9 60.3 61.3	L90 52.7 52.1 53.3 53.8 53.3 53.2 51 52.6
Time 9:59:38 PM 10:00:38 PM 10:01:38 PM 10:02:38 PM 10:03:38 PM 10:04:38 PM 10:05:38 PM 10:06:38 PM 10:07:38 PM	Overload No No No No No No No No No No No	66.7 Leq 63.8 56.7 58.4 62 60.4 57.6 56.5 58 58.9	Lmax 75.3 64.3 70.2 69.1 66.3 64.9 62.9 64.7 67	L10 68.3 59.3 60.4 66.4 64.3 59.9 60.3 61.3 63.3	L90 52.7 52.1 53.3 53.8 53.3 53.2 51 52.6 53.9

66.2

59

58.4

60.7

70.1

66.7

66.4

71.3

78.2

62

62.2

64.8

75.9

52

52.2

52.9

56.4



Location: P1 Date: 6/5/17 (Monday)

Time Overload	Leq	Lmax	L10	L90
11:53:17 AM No	67.5	73.8	70.6	64
11:54:17 AM No	67.3	73.4	70.5	63.7
11:55:17 AM No	67.5	73.6	69.8	64.2
11:56:17 AM No	65.2	70.1	67.2	63.3
11:57:17 AM No	65.7	72.3	67.2	63.4
11:58:17 AM No	67.5	75.6	71.2	61.6
11:59:17 AM No	67.3	74.5	70.8	61.8
12:00:17 PM No	65	71.9	67.1	62.1
12:01:17 PM No	66.9	75.6	70.1	62.6
12:02:17 PM No	64.9	69.2	66.9	62.2
12:03:17 PM No	66.1	71.5	68.9	62.6
12:04:17 PM No	66	71.7	69.5	62.4
12:05:17 PM No	68	77.5	70.7	63.8
12:06:17 PM No	67.4	71.5	70	63.3
12:07:17 PM No	63.9	68.4	66	62.1
	66.6			

Time Overload	Leq	Lmax	L10	L90
11:33:20 PM No	64.5	76.6	67.2	56.4
11:34:20 PM No	60	67.5	64.5	56.2
11:35:20 PM No	58.9	66.5	62.3	56
11:36:20 PM No	73.5	84.1	75.8	55.9
11:37:20 PM No	67.4	80.5	70.5	58.1
11:38:20 PM No	62.4	69.7	66.6	57.2
11:39:20 PM No	69.8	82.4	70.8	57.8
11:40:20 PM No	61.3	71.2	65.2	56
11:41:20 PM No	57.8	64.2	60.8	55.8
11:42:20 PM No	58.6	66.6	61.6	55.9
11:43:20 PM No	58.8	68.6	60.6	55.9
11:44:20 PM No	65.1	75.9	70.7	56.3
11:45:20 PM No	62.3	69.7	67.2	56.7
11:46:20 PM No	58.1	67.7	59.6	55.9
11:47:20 PM No	59.4	71.3	61.5	55.9
	65.5			



Location: P1 Date: 6/4/2017 (Sunday)

Time Overload	Leq	Lmax	L10	L90
12:00:22 PM No	68.6	74.6	72.6	62.5
12:01:22 PM No	64.6	72.4	68.3	61.4
12:02:22 PM No	65.8	72	68.5	62.4
12:03:22 PM No	66.6	72.2	70.1	62.1
12:04:22 PM No	65.9	74.5	67.9	63
12:05:22 PM No	66	74.6	68.7	61.7
12:06:22 PM No	66.8	73.2	70.5	63.2
12:07:22 PM No	65.7	73.4	68.5	61.6
12:08:22 PM No	68.8	78.8	71.2	62.9
12:09:22 PM No	64.9	70.2	67.7	62.4
12:10:22 PM No	64.5	71.2	68.4	61.2
12:11:22 PM No	69.4	79.6	72.5	63.2
12:12:22 PM No	67.3	71.9	70.3	63.3
12:13:22 PM No	65.4	71.8	69.3	61.8
12:14:22 PM No	63.3	70.9	65.9	60.8
	66.6			

Time	Overload	Leq	Lmax	L10	L90
11:38:16 PM N	10	60.8	69.3	62.2	58
11:39:16 PM N	10	58.8	62.5	60.2	57.9
11:40:16 PM N	10	59.2	63.3	60.5	57.5
11:41:16 PM N	10	61.8	72	64.3	57.8
11:42:16 PM N	10	63.7	74.5	67	58.6
11:43:16 PM N	10	62.5	69.7	66.8	58.6
11:44:16 PM N	10	63.1	71.2	67.1	58.1
11:45:16 PM N	10	62.8	73.3	64.5	57.9
11:46:16 PM N	lo	58.4	64.7	60.2	57.5
11:47:16 PM N	lo	60.7	71.1	63.1	58
11:48:16 PM N	lo	61.4	71.7	63.3	58.1
11:49:16 PM N	lo	61.2	70.2	62.9	58.1
11:50:16 PM N	lo	61.7	69.4	65.6	57.8
11:51:16 PM N	lo	58.8	63.1	59.6	57.9
11:52:16 PM N	lo	67.6	77	72	59.9
		62.2			



Location: R1 Date: 6/4/2017 (Sunday)

Time Overloa	ad Leq	Lmax	L10	L90
10:00:35 AM No	56.4	60.8	59	54.3
10:01:35 AM No	60.8	69.3	64.8	55.4
10:02:35 AM No	59.8	65.9	62.1	57.1
10:03:35 AM No	59.4	68.9	63.2	54.6
10:04:35 AM No	58.3	66.3	59.8	55.1
10:05:35 AM No	60.1	68.1	64.1	53.8
10:06:35 AM No	60.7	64.7	63.3	56.6
10:07:35 AM No	64.5	72	69.7	54.1
10:08:35 AM No	58.4	68.7	59.8	53.9
10:09:35 AM No	59.1	65.1	62.1	53.6
10:10:35 AM No	61.3	72.7	66	53.4
10:11:35 AM No	61	69	65.1	55.3
10:12:35 AM No	58	64.1	61.5	53.7
10:13:35 AM No	64.1	72	68.3	56.1
10:14:35 AM No	60.9	68.7	64.9	53.4
	60.7			
Time Overlag	nd Log	Imay	110	100

Time Overload	Leq	Lmax	L10	L90
10:00:23 PM No	61.3	70.3	66.9	54.6
10:01:23 PM No	62.5	74	65.5	58
10:02:23 PM No	64.3	72.8	68.5	56.1
10:03:23 PM No	73.2	87.8	73.2	55.2
10:04:23 PM No	84.6	99.4	87.4	56.1
10:05:23 PM No	62	70.5	66.6	55.3
10:06:23 PM No	58.6	65.8	61	54.5
10:07:23 PM No	57.1	63.6	58.1	55.1
10:08:23 PM No	61.6	69.2	65	56.9
10:09:23 PM No	56.6	61.9	58.8	54.4
10:10:23 PM No	60.7	71.2	63.7	55.6
10:11:23 PM No	63.7	70.2	67.3	57.8
10:12:23 PM No	61.4	69.5	65.7	56.4
10:13:23 PM No	65.9	77.3	71.4	53.9
10:14:23 PM No	64.3	73	68.1	57.3
	64.9			



Location: R2 Date: 6/5/17 (Monday)

Time Overload	Leq	Lmax	L10	L90
10:20:39 AM No	68.2	77.2	69.6	65.2
10:21:39 AM No	66.9	69.3	68	65.5
10:22:39 AM No	70	80.1	73.4	61.6
10:23:39 AM No	62.5	69.5	65.5	58.3
10:24:39 AM No	66.9	72.8	70.9	61.1
10:25:39 AM No	64.9	74	66.3	61
10:26:39 AM No	67.7	75.9	73.2	56.8
10:27:39 AM No	68.6	77.5	71.3	62.6
10:28:39 AM No	64.7	70.3	68.1	58.1
10:29:39 AM No	65	69.6	68.5	62.1
10:30:39 AM No	65.5	72.8	71	59.5
10:31:39 AM No	74.3	86.6	77.6	58.9
10:32:39 AM No	65.3	74.7	69.7	57.7
10:33:39 AM No	73.2	88.6	70.4	61.2
10:34:39 AM No	67.9	80.4	71.1	59.7
	68.7			

Time Overload	Leq	Lmax	L10	L90
10:18:29 PM No	63.6	67.9	67.2	56.4
10:19:29 PM No	60	68	63.3	54
10:20:29 PM No	63.8	71.6	69.6	53.1
10:21:29 PM No	60.9	69	65.1	53.5
10:22:29 PM No	58.7	63.6	62.6	53.6
10:23:29 PM No	67.7	79.6	71.1	56.9
10:24:29 PM No	62.4	69.4	65.5	55.9
10:25:29 PM No	61.8	72.3	66.1	54.1
10:26:29 PM No	62.4	69.6	68.3	52.6
10:27:29 PM No	66.5	77.9	69.5	53.6
10:28:29 PM No	65.6	77.6	70.7	53.8
10:29:29 PM No	70.6	81.6	76.2	57.5
10:30:29 PM No	63.9	69.9	67.9	56.8
10:31:29 PM No	63.4	73.8	66.7	54.1
10:32:29 PM No	71	84.9	74.1	52.8

65.7



Location: R2 Date: 6/4/2017 (Sunday)

10:31:00 PM No

10:32:00 PM No

10:33:00 PM No

10:34:00 PM No

Time	Overload Leq	Lmax	L10	L90
10:38:36 AM No	68.1	72.6	70.3	64.5
10:39:36 AM No	72.7	81.1	77.8	61.7
10:40:36 AM No	67.7	77.9	71.6	59.1
10:41:36 AM No	64.8	73.7	70.4	57.9
10:42:36 AM No	61.6	68.4	64	57.9
10:43:36 AM No	64.9	73.2	66.8	62
10:44:36 AM No	69.4	79.5	73.3	61.7
10:45:36 AM No	60.7	65.5	63.1	57.5
10:46:36 AM No	61.7	68.6	67.1	56
10:47:36 AM No	64.4	70.8	68.4	57.3
10:48:36 AM No	63.5	68.4	66.3	57.8
10:49:36 AM No	59.9	67.8	63.9	56.1
10:50:36 AM No	69.7	82.1	70	60.1
10:51:36 AM No	72.4	81.7	77	62.6
10:52:36 AM No	65	73.2	68.7	60.8
10:52:36 AM No	65 67.6	73.2	68.7	60.8
	67.6	-		
Time	67.6 Overload Leq	Lmax	L10	L90
Time 10:20:00 PM No	67.6 Overload Leq 63.8	Lmax 70.5	L10 69.4	L90 57
Time 10:20:00 PM No 10:21:00 PM No	67.6 Overload Leq 63.8 59.5	Lmax 70.5 65.1	L10 69.4 61.7	L90 57 56.1
Time 10:20:00 PM No 10:21:00 PM No 10:22:00 PM No	67.6 Overload Leq 63.8 59.5 61.7	Lmax 70.5 65.1 69.5	L10 69.4 61.7 66.5	L90 57 56.1 52.6
Time 10:20:00 PM No 10:21:00 PM No 10:22:00 PM No 10:23:00 PM No	67.6 Overload Leq 63.8 59.5 61.7 59.5	Lmax 70.5 65.1 69.5 67.4	L10 69.4 61.7 66.5 61.8	L90 57 56.1 52.6 54.1
Time 10:20:00 PM No 10:21:00 PM No 10:22:00 PM No 10:23:00 PM No 10:24:00 PM No	67.6 Overload Leq 63.8 59.5 61.7 59.5 64.9	Lmax 70.5 65.1 69.5 67.4 75.4	L10 69.4 61.7 66.5 61.8 69.9	L90 57 56.1 52.6 54.1 54
Time 10:20:00 PM No 10:21:00 PM No 10:22:00 PM No 10:23:00 PM No 10:24:00 PM No 10:25:00 PM No	67.6 Overload Leq 63.8 59.5 61.7 59.5 64.9 67.5	Lmax 70.5 65.1 69.5 67.4 75.4 79	L10 69.4 61.7 66.5 61.8 69.9 71.1	L90 57 56.1 52.6 54.1 54 56
Time 10:20:00 PM No 10:21:00 PM No 10:22:00 PM No 10:23:00 PM No 10:24:00 PM No 10:25:00 PM No 10:26:00 PM No	67.6 Overload Leq 63.8 59.5 61.7 59.5 64.9 67.5 61	Lmax 70.5 65.1 69.5 67.4 75.4 79 68.7	L10 69.4 61.7 66.5 61.8 69.9 71.1 64.1	L90 57 56.1 52.6 54.1 54 54 56 54.2
Time 10:20:00 PM No 10:21:00 PM No 10:22:00 PM No 10:23:00 PM No 10:24:00 PM No 10:25:00 PM No 10:26:00 PM No 10:27:00 PM No	67.6 Overload Leq 63.8 59.5 61.7 59.5 64.9 67.5 61 62.1	Lmax 70.5 65.1 69.5 67.4 75.4 79 68.7 69.4	L10 69.4 61.7 66.5 61.8 69.9 71.1 64.1 67	L90 57 56.1 52.6 54.1 54 56 54.2 55
Time 10:20:00 PM No 10:21:00 PM No 10:22:00 PM No 10:23:00 PM No 10:24:00 PM No 10:25:00 PM No 10:26:00 PM No 10:27:00 PM No 10:28:00 PM No	67.6 Overload Leq 63.8 59.5 61.7 59.5 64.9 67.5 61 62.1 62.1 65.1	Lmax 70.5 65.1 69.5 67.4 75.4 79 68.7 69.4 76.2	L10 69.4 61.7 66.5 61.8 69.9 71.1 64.1 67 68.9	L90 57 56.1 52.6 54.1 54 56 54.2 55 54.6
Time 10:20:00 PM No 10:21:00 PM No 10:22:00 PM No 10:23:00 PM No 10:24:00 PM No 10:25:00 PM No 10:26:00 PM No 10:27:00 PM No	67.6 Overload Leq 63.8 59.5 61.7 59.5 64.9 67.5 61 62.1	Lmax 70.5 65.1 69.5 67.4 75.4 79 68.7 69.4	L10 69.4 61.7 66.5 61.8 69.9 71.1 64.1 67	L90 57 56.1 52.6 54.1 54 56 54.2 55

68.6

61.9

59.3

64.5

63.6

78.2

66.2

71.5

71

74.3

66.2

62.7

69.3

51.7

55.9

53.4 54.7



Location: R3 Date: 6/5/17 (Monday)

Time Overload	Leq	Lmax	L10	L90
10:39:41 AM No	62.2	69.6	64.2	59.6
10:40:41 AM No	69.7	79.3	74	59.2
10:41:41 AM No	67.8	76.4	72.5	60.6
10:42:41 AM No	71.1	80.8	76.2	60
10:43:41 AM No	69.7	76.3	73.8	61.8
10:44:41 AM No	62.9	66.3	64.3	60.8
10:45:41 AM No	63.7	74.4	66.7	56.9
10:46:41 AM No	67.9	78	70.9	57.7
10:47:41 AM No	66.1	80.6	67.5	58.5
10:48:41 AM No	70.3	81.6	75.4	58.8
10:49:41 AM No	69.6	79.8	75.1	54.2
10:50:41 AM No	63.9	76.3	65.9	57.7
10:51:41 AM No	68.6	77.2	74.9	60.4
10:52:41 AM No	72.3	84.2	76.4	57.5
10:53:41 AM No	66.9	77.8	67.3	59.1
	68.5			

Time	Overload	Leq	Lmax	L10	L90
10:36:12 PM	No	61.6	69.6	65	55.2
10:37:12 PM	No	65.4	75.7	69.1	57.8
10:38:12 PM	No	59.2	68.7	61.4	54.8
10:39:12 PM	No	64.4	76.5	67.5	54.3
10:40:12 PM	No	58.2	64.9	61	54.3
10:41:12 PM	No	64.4	69.8	67.6	58.1
10:42:12 PM	No	65.9	76	70.2	57.1
10:43:12 PM	No	60.1	68.2	63.3	54.3
10:44:12 PM	No	61.3	67.2	64.9	54.1
10:45:12 PM	No	62.9	70.6	66.4	55.8
10:46:12 PM	No	60.3	66.3	64.4	55.3
10:47:12 PM	No	71.2	82.7	75.8	57.6
10:48:12 PM	No	62.3	73.6	64.9	54.2
10:49:12 PM	No	59.3	71	60.9	52.1
10:50:12 PM	No	61.9	69.7	65.1	54.7
		64.4			

64.1



Location: R3 Date: 6/4/2017 (Sunday)

	Time	Overload	Leq	Lmax	L10	L90
	10:57:11 AM	No	60.4	68.6	62	57.3
	10:58:11 AM	No	60.6	65.3	64	56.8
	10:59:11 AM	No	61.2	64.1	62.9	59.6
	11:00:11 AM	No	60.1	64.8	63.1	56.1
	11:01:11 AM	No	60	66	63.4	56.5
	11:02:11 AM	No	57.3	61	59.2	53.5
	11:03:11 AM	No	61.1	66	64.6	55.7
	11:04:11 AM	No	67.2	78.6	70.6	58.8
	11:05:11 AM	No	65.4	75.1	69.2	58.3
	11:06:11 AM	No	62.9	66.4	65.4	59.8
	11:07:11 AM	No	68.4	75.6	71	61.2
	11:08:11 AM	No	64.2	68.9	66.9	61.5
	11:09:11 AM	No	66.7	77.2	69.4	58
	11:10:11 AM	No	60.2	64.4	62.5	57.3
	11:11:11 AM	No	58.8	64.9	61.1	55.4
			63.6			
			63.6			
	Time	Overload	63.6 Leq	Lmax	L10	L90
	Time 10:37:38 PM			Lmax 71.2	L10 66.3	L90 57.3
_		No	Leq			
_	10:37:38 PM	No No	Leq 63.7	71.2	66.3	57.3
	10:37:38 PM 10:38:38 PM	No No No	Leq 63.7 59.8	71.2 68.9	66.3 62.2	57.3 54.6
	10:37:38 PM 10:38:38 PM 10:39:38 PM	No No No No	Leq 63.7 59.8 62.2	71.2 68.9 70.5	66.3 62.2 64.5	57.3 54.6 57.7
	10:37:38 PM 10:38:38 PM 10:39:38 PM 10:40:38 PM	No No No No	Leq 63.7 59.8 62.2 63.6	71.2 68.9 70.5 70.4	66.3 62.2 64.5 67.7	57.3 54.6 57.7 56.6
	10:37:38 PM 10:38:38 PM 10:39:38 PM 10:40:38 PM 10:41:38 PM	No No No No No	Leq 63.7 59.8 62.2 63.6 56	71.2 68.9 70.5 70.4 60	66.3 62.2 64.5 67.7 57.8	57.3 54.6 57.7 56.6 54.3
_	10:37:38 PM 10:38:38 PM 10:39:38 PM 10:40:38 PM 10:41:38 PM 10:42:38 PM	No No No No No No	Leq 63.7 59.8 62.2 63.6 56 64.3	71.2 68.9 70.5 70.4 60 71.5	66.3 62.2 64.5 67.7 57.8 68.3	57.3 54.6 57.7 56.6 54.3 57.6
_	10:37:38 PM 10:38:38 PM 10:39:38 PM 10:40:38 PM 10:41:38 PM 10:42:38 PM 10:43:38 PM	No No No No No No No	Leq 63.7 59.8 62.2 63.6 56 64.3 60	71.2 68.9 70.5 70.4 60 71.5 67.2	66.3 62.2 64.5 67.7 57.8 68.3 64.5	57.3 54.6 57.7 56.6 54.3 57.6 54.3
_	10:37:38 PM 10:38:38 PM 10:39:38 PM 10:40:38 PM 10:41:38 PM 10:42:38 PM 10:43:38 PM 10:43:38 PM	No No No No No No No No	Leq 63.7 59.8 62.2 63.6 56 64.3 60 61.7	71.2 68.9 70.5 70.4 60 71.5 67.2 68.1	66.3 62.2 64.5 67.7 57.8 68.3 64.5 63.5	57.3 54.6 57.7 56.6 54.3 57.6 54.3 58.1
_	10:37:38 PM 10:38:38 PM 10:39:38 PM 10:40:38 PM 10:41:38 PM 10:42:38 PM 10:43:38 PM 10:43:38 PM 10:44:38 PM	No No No No No No No No	Leq 63.7 59.8 62.2 63.6 56 64.3 60 61.7 65.1	71.2 68.9 70.5 70.4 60 71.5 67.2 68.1 78	66.3 62.2 64.5 67.7 57.8 68.3 64.5 63.5 69.2	57.3 54.6 57.7 56.6 54.3 57.6 54.3 58.1 53
_	10:37:38 PM 10:38:38 PM 10:39:38 PM 10:40:38 PM 10:41:38 PM 10:42:38 PM 10:43:38 PM 10:43:38 PM 10:45:38 PM 10:46:38 PM	No No No No No No No No No No	Leq 63.7 59.8 62.2 63.6 56 64.3 60 61.7 65.1 56.5	71.2 68.9 70.5 70.4 60 71.5 67.2 68.1 78 61.4	66.3 62.2 64.5 67.7 57.8 68.3 64.5 63.5 69.2 59.1	57.3 54.6 57.7 56.6 54.3 57.6 54.3 58.1 53 53
_	10:37:38 PM 10:38:38 PM 10:39:38 PM 10:40:38 PM 10:41:38 PM 10:42:38 PM 10:43:38 PM 10:44:38 PM 10:45:38 PM 10:46:38 PM 10:47:38 PM	No No No No No No No No No No No	Leq 63.7 59.8 62.2 63.6 56 64.3 60 61.7 65.1 56.5 61.6	71.2 68.9 70.5 70.4 60 71.5 67.2 68.1 78 61.4 70.5	66.3 62.2 64.5 67.7 57.8 68.3 64.5 63.5 69.2 59.1 64.6	57.3 54.6 57.7 56.6 54.3 57.6 54.3 58.1 53 53 53 55.9
_	10:37:38 PM 10:38:38 PM 10:39:38 PM 10:40:38 PM 10:41:38 PM 10:42:38 PM 10:43:38 PM 10:43:38 PM 10:45:38 PM 10:45:38 PM 10:45:38 PM 10:47:38 PM	No No No No No No No No No No No No	Leq 63.7 59.8 62.2 63.6 56 64.3 60 61.7 65.1 56.5 61.6 61.1	71.2 68.9 70.5 70.4 60 71.5 67.2 68.1 78 61.4 70.5 68.4	66.3 62.2 64.5 67.7 57.8 68.3 64.5 63.5 69.2 59.1 64.6 63.5	57.3 54.6 57.7 56.6 54.3 57.6 54.3 58.1 53 53 55.9 58.1

61.9

60

10:51:38 PM No

69.6

63.4

55.8



Location: R4 Date: 6/5/17 (Monday)

Time Overload	Leq	Lmax	L10	L90
11:01:11 AM No	65.7	72.4	68.6	62.2
11:02:11 AM No	62.8	67.1	64.5	61.6
11:03:11 AM No	63.1	71.5	63.6	61.6
11:04:11 AM No	63.8	70.2	66.1	62.4
11:05:11 AM No	65.1	71.6	67.9	62
11:06:11 AM No	64.5	72.2	66.8	62
11:07:11 AM No	69.7	83.3	71.7	63.2
11:08:11 AM No	64.9	72.8	66.7	62.5
11:09:11 AM No	65.1	71.1	68.1	62.4
11:10:11 AM No	69.7	75.9	74.2	64.5
11:11:11 AM No	72	82.1	76	63.5
11:12:11 AM No	64.7	67.8	66.7	63.1
11:13:11 AM No	64.9	67.5	66.3	63.7
11:14:11 AM No	64.6	67.5	65.6	63.6
11:15:11 AM No	64.9	70.5	67	62.7
	66.6			
Time Overload	Leq	Lmax	L10	L90
10:54:38 PM No	54.6	61.7	56.9	52.1

lime	Overload	Leq	Lmax	LIU	L90
10:54:38 PM	No	54.6	61.7	56.9	52.1
10:55:38 PM	No	60.3	69.5	64.5	52.4
10:56:38 PM	No	56.8	62.9	60.1	53
10:57:38 PM	No	57.6	63.5	61.6	52.9
10:58:38 PM	No	55.9	64	59.5	52.7
10:59:38 PM	No	55.3	61.8	58.9	52.5
11:00:38 PM	No	56.7	65.6	58.3	53.2
11:01:38 PM	No	54.5	60.7	56	52.7
11:02:38 PM	No	65.4	77.7	70.6	53.8
11:03:38 PM	No	59.8	69.1	62.9	53.6
11:04:38 PM	No	59.7	68	63.5	52.8
11:05:38 PM	No	56.4	64	59.9	52.3
11:06:38 PM	No	57.2	64.9	60.2	52.7
11:07:38 PM	No	57.7	63.7	61	54.2
11:08:38 PM	No	56.2	64.2	58.8	52.8
		58.7			



Location: R4 Date: 6/4/2017 (Sunday)

Time	Overload	Leq	Lmax	L10	L90
11:18:06 AM	No	61	67.6	62.2	59.3
11:19:06 AM	No	62.4	69.3	65.6	59.3
11:20:06 AM	No	60.2	63.6	62.3	58.1
11:21:06 AM	No	61.5	69.7	63.5	58.1
11:22:06 AM	No	60.5	68.2	64.1	57.5
11:23:06 AM	No	62	70.9	64	58.5
11:24:06 AM	No	60.1	66.7	61.7	57.7
11:25:06 AM	No	58.8	66	60.7	57.1
11:26:06 AM	No	60.5	66.8	63.8	57.5
11:27:06 AM	No	61.3	67.8	64.1	57.4
11:28:06 AM	No	63	70.9	65.8	59
11:29:06 AM	No	65.5	73.8	70	58.8
11:30:06 AM	No	60.5	65.2	62.1	58.1
11:31:06 AM	No	60.4	67	63	57.2
11:32:06 AM	No	60	66.6	63.2	57.2
		61.5			
Time	Overload	Leq	Lmax	L10	L90
12:16:48 AM		64.4	70.3	66.9	59.1
12:17:48 AM	-	69	77.4	74.9	57.8
12:18:48 AM		59.5	64.8	62.5	56.8
12:19:48 AM		64.9	74.9	70.1	57
12:20:48 AM	No	60.4	<u> </u>	C / 1	
			68.2	64.1	57.3
12:21:48 AM	-	58.7	63.7	61	57.2
12:22:48 AM	No	58.7 58.6	63.7 60.8	61 59.6	57.2 57.7
12:22:48 AM 12:23:48 AM	No No	58.7 58.6 68.4	63.7 60.8 77.4	61 59.6 72.3	57.2 57.7 58.1
12:22:48 AM 12:23:48 AM 12:24:48 AM	No No No	58.7 58.6 68.4 65.9	63.7 60.8 77.4 71	61 59.6 72.3 70	57.2 57.7 58.1 60.2
12:22:48 AM 12:23:48 AM 12:24:48 AM 12:25:48 AM	No No No	58.7 58.6 68.4 65.9 61.5	63.7 60.8 77.4 71 67.5	61 59.6 72.3 70 63.7	57.2 57.7 58.1 60.2 58.9
12:22:48 AM 12:23:48 AM 12:24:48 AM 12:25:48 AM 12:26:48 AM	No No No No	58.7 58.6 68.4 65.9 61.5 60.8	63.7 60.8 77.4 71 67.5 68.3	61 59.6 72.3 70 63.7 64.4	57.2 57.7 58.1 60.2 58.9 57.3
12:22:48 AM 12:23:48 AM 12:24:48 AM 12:25:48 AM 12:26:48 AM 12:27:48 AM	No No No No No	58.7 58.6 68.4 65.9 61.5 60.8 60.1	63.7 60.8 77.4 71 67.5 68.3 66.2	61 59.6 72.3 70 63.7 64.4 64.2	57.2 57.7 58.1 60.2 58.9 57.3 57.5
12:22:48 AM 12:23:48 AM 12:24:48 AM 12:25:48 AM 12:26:48 AM 12:27:48 AM 12:28:48 AM	No No No No No	58.7 58.6 68.4 65.9 61.5 60.8 60.1 74.4	63.7 60.8 77.4 71 67.5 68.3 66.2 82.3	61 59.6 72.3 70 63.7 64.4 64.2 80.3	57.2 57.7 58.1 60.2 58.9 57.3 57.5 60.7
12:22:48 AM 12:23:48 AM 12:24:48 AM 12:25:48 AM 12:26:48 AM 12:27:48 AM	No No No No No No	58.7 58.6 68.4 65.9 61.5 60.8 60.1	63.7 60.8 77.4 71 67.5 68.3 66.2	61 59.6 72.3 70 63.7 64.4 64.2	57.2 57.7 58.1 60.2 58.9 57.3 57.5

66.1



Location: R5 Date: 6/5/17 (Monday)

Time Overload	Leq	Lmax	L10	L90
11:21:15 AM No	65	69.3	67.3	62.2
11:22:15 AM No	62.6	67.4	64.3	60.4
11:23:15 AM No	65.6	72.1	68.9	60.8
11:24:15 AM No	66.1	70.8	69.7	60.8
11:25:15 AM No	64.7	72	67	61.6
11:26:15 AM No	69.2	78.5	73.2	60.5
11:27:15 AM No	65.7	71.4	68.4	61.7
11:28:15 AM No	63.4	68	65.2	61.3
11:29:15 AM No	65	69.5	68	60.4
11:30:15 AM No	65.1	70.1	68.1	60.1
11:31:15 AM No	63	67.1	64.8	60.8
11:32:15 AM No	65.6	74	67.7	60.2
11:33:15 AM No	64.1	68.4	67	60.5
11:34:15 AM No	62.7	72	64.5	59.9
11:35:15 AM No	66.5	73.7	70.6	59.6
	65.3			
Times Ourselaged	1.0.0	L ma a v	110	100

Time Overloa	d Leq	Lmax	L10	L90
11:13:22 PM No	60.1	67.8	61.4	58.5
11:14:22 PM No	64.5	72.2	69.6	59.3
11:15:22 PM No	63.9	70.9	68.2	59.1
11:16:22 PM No	61.5	71	64.8	56.6
11:17:22 PM No	62.7	72.7	68.2	56.7
11:18:22 PM No	60.1	70.4	62.2	57.1
11:19:22 PM No	60.7	69.1	64.7	56.5
11:20:22 PM No	63.5	70.9	67.4	57.5
11:21:22 PM No	65.2	74.4	69.5	57.3
11:22:22 PM No	62.6	69.4	67.9	56
11:23:22 PM No	62.1	72.5	65.1	57.7
11:24:22 PM No	59.2	64.5	60.1	58.1
11:25:22 PM No	60.7	68	63.5	57.7
11:26:22 PM No	60.9	66.6	63	58.5
11:27:22 PM No	61.2	67.2	64.2	57.8
	62.3			



Location: R5 Date: 6/4/2017 (Sunday)

Time Overload	Leq	Lmax	L10	L90
11:39:46 AM No	62.4	70.2	66.8	56.1
11:40:46 AM No	63.3	69.7	67.1	55.5
11:41:46 AM No	63.1	73.8	68.3	55.2
11:42:46 AM No	65.1	71.2	70.2	55
11:43:46 AM No	63.6	68.8	67.1	53.8
11:44:46 AM No	61.5	71.8	65.7	54.5
11:45:46 AM No	65.9	72.2	70.8	56.5
11:46:46 AM No	64.6	71.8	68.4	56.9
11:47:46 AM No	62.8	71.2	68.9	56.2
11:48:46 AM No	65.5	73.3	69.8	56.7
11:49:46 AM No	64	71.9	68.2	56.4
11:50:46 AM No	59.6	70	62.1	56.2
11:51:46 AM No	64.2	73.4	67.9	56.4
11:52:46 AM No	65.2	71.4	68.7	55.7
11:53:46 AM No	61.5	70.7	64	56.5
	63.8			

Time Overload	Leq	Lmax	L10	L90
11:18:16 PM No	63.4	71.4	66.7	54
11:19:16 PM No	58.6	64.8	61.9	53.9
11:20:16 PM No	67.6	76.7	72.4	56.1
11:21:16 PM No	64	73.1	68.9	55.1
11:22:16 PM No	64.6	74.9	69.4	54.7
11:23:16 PM No	58.7	65.6	62.5	54.2
11:24:16 PM No	60.9	67.4	64.1	55.5
11:25:16 PM No	65.4	77.1	69.7	53.5
11:26:16 PM No	58.9	67.1	62.5	53.2
11:27:16 PM No	54.2	59.6	55.5	52.8
11:28:16 PM No	60.6	68.9	66.6	53.1
11:29:16 PM No	58.8	67.8	61.9	54.4
11:30:16 PM No	58.6	63.7	62	55.3
11:31:16 PM No	67.3	74	71.9	62.5
11:32:16 PM No	60.6	67.2	63.9	54.8
	63.0			



Location: R6 Date: 6/5/17 (Monday)

Time Overload	Leq	Lmax	L10	L90
12:11:44 PM No	65.6	75.5	68.9	57.4
12:12:44 PM No	68.1	75.7	70.1	63
12:13:44 PM No	61.2	66.8	63.3	58.9
12:14:44 PM No	63	68.5	66.5	59.3
12:15:44 PM No	67.1	73	70.2	63.6
12:16:44 PM No	75.6	86.6	80.2	60.2
12:17:44 PM No	64.5	71.8	68.1	60
12:18:44 PM No	69.4	80	73.2	60
12:19:44 PM No	67.6	73.1	70.2	65
12:20:44 PM No	66.3	74.3	68.4	62.5
12:21:44 PM No	84.4	96.3	90.7	66
12:22:44 PM No	66.4	74.5	71.7	58.9
12:23:44 PM No	63	67.8	65.5	59.9
12:24:44 PM No	64.4	68.9	67.8	58.1
12:25:44 PM No	67.9	76.6	72.1	60
	68.2			

Time	Overload	Leq	Lmax	L10	L90
11:51:02 PM	No	65.6	76.1	69.2	57.3
11:52:02 PM	No	64.4	74	67.8	57.5
11:53:02 PM	No	68.1	78	73	54.4
11:54:02 PM	No	63.9	73	68.2	53.5
11:55:02 PM	No	60.5	69.1	63.3	54.1
11:56:02 PM	No	54.8	61	58.7	51.7
11:57:02 PM	No	69.5	77.8	74.6	55.7
11:58:02 PM	No	59	67.6	61.8	52.8
11:59:02 PM	No	61.4	67.7	64.5	57.1
12:00:02 AM	No	61.1	70.2	65.2	56.3
12:01:02 AM	No	63.1	71.1	67.7	56.4
12:02:02 AM	No	64.8	74.5	70.3	56.9
12:03:02 AM	No	78.3	86	85.3	61.6
12:04:02 AM	No	65.5	73	69.3	59.3
12:05:02 AM	No	65.3	74.2	70.3	58.8
		68.6			



Location: R6 Date: 6/4/2017 (Sunday)

Time Overload	Leq	Lmax	L10	L90
12:19:28 PM No	62.7	72.1	67.2	55.3
12:20:28 PM No	64.6	71.9	69.2	54.7
12:21:28 PM No	63	70.6	67.7	52.8
12:22:28 PM No	62.4	69.1	66	56.3
12:23:28 PM No	65	71.9	68.9	58.8
12:24:28 PM No	65.8	70.5	69.2	59.2
12:25:28 PM No	63	69.4	67.5	56.1
12:26:28 PM No	61.7	67.5	64.8	56.3
12:27:28 PM No	65	72	68.7	56.9
12:28:28 PM No	61.8	67.9	66.1	54.6
12:29:28 PM No	68	74.6	72	61.1
12:30:28 PM No	64.3	70.9	68	54.9
12:31:28 PM No	60.8	65.9	64.1	55.7
12:32:28 PM No	66.2	71.7	69.2	59.2
12:33:28 PM No	62.6	67.1	65.9	57.3
	64.2			
Time Overload	Leq	Lmax	L10	L90
11:56:18 PM No	63.3	72.2	67.5	55.7
11:57:18 PM No	62.3	71.7	67.5	51.3
11.58.18 PM No	64 1	73.8	66 3	52.1

5 51.3 3 52.1 4 53.4
4 53.4
4 55.5
1 52.7
4 51.7
.5 51.9
1 50.4
8 53.3
1 50.3
4 50.4
2 53.8
.8 49.7
49.9

Construction Noise & Vibration Calculations



Construction Phase: Demolition

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Concrete Saw	1	90	20%	300	5
Loader	2	79	40%	300	5
Air Compressor	1	78	40%	300	5
Tractor/Loader/Backhoe	1	79	40%	300	5
	5				
Receptor:	R1				
Results: 1-ł	nour Leq:	64.5			



Construction Phase: Grading / Excavation

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Grader	1	85	40%	300	5
Bore/Drill Rig	1	84	20%	300	5
Bulldozer	1	82	40%	300	5
Crane	1	81	16%	300	5
Excavator	1	81	40%	300	5
Plate Compactor	1	83	20%	300	5
	6				
Receptor:	°R1				
Results:	1-hour Leq:	64.9			



Construction Phase: Foundation

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactors	1	83	20%	300	5
Concrete Pump	1	81	20%	300	5
Backhoe	2	78	40%	300	5
Crawler Crane	1	81	16%	300	5
Welders	1	74	40%	300	5
Plate Compactors	1	83	20%	300	5
Concrete Pump	1	81	20%	300	5
	8				
Receptor:	⁸ <i>R1</i>				
Results:					
Noouno.	1-hour Leq:	62.7			



Construction Phase: Building Construction

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (tower)	1	81	16%	300	5
Cutoff Saw	1	84	20%	300	5
Concrete Pump	1	81	20%	300	5
Crawler Crane	1	81	16%	300	5
Welders	15	74	40%	300	5
Cutoff Saw	2	84	20%	300	5
Air Compressor	2	78	40%	300	5
Aerial Lift	3	75	20%	300	5
Forklift	5	75	20%	300	5
Man Lift	2	75	20%	300	5
	33				
Receptor:	83 R1				
Results:	1-hour Leq:	66.3			



Construction Phase: Paving/Concrete/Landscape

Equipment

		Reference		-	Estimated
Decerintien	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Concrete Saw	1	90	20%	300	5
Tractor/Loader/Backhoe	1	79	40%	300	5
Skid Steer Loader	1	79	40%	300	5
Roller	1	80	20%	300	5
Paving Equipment	1	77	50%	300	5
	5				
Bocontor:					
Receptor:	K I				
Desulter					
Results:					
	1-hour Leq:	64.3			
	_				



Construction Phase: Demolition

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Concrete Saw	1	90	20%	295	5
Loader	2	79	40%	295	5
Air Compressor	1	78	40%	295	5
Tractor/Loader/Backhoe	1	79	40%	295	5
	5				
Receptor:					
	Π2				
Results: 1-I	nour Leq:	64.6			



Construction Phase: Grading / Excavation

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Grader	1	85	40%	295	5
Bore/Drill Rig	1	84	20%	295	5
Bulldozer	1	82	40%	295	5
Crane	1	81	16%	295	5
Excavator	1	81	40%	295	5
Plate Compactor	1	83	20%	295	5
	6				
Receptor:	[~] R2				
Results:	1-hour Leq:	65.0			



Construction Phase: Foundation

Equipment

	No. of	Reference	Acoustical	Distance to	Estimated
Description	No. of Equip.	Noise Level at 50ft, Lmax	Usage Factor	Receptor, ft	Noise Shielding, dBA
Plate Compactors	1	83	20%	295	5
Concrete Pump	1	81	20%	295	5
Backhoe	2	78	40%	295	5
Crawler Crane	1	81	16%	295	5
Welders	1	74	40%	295	5
Plate Compactors	1	83	20%	295	5
Concrete Pump	1	81	20%	295	5
	8				
Receptor:	。 R2				
Results:	1-hour Leq:	62.8			



Construction Phase: Building Construction

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (tower)	1	81	16%	295	5
Cutoff Saw	1	84	20%	295	5
Concrete Pump	1	81	20%	295	5
Crawler Crane	1	81	16%	295	5
Welders	15	74	40%	295	5
Cutoff Saw	2	84	20%	295	5
Air Compressor	2	78	40%	295	5
Aerial Lift	3	75	20%	295	5
Forklift	5	75	20%	295	5
Man Lift	2	75	20%	295	5
Receptor:	33 R2				
Results:					
	1-hour Leq:	66.4			



Construction Phase: Paving/Concrete/Landscape

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Concrete Saw	1	90	20%	295	5
Tractor/Loader/Backhoe	e 1	79	40%	295	5
Skid Steer Loader	1	79	40%	295	5
Roller	1	80	20%	295	5
Paving Equipment	1	77	50%	295	5
	5				
Receptor:	R2				
Results:					
	1-hour Leq:	64.5			



Construction Phase: Demolition

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Concrete Saw	1	90	20%	340	5
Loader	2	79	40%	340	5
Air Compressor	1	78	40%	340	5
Tractor/Loader/Backhoe	1	79	40%	340	5
	5				
Receptor:	R3				
	7.5				
Results: 1-h	our Leq:	63.4			



Construction Phase: Grading / Excavation

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Grader	1	85	40%	340	5
Bore/Drill Rig	1	84	20%	340	5
Bulldozer	1	82	40%	340	5
Crane	1	81	16%	340	5
Excavator	1	81	40%	340	5
Plate Compactor	1	83	20%	340	5
	6				
Receptor:	R 3				
Results:					
	1-hour Leq:	63.8			



Construction Phase: Foundation

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactors	1	83	20%	340	5
Concrete Pump	1	81	20%	340	5
Backhoe	2	78	40%	340	5
Crawler Crane	1	81	16%	340	5
Welders	1	74	40%	340	5
Plate Compactors	1	83	20%	340	5
Concrete Pump	1	81	20%	340	5
	8				
Receptor:	° R 3				
Results:					
Roound.	1-hour Leq:	61.6			



Construction Phase: Building Construction

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (tower)	1	81	16%	340	5
Cutoff Saw	1	84	20%	340	5
Concrete Pump	1	81	20%	340	5
Crawler Crane	1	81	16%	340	5
Welders	15	74	40%	340	5
Cutoff Saw	2	84	20%	340	5
Air Compressor	2	78	40%	340	5
Aerial Lift	3	75	20%	340	5
Forklift	5	75	20%	340	5
Man Lift	2	75	20%	340	5
	00				
Receptor:	33 R3				
Results:	1-hour Leq:	65.2			



Construction Phase: Paving/Concrete/Landscape

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Concrete Saw	1	90	20%	340	5
Tractor/Loader/Backhoe	1	79	40%	340	5
Skid Steer Loader	1	79	40%	340	5
Roller	1	80	20%	340	5
Paving Equipment	1	77	50%	340	5
	5				
Receptor:	R3				
Results:					
	our Leq:	63.2			



Construction Phase: Demolition

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Concrete Saw	1	90	20%	245	5
Loader	2	79	40%	245	5
Air Compressor	1	78	40%	245	5
Tractor/Loader/Backhoe	1	79	40%	245	5
	5				
Receptor:	R4				
Results:					
1-ł	nour Leq:	66.3			



Construction Phase: Grading / Excavation

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Grader	1	85	40%	245	5
Bore/Drill Rig	1	84	20%	245	5
Bulldozer	1	82	40%	245	5
Crane	1	81	16%	245	5
Excavator	1	81	40%	245	5
Plate Compactor	1	83	20%	245	5
	6				
Receptor:	R4				
Results:	1-hour Leq:	66.6			



Construction Phase: Foundation

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactors	1	83	20%	245	5
Concrete Pump	1	81	20%	245	5
Backhoe	2	78	40%	245	5
Crawler Crane	1	81	16%	245	5
Welders	1	74	40%	245	5
Plate Compactors	1	83	20%	245	5
Concrete Pump	1	81	20%	245	5
_	8				
Receptor:	R4				
Results:	1-hour Leq:	64.4			



Construction Phase: Building Construction

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (tower)	1	81	16%	245	5
Cutoff Saw	1	84	20%	245	5
Concrete Pump	1	81	20%	245	5
Crawler Crane	1	81	16%	245	5
Welders	15	74	40%	245	5
Cutoff Saw	2	84	20%	245	5
Air Compressor	2	78	40%	245	5
Aerial Lift	3	75	20%	245	5
Forklift	5	75	20%	245	5
Man Lift	2	75	20%	245	5
Receptor:	33 R4				
Results:	1-hour Leq:	68.0			



Construction Phase: Paving/Concrete/Landscape

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Concrete Saw	1	90	20%	245	5
Tractor/Loader/Backhoe	1	79	40%	245	5
Skid Steer Loader	1	79	40%	245	5
Roller	1	80	20%	245	5
Paving Equipment	1	77	50%	245	5
Receptor:	5 R4				
Results: 1-h	our Leq:	66.1			



Construction Phase: Demolition

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Concrete Saw	1	90	20%	495	10
Loader	2	79	40%	495	10
Air Compressor	1	78	40%	520	10
Tractor/Loader/Backhoe	• 1	79	40%	520	10
	5				
Receptor:	R5				
-					
Results:	1-hour Leq:	55.1			



Construction Phase: Grading / Excavation

Equipment

	No. of	Reference Noise Level at	Acoustical	Distance to	Estimated Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Grader	1	85	40%	495	10
Bore/Drill Rig	1	84	20%	495	10
Bulldozer	1	82	40%	495	10
Crane	1	81	16%	495	10
Excavator	1	81	40%	495	10
Plate Compactor	1	83	20%	495	10
	6				
Receptor:	R5				
Results:					
	1-hour Leq:	55.5			



Construction Phase: Foundation

Equipment

	No. of	Reference Noise Level at	Acoustical	Distance to	Estimated Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Plate Compactors	1	83	20%	495	10
Concrete Pump	1	81	20%	495	10
Backhoe	2	78	40%	495	10
Crawler Crane	1	81	16%	495	10
Welders	1	74	40%	495	10
Plate Compactors	1	83	20%	495	10
Concrete Pump	1	81	20%	495	10
	8				
Receptor:	R5				
Results:					
	1-hour Leq:	53.3			



Construction Phase: Building Construction

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (tower)	1	81	16%	495	10
Cutoff Saw	1	84	20%	495	10
Concrete Pump	1	81	20%	495	10
Crawler Crane	1	81	16%	495	10
Welders	15	74	40%	495	10
Cutoff Saw	2	84	20%	495	10
Air Compressor	2	78	40%	495	10
Aerial Lift	3	75	20%	495	10
Forklift	5	75	20%	495	10
Man Lift	2	75	20%	495	10
_	33				
Receptor:	R5				
Results:					
	1-hour Leq:	56.9			



Construction Phase: Paving/Concrete/Landscape

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Concrete Saw	1	90	20%	495	10
Tractor/Loader/Backhoe	e 1	79	40%	495	10
Skid Steer Loader	1	79	40%	495	10
Roller	1	80	20%	495	10
Paving Equipment	1	77	50%	495	10
	5				
Receptor:	R5				
Results:					
	1-hour Leq:	55.0			



Construction Phase: Demolition

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Concrete Saw	1	90	20%	60	0
Loader	2	79	40%	60	0
Air Compressor	1	78	40%	85	0
Tractor/Loader/Backhoe	1	79	40%	85	0
	5				
Receptor:	R6				
	70				
Results: 1-h	our Leq:	83.1			



Construction Phase: Grading / Excavation

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Grader	1	85	40%	60	0
Bore/Drill Rig	1	84	20%	60	0
Bulldozer	1	82	40%	85	0
Crane	1	81	16%	85	0
Excavator	1	81	40%	100	0
Plate Compactor	1	83	20%	100	0
	6				
Receptor:	R6				
Results:					
	1-hour Leq:	82.4			



Construction Phase: Foundation

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactors	1	83	20%	60	
Concrete Pump	1	81	20%	60	0
Backhoe	2	78	40%	85	0
Crawler Crane	1	81	16%	85	0
Welders	1	74	40%	100	0
Plate Compactors	1	83	20%	100	0
Concrete Pump	1	81	20%	100	0
	0				
Receptor:	⁸ R6				
Results:					
	1-hour Leq:	79.5			



Construction Phase: Building Construction

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (tower)	1	81	16%	60	0
Cutoff Saw	1	84	20%	60	0
Concrete Pump	1	81	20%	85	0
Crawler Crane	1	81	16%	85	0
Welders	15	74	40%	100	0
Cutoff Saw	2	84	20%	100	0
Air Compressor	2	78	40%	100	0
Aerial Lift	3	75	20%	100	0
Forklift	5	75	20%	100	0
Man Lift	2	75	20%	100	0
Receptor:	33 R6				
Results:					
	1-hour Leq:	81.9			



Construction Phase: Paving/Concrete/Landscape

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Concrete Saw	1	90	20%	60	0
Tractor/Loader/Backhoe	1	79	40%	60	0
Skid Steer Loader	1	79	40%	85	0
Roller	1	80	20%	85	0
Paving Equipment	1	77	50%	100	0
	5				
Receptor:	R6				
Results:					
1	-hour Leq:	82.7			

INPUT: ROADWAYS							222 V	Vest 2nd			
Eyestone Environmental					6 December	2018					
SKB					TNM 2.5						
INPUT: ROADWAYS							Average	pavement typ	e shall be ι	used unles	S
PROJECT/CONTRACT:	222 West	2nd					a State h	ighway agenc	y substant	iates the u	se
RUN:	Trucks -	Demolitior	า				of a diffe	rent type with	the approv	al of FHW	Δ.
Roadway		Points									
Name	Width	Name	No.	Coordinates	(pavement)		Flow Cor	ntrol		Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt	On
							Device	Constraint	Vehicles	Туре	Struct?
									Affected		
	ft			ft	ft	ft		mph	%		
Haul Route	12.0	point1	1	0.0	0.0	0.00	Signal	0.00	100	Average	
		point2	2	1,000.0	0.0	0.00)				

INPUT: TRAFFIC FOR LAeq1h Volumes						2	22 West 2	2nd				
Eyestone Environmental				6 Dece	ember 2	2018						
SKB				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	222 West 2n	nd										
RUN:	Trucks - Dei	molition										
Roadway	Points			_								-
Name	Name	No.	Segmer	nt								
			Autos		MTruc	ks	HTrucks	5	Buses		Motorcy	/cles
			v	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Haul Route	point1	1	12	2 35		0 0	2	25	0	0	0) (
	point2	2	2									

INPUT: RECEIVERS				[222 West	2nd		
Eyestone Environmental						6 D	ecemb	er 2018				
SKB						TNI	M 2.5					
INPUT: RECEIVERS												
PROJECT/CONTRACT:	222 V	Vest 2nd	d		1							
RUN:	Truck	ks - Den	nolition	,								
Receiver												
Name	No.	#DUs	Coordinates	(ground)		Hei	ght	Input Sou	nd Levels	and Criteri	a	Active
			X	Y	Z	abo	ove	Existing	Impact Cr	iteria	NR	in
						Gro	ound	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft		dBA	dBA	dB	dB	
Along Spring St. 3rd St. and 4th St.		1 1	250.0	25.0		0.00	4.92	0.00	C	0.0) 0.0) Y
Along Los Angeles St.	1:	3 1	250.0	30.0		0.00	4.92	0.00	C	0.0	0.0) Y

RESULTS: SOUND LEVELS								222 West 2	2nd					
Eyestone Environmental								6 Decemb	per 2018					
SKB								TNM 2.5						
								Calculate	d with TNN	1 2.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		222 We	st 2nd											
RUN:		Trucks	- Demolitic	on										
BARRIER DESIGN:		INPUT	HEIGHTS						Average p	pavement type	e shall be use	d unles	S	
									a State hi	ghway agenc	y substantiate	es the u	ise	
ATMOSPHERICS:		68 deg	F, 50% RH	ĺ					of a differ	ent type with	approval of F	HWA.		
Receiver					_									
Name	No.	#DUs	Existing	No Barrier						With Barrier				
			LAeq1h	LAeq1h		Incr	ease over	existing	Туре	Calculated	Noise Reduc	tion		
				Calculated	Crit'n	Cale	culated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calcula	ated
								Sub'l Inc					minus	
													Goal	
			dBA	dBA	dBA	dB		dB		dBA	dB	dB	dB	
Along Spring St. 3rd St. and 4th St.	1	1	0.0	58	.1	0	58.1	C) Snd Lvl	58.1	0.0		0	0
Along Los Angeles St.	13	6 1	0.0	57	.3	0	57.3	в С	Snd Lvl	57.3	0.0		0	0
Dwelling Units		# DUs	Noise Re	duction										
			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		2	0.0	0	.0	0.0						ĺ		

INPUT: ROADWAYS		[222 V	Vest 2nd			
Eyestone Environmental					6 December	2018					
SKB					TNM 2.5						
INPUT: ROADWAYS							Average	pavement typ	e shall be u	used unles	S
PROJECT/CONTRACT:	222 West	2nd					a State h	ighway agend	y substant	iates the u	se
RUN:	Trucks -	Grading					of a diffe	rent type with	the approv	al of FHW	Δ.
Roadway		Points									
Name	Width	Name	No.	Coordinates	(pavement)		Flow Co	ntrol		Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt	On
							Device	Constraint	Vehicles	Туре	Struct?
									Affected		
	ft			ft	ft	ft		mph	%		
Haul Route	12.0	point1	1	0.0	0.0	0.0	0 Signal	0.00	100	Average	
		point2	2	2 1,000.0	0.0	0.0	0				

INPUT: TRAFFIC FOR LAeq1h Volumes						2	22 West 2	2nd				
Eyestone Environmental				6 Dece	ember 2	018						
SKB				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	222 West 2nd											
RUN:	Trucks - Grad	ling										
Roadway	Points											-
Name	Name	No.	Segmer	nt								
			Autos		MTruc	ks	HTrucks	5	Buses		Motorcy	/cles
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Haul Route	point1	1	24	35		0 0	7	25	0	0	0) (
	point2	2	2									

INPUT: RECEIVERS									222 West	2nd		
Eyestone Environmental						6 D	ecemb	er 2018				
SKB						TNI	M 2.5					
INPUT: RECEIVERS												
PROJECT/CONTRACT:	222 V	Vest 2nd	d									
RUN:	Truck	s - Gra	ding	_								
Receiver												
Name	No.	#DUs	Coordinates	(ground)		Hei	ght	Input Sou	nd Levels	and Criteri	a	Active
			X	Y	Z	abo	ove	Existing	Impact Cr	iteria	NR	in
						Gro	ound	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft		dBA	dBA	dB	dB	
Along Spring St. 3rd St. and 4th St.		1 1	250.0	25.0		0.00	4.92	0.00	0	0.0	0.	0 Y
Along Los Angeles St.	1:	3 1	250.0	30.0)	0.00	4.92	0.00	C	0.0	0.	0 Y

RESULTS: SOUND LEVELS		1						222 West 2	2nd					
Eyestone Environmental								6 Decemb	er 2018					
SKB								TNM 2.5						
								Calculate	d with TNN	1 2.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		222 We	st 2nd											
RUN:		Trucks	- Grading											
BARRIER DESIGN:		INPUT	HEIGHTS						Average p	pavement typ	e shall be use	d unles	is	
									a State hi	ghway agenc	y substantiate	es the u	se	
ATMOSPHERICS:		68 deg	F, 50% RH	ĺ					of a differ	ent type with	approval of F	HWA.		
Receiver		_												
Name	No.	#DUs	Existing	No Barrier						With Barrier				
			LAeq1h	LAeq1h		Ir	ncrease over	existing	Туре	Calculated	Noise Reduc	tion		
				Calculated	Crit'n	С	alculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calcula	ated
						ĺ		Sub'l Inc					minus	
						ĺ							Goal	
			dBA	dBA	dBA	d	В	dB		dBA	dB	dB	dB	
Along Spring St. 3rd St. and 4th St.	1	1	0.0	63	.1	0	63.1	C	Snd Lvl	63.1	0.0)	0	0
Along Los Angeles St.	13	5 1	0.0	62	.3	0	62.3	C	Snd Lvl	62.3	0.0		0	0
Dwelling Units		# DUs	Noise Re	duction										
			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		2	0.0	0	.0	0.0								

INPUT: ROADWAYS		[222 V	Vest 2nd			
Eyestone Environmental					6 December	2018					
SKB					TNM 2.5						
INPUT: ROADWAYS							Average	pavement typ	e shall be u	used unles	s
PROJECT/CONTRACT:	222 West	2nd					a State h	ighway agend	y substant	iates the u	se
RUN:	Trucks -	Foundatio	n				of a diffe	rent type with	the approv	al of FHW	A
Roadway		Points								-	
Name	Width	Name	No.	Coordinates	(pavement)		Flow Cor	ntrol		Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt	On
							Device	Constraint	Vehicles	Туре	Struct?
									Affected		
	ft			ft	ft	ft		mph	%		
Haul Route	12.0	point1	1	0.0	0.0	0.00) Signal	0.00	100	Average	
		point2	2	2 1,000.0	0.0	0.00)				

INPUT: TRAFFIC FOR LAeq1h Volumes						2	22 West 2	2nd				
Eyestone Environmental				6 Dece	ember 2	2018						
SKB				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	222 West 2nd	d										
RUN:	Trucks - Fou	Indation										
Roadway	Points											
Name	Name	No.	Segmen	nt								
			Autos		MTruc	ks	HTrucks	5	Buses		Motorcy	/cles
			v	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Haul Route	point1	1	40	35		0 0	7	25	0	0	0) (
	point2	2	2									

INPUT: RECEIVERS									222 West	2nd		
Eyestone Environmental						6 D	ecemb	er 2018				
SKB						TNI	M 2.5					
INPUT: RECEIVERS												
PROJECT/CONTRACT:	222 V	Vest 2nd	d		1							
RUN:	Truck	ks - Fou	ndation	,								
Receiver												
Name	No.	#DUs	Coordinates	(ground)		Hei	ght	Input Sou	nd Levels	and Criteri	a	Active
			X	Y	Z	abo	ove	Existing	Impact Cr	iteria	NR	in
						Gro	ound	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft		dBA	dBA	dB	dB	
Along Spring St. 3rd St. and 4th St.		1 1	250.0	25.0		0.00	4.92	0.00	C	0.0) 0.0) Y
Along Los Angeles St.	1:	3 1	250.0	30.0		0.00	4.92	0.00	C	0.0	0.0) Y

RESULTS: SOUND LEVELS								222 West 2	2nd					
Eyestone Environmental								6 Decemb	per 2018					
SKB								TNM 2.5						
								Calculate	d with TNN	1 2.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		222 We	st 2nd											
RUN:		Trucks	- Foundati	on										
BARRIER DESIGN:		INPUT	HEIGHTS						Average	pavement typ	e shall be use	d unles	s	
									a State hi	ghway agenc	y substantiate	es the u	ise	
ATMOSPHERICS:		68 deg	F, 50% RH	I					of a differ	ent type with	approval of F	HWA.		
Receiver								-	=					
Name	No.	#DUs	Existing	No Barrier						With Barrier				
			LAeq1h	LAeq1h		ĺ	Increase over	existing	Туре	Calculated	Noise Reduc	tion		
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calcu	lated
						ĺ		Sub'l Inc					minus	;
						Í							Goal	
			dBA	dBA	dBA	(dB	dB		dBA	dB	dB	dB	
Along Spring St. 3rd St. and 4th St.	1	1	0.0	63	.5	0	63.5	() Snd Lvl	63.5	i 0.0		0	0
Along Los Angeles St.	13	6 1	0.0	62	.7	0	62.7	() Snd Lvl	62.7	0.0		0	0
Dwelling Units		# DUs	Noise Re	duction										
			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		2	0.0	0	.0	0.0								

INPUT: ROADWAYS								222 W	lest 2nd			
Eyestone Environmental					6 Decemb	er 2	2018					
SKB					TNM 2.5							
INPUT: ROADWAYS								Average	pavement typ	e shall be ι	used unles	S
PROJECT/CONTRACT:	222 West	2nd						a State hi	ighway agenc	y substant	iates the u	se
RUN:	Trucks -	Building C	Construct	tion				of a diffe	rent type with	the approv	al of FHW	A
Roadway		Points		_								
Name	Width	Name	No.	Coc	ordinates (pavement	t)		Flow Con	itrol		Segment	
				Х	Y		Z	Control	Speed	Percent	Pvmt	On
								Device	Constraint	Vehicles	Туре	Struct?
										Affected		
	ft			ft	ft		ft		mph	%		
Haul Route	12.0	point1	1	1	0.0	0.0	0.00	Signal	0.00	100	Average	
		point2	2	2	1,000.0 (0.0	0.00					

INPUT: TRAFFIC FOR LAeq1h Volumes						2	22 West 2	2nd	1			
Eyestone Environmental				6 Dece	ember 2	2018						
SKB				TNM 2	5		1					
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	222 West 2	nd										
RUN:	Trucks - Bu	uilding Co	nstructio	on								
Roadway	Points							-				-
Name	Name	No.	Segmen	nt								-
			Autos		MTruc	ks	HTrucks	5	Buses		Motorcy	/cles
			v	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Haul Route	point1	1	200	35		0 0	7	25	0	0	0	0 0
	point2	2	2									

INPUT: RECEIVERS								222 West	2nd		
Eyestone Environmental						6 Decemb	er 2018				
SKB						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	222 W	est 2nd	d		1						
RUN:	Truck	s - Buil	ding Constru	ction							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criter	ia	Active
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Along Spring St. 3rd St. and 4th St.	1	1	250.0	25.0	0.00	4.92	0.00	0	0.	0 0.	0 Y
Along Los Angeles St.	13	1	250.0	30.0	0.00	4.92	2 0.00	0	0.	0 0.	0 Y

RESULTS: SOUND LEVELS								222 West 2	2nd					
Eyestone Environmental								6 Decemb	per 2018					
SKB								TNM 2.5						
								Calculate	d with TNN	1 2.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		222 We	st 2nd											
RUN:		Trucks	- Building	Constructio	n									
BARRIER DESIGN:		INPUT	HEIGHTS						Average	pavement type	e shall be use	d unles	ss	
									a State hi	ghway agenc	y substantiate	es the u	ise	
ATMOSPHERICS:		68 deg	F, 50% RH	l					of a differ	ent type with	approval of F	HWA.		
Receiver														
Name	No.	#DUs	Existing	No Barrier						With Barrier				
			LAeq1h	LAeq1h			Increase over	existing	Туре	Calculated	Noise Reduc	tion		
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calcu	lated
						ĺ		Sub'l Inc					minus	3
													Goal	
			dBA	dBA	dBA	1	dB	dB		dBA	dB	dB	dB	
Along Spring St. 3rd St. and 4th St.	1	1	0.0	66	.0	0	66.0	() Snd Lvl	66.0	0.0)	0	0
Along Los Angeles St.	13	6 1	0.0	65	.2	0	65.2	() Snd Lvl	65.2	2 0.0		0	0
Dwelling Units		# DUs	Noise Re	duction										
			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		2	0.0	0	.0	0.0						1		

INPUT: ROADWAYS							222 V	Vest 2nd			
Eyestone Environmental					6 December	2018					
SKB					TNM 2.5						
INPUT: ROADWAYS							Average	pavement typ	e shall be u	used unles	S
PROJECT/CONTRACT:	222 West	2nd					a State h	ighway agend	y substant	iates the u	se
RUN:	Trucks -	Landscap	e				of a diffe	rent type with	the approv	al of FHW	Δ.
Roadway		Points									
Name	Width	Name	No.	Coordinates	(pavement)		Flow Cor	ntrol		Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt	On
							Device	Constraint	Vehicles	Туре	Struct?
						Ì			Affected		
	ft			ft	ft	ft		mph	%		
Haul Route	12.0	point1	1	0.0	0.0	0.00	Signal	0.00	100	Average	
		point2	2	2 1,000.0	0.0	0.00)				

INPUT: TRAFFIC FOR LAeq1h Volumes						2	22 West 2	2nd				
Eyestone Environmental				6 Dece	ember 2	018						
SKB				TNM 2	2.5		1					
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	222 West 2nd											
RUN:	Trucks - Land	Iscape										
Roadway	Points							-				-
Name	Name	No.	Segmen	nt								
			Autos		MTruc	ks	HTrucks	5	Buses		Motorcy	/cles
			v	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Haul Route	point1	1	40	35	5	0 0	3	25	0	0	0) (
	point2	2	2									

INPUT: RECEIVERS				[222 West	2nd		
Eyestone Environmental						6 D	ecemb	er 2018				
SKB						TNI	M 2.5					
INPUT: RECEIVERS												
PROJECT/CONTRACT:	222 V	Vest 2nd	d		1							
RUN:	Truck	ks - Lan	dscape									
Receiver												
Name	No.	#DUs	Coordinates	(ground)		Hei	ight	Input Sou	nd Levels	and Criteri	a	Active
			X	Y	Z	abo	ove	Existing	Impact Cr	iteria	NR	in
						Gro	ound	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft		dBA	dBA	dB	dB	
Along Spring St. 3rd St. and 4th St.		1 1	250.0	25.0		0.00	4.92	0.00	C	0.0	0.0) Y
Along Los Angeles St.	1:	3 1	250.0	30.0		0.00	4.92	0.00	C	0.0	0.0) Y

RESULTS: SOUND LEVELS				ĺ				222 West 2	2nd					
Eyestone Environmental								6 Decemb	er 2018					
SKB								TNM 2.5						
								Calculate	d with TNN	1 2.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		222 We	st 2nd											
RUN:		Trucks	- Landscaj	be										
BARRIER DESIGN:		INPUT	HEIGHTS						Average p	pavement type	shall be use	d unles	S	
									a State hi	ghway agenc	y substantiate	es the u	se	
ATMOSPHERICS:		68 deg	F, 50% RH							ent type with				
Receiver														
Name	No.	#DUs	Existing	No Barrier						With Barrier		J		
			LAeq1h	LAeq1h		Ir	ncrease over	existing	Туре	Calculated	Noise Reduc	tion		
				Calculated	Crit'n	C	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calcula	ated
								Sub'l Inc					minus	
			İ					İ					Goal	
			dBA	dBA	dBA	d	В	dB		dBA	dB	dB	dB	
Along Spring St. 3rd St. and 4th St.	1	1	0.0	60	.8	0	60.8	0	Snd Lvl	60.8	0.0		0	0
Along Los Angeles St.	13	3 1	0.0	60	.0	0	60.0	0	Snd Lvl	60.0	0.0		0	0
Dwelling Units		# DUs	Noise Re	duction										-
			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		2	0.0	0	.0	0.0								

INPUT: ROADWAYS								222 V	Vest 2nd			
Eyestone Environmental					12	March 201	9					
SKB					TN	IM 2.5						
INPUT: ROADWAYS								Average	pavement typ	e shall be i	used unles	S
PROJECT/CONTRACT:	222 West	2nd						a State h	ighway agend	y substant	iates the u	se
RUN:	Trucks -	Cumulativ	e Spring	, 3rd	& 4th			of a diffe	rent type with	the approv	al of FHW	A
Roadway		Points										
Name	Width	Name	No.	Coo	rdinates (pa	avement)		Flow Cor	ntrol		Segment	
				Х	Y		Z	Control	Speed	Percent	Pvmt	On
								Device	Constraint	Vehicles	Туре	Struct?
										Affected		
	ft			ft	ft		ft		mph	%		
Haul Route	12.0	point1	1	1	0.0	0.0	0.0) Signal	0.00	100	Average	
		point2	2	2	1,000.0	0.0	0.0	C				

INPUT: ROADWAYS								222 V	Vest 2nd			
Eyestone Environmental					12 Mai	rch 201	9					
SKB					TNM 2	.5						
INPUT: ROADWAYS								Average	pavement typ	e shall be i	used unles	S
PROJECT/CONTRACT:	222 West	2nd						a State h	ighway agend	y substant	iates the u	se
RUN:	Trucks -	Cumulativ	e LA Str	eet				of a diffe	rent type with	the approv	al of FHW	Α
Roadway		Points		-								
Name	Width	Name	No.	Coo	rdinates (paven	nent)		Flow Cor	ntrol		Segment	
				Х	Y		Z	Control	Speed	Percent	Pvmt	On
								Device	Constraint	Vehicles	Туре	Struct?
										Affected		
	ft			ft	ft		ft		mph	%		
Haul Route	12.0	point1	1	1	0.0	0.0	0.00	Signal	0.00	100	Average	
		point2	2	2	1,000.0	0.0	0.00					

INPUT: TRAFFIC FOR LAeq1h Volumes					1	2	22 West	2nd				
Eyestone Environmental				12 Ma	rch 2019)						
SKB				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	222 West 2	2nd			1							
RUN:	Trucks - C	umulative	LA Stree	t								
Roadway	Points											-
Name	Name	No.	Segmen	t								
			Autos		MTruck	s	HTruck	s	Buses		Motorcy	cles
			v	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Haul Route	point1	1	24	35		0 0	96	6 25	c C	0 0) C) C
	point2	2	2									

INPUT: RECEIVERS									222 West	2nd			
Eyestone Environmental							12 March	2019					
SKB							TNM 2.5						
INPUT: RECEIVERS													
PROJECT/CONTRACT:	222 W	est 2nd	b			1							
RUN:	Truck	s - Cun	nulative LA	Street									
Receiver													
Name	No.	#DUs	Coordinat	tes (ground)			Height	Input Sou	nd Levels a	and Crite	eria		Active
			Х	Y		Z	above	Existing	Impact Cr	iteria	NR		in
							Ground	LAeq1h	LAeq1h	Sub'l	Goal		Calc.
			ft	ft		ft	ft	dBA	dBA	dB	dB		<u> </u>
Along Los Angeles St.	13	6 1	25	0.0	30.0	0.00	0 4.92	0.00	0	().0	0.0	Y

RESULTS: SOUND LEVELS							222 West 2	nd					
Eyestone Environmental							12 March	2019					
SKB							TNM 2.5						
							Calculated	d with TNN	1 2.5				
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		222 We	st 2nd										
RUN:		Trucks	- Cumulati	ve LA Street									
BARRIER DESIGN:		INPUT	HEIGHTS					Average p	pavement typ	e shall be us	ed unless	\$	
								a State high	ghway agenc	y substantia	tes the us	e	
ATMOSPHERICS:		68 deg	F, 50% RH	I				of a differ	ent type with	approval of	FHWA.		
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier	,			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Redu	ction		
	İ			Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calcula	ted
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Along Los Angeles St.	13	6 1	0.0	73.2	2 (0 73.2	2 0	Snd Lvl	73.2	2 0.	0	0	0.
Dwelling Units		# DUs	Noise Re	duction									
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0	0.0	0.0	0							
All Impacted		1	0.0	0.0	0.0	0							
All that meet NR Goal		1	0.0	0.0	0.0	0							

INPUT: TRAFFIC FOR LAeq1h Volumes					1	2	22 West	2nd	1			
Eyestone Environmental				12 Ma	rch 2019)						
SKB				TNM 2	.5		I					
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	222 West 2	nd										
RUN:	Trucks - Cu	umulative	Spring, 3	8rd & 4t	h							
Roadway	Points											
Name	Name	No.	Segmen	t								
		İ	Autos		MTruck	s	HTruck	S	Buses		Motorcy	vcles
			v	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Haul Route	point1	1	24	35		0 0	87	7 25	C	0 0) C) (
	point2	2	2									

INPUT: RECEIVERS								222 West	2nd		
Eyestone Environmental						12 March	2019				
SKB						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	222 V	Vest 2nd	d								
RUN:	Truck	ks - Cun	nulative Sprin	g, 3rd & 4th							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	ind Levels	and Crite	ria	Active
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Along Spring St. 3rd St. and 4th St.		1 1	250.0	25.0	0.00	4.92	2 0.00) () (0.0	0.0 Y

RESULTS: SOUND LEVELS								222 West 2	nd					
Eyestone Environmental								12 March	2019					
SKB								TNM 2.5						
								Calculated	d with TNN	1 2.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		222 We	st 2nd											
RUN:		Trucks	- Cumulati	ve Spring, 3	rd & 4th	n								
BARRIER DESIGN:		INPUT	HEIGHTS						Average p	oavement typ	e shall be us	ed unless	3	
										ghway agenc				
ATMOSPHERICS:		68 deg	F, 50% RH	l					of a differ	ent type with	approval of	FHWA.		
Receiver														
Name	No.	#DUs	Existing	No Barrier						With Barrier	,			
			LAeq1h	LAeq1h			Increase over	existing	Туре	Calculated	Noise Redu	ction		
				Calculated	Crit'n	i	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Cale	culated
								Sub'l Inc	ĺ				min	us
													Goa	ıl
			dBA	dBA	dBA		dB	dB		dBA	dB	dB	dB	
Along Spring St. 3rd St. and 4th St.		1 1	0.0	73	.5	0	73.5	5 0	Snd Lvl	73.5	5 0.	0	0	0
Dwelling Units		# DUs	Noise Re	duction	-	-								
-			Min	Avg	Max									
			dB	dB	dB									
All Selected		1	0.0	0	.0	0.0								
All Impacted		1	0.0	0	.0	0.0	1							
All that meet NR Goal		1	0.0	0	.0	0.0	1							



Project: 222 West 2nd Project EIR

Construction Vibration Impacts

Reference Levels at 25 feet are based on FTA, 2006 (Transit Noise and Vibration Impact Assessment)Calculations using FTA procedure withn=1.5

ON-SITE CONSTRUCTION ACTIVITIES

Table 1: Construction Equipment Vibration Levels (PPV) - Building Damages

		Estimat	ed Vibration L	evels at neares	t off-site build	ling structures	s (distance in fe	et), PPV
	Reference Vibration Levels at 25	LA Times Building to the North	Multi-story Residential Building to the South	Commercial Building to the East	Commercial Building to the West			
Equipment	ft., PPV	50	255	70	95			
Large Bulldozer	0.089	0.032	0.003	0.019	0.012			
Caisson Drilling	0.089	0.032	0.003	0.019	0.012			
Loaded Trucks	0.076	0.027	0.002	0.016	0.010			
Jackhammer	0.035	0.012	0.001	0.008	0.005			
Small bulldozer	0.003	0.001	0.000	0.001	0.000			
Significance	Threshold, PPV	0.12	0.5	0.3	0.5			

Table 2: Construction Equipment Vibration Levels (VdB) - Human Annoyance

	Reference Vibration	Esti	mated Vibrati	on Levels at Of	f-Site Recepto	ors (at note dis	tance in feet),	VdB
	Levels at 25	R1	R2	R3	R4	R5	R6	
Equipment	ft., VdB	300	295	340	245	495	60	
Large Bulldozer	87	55	55	53	57	48	76	
Caisson Drilling	87	55	55	53	57	48	76	
Loaded Trucks	86	54	54	52	56	47	75	
Jackhammer	79	47	47	45	49	40	68	
Small bulldozer	58	26	26	24	28	19	47	
Significance	Threshold, VdB	72	72	72	72	72	72	

OFF-SITE CONSTRUCTION HAUL TRUCKS

Table 3: Off-Site Haul Trucks - Building Damage

	Reference Vibration		Estima	ted Vibration I	evels at noted	l distance in fe	et, PPV	
Equipment	Levels at 50 ft., PPV	20						
Typical road surface	0.00565	0.022						
Significance T	hreshold, PPV	0.12						

Ref. Levels based on FTA Figure 7-3 (converted from VdB to PPV)

Table 4: Off-Site Haul Trucks - Human Annoyance

	Reference Vibration		Estimat	ted Vibration L	evels at noted	distance in fe	et, VdB	
Equipment	Levels at 50 ft., VdB	20						
Typical road surface	63	75						
Significance T	hreshold, VdB	72						

Ref. Levels based on FTA Figure 7-3

Operation Noise Calculations



Project Composite Noise Calculations (CNEL) Project: 222 West 2nd Street Project

				Trash			Project	Ambient +	
Ambient	Traffic ^a	Mechanical		Compactor	Outdoor		Composite	Project	Increase
69.0	52.4	34.2		22.3	45.5		53.2	69.1	0.1
69.4	60.4	42.4		30.5	52.1		61.1	70.0	0.6
67.0	56.9	37.9		51.8	53.6		59.4	67.7	0.7
66.4	51.7	40.2		35.6	54.3		56.3	66.8	0.4
67.7	43.8	36.5		37.5	57.1		57.3	68.1	0.4
67.8	59.4	50.2		49.7	63.5		65.2	69.7	1.9
	69.0 69.4 67.0 66.4 67.7	69.0 52.4 69.4 60.4 67.0 56.9 66.4 51.7 67.7 43.8	69.0 52.4 34.2 69.4 60.4 42.4 67.0 56.9 37.9 66.4 51.7 40.2 67.7 43.8 36.5	69.0 52.4 34.2 69.4 60.4 42.4 67.0 56.9 37.9 66.4 51.7 40.2 67.7 43.8 36.5	Ambient Traffic ^a Mechanical Compactor 69.0 52.4 34.2 22.3 69.4 60.4 42.4 30.5 67.0 56.9 37.9 51.8 66.4 51.7 40.2 35.6 67.7 43.8 36.5 37.5	AmbientTrafficaMechanicalCompactorOutdoor69.052.434.222.345.569.460.442.430.552.167.056.937.951.853.666.451.740.235.654.367.743.836.537.557.1	Ambient Traffic ^a Mechanical Compactor Outdoor 69.0 52.4 34.2 22.3 45.5 69.4 60.4 42.4 30.5 52.1 67.0 56.9 37.9 51.8 53.6 66.4 51.7 40.2 35.6 54.3 67.7 43.8 36.5 37.5 57.1	Ambient Traffic ^a Mechanical Compactor Outdoor Composite 69.0 52.4 34.2 22.3 45.5 53.2 69.4 60.4 42.4 30.5 52.1 61.1 67.0 56.9 37.9 51.8 53.6 59.4 66.4 51.7 40.2 35.6 54.3 56.3 67.7 43.8 36.5 37.5 57.1 57.3	Ambient Traffic ^a Mechanical Compactor Outdoor Composite Project 69.0 52.4 34.2 22.3 45.5 53.2 69.1 69.4 60.4 42.4 30.5 52.1 61.1 70.0 67.0 56.9 37.9 51.8 53.6 59.4 67.7 66.4 51.7 40.2 35.6 54.3 56.3 66.8 67.7 43.8 36.5 37.5 57.1 57.3 68.1

^a - traffic noise levels at each receptor is based on the traffic noise analysis for the roadway segment in front of the receptor.

		Traffic Noise Levels, CNEL							distance to	
			Existing +	Project	distance to		Existing +		Center	adj. for
Receptor	Roadway Segment	Existing	Project	Only	roadway, ft	Existing	Project	barrier	Line	distance
R1	2nd St.	68.7	68.8	52.4	10	68.7	68.8	0	30	0.0
R2	Broadway	68.7	69.3	60.4	10	68.7	69.3	0	35	0.0
R3	Spring St.	68.4	68.7	56.9	10	68.4	68.7	0	35	0.0
R4	2nd St.	68.0	68.1	51.7	10	68.0	68.1	0	30	0.0
R5	Main St.	70.2	70.2	43.8	10	70.2	70.2	0	30	0.0
R6	Broadway	68.5	69.0	59.4	10	68.5	69.0	0	40	0.0



OutdoorMechanical Equipment Noise CalculationsProject:222 West 2nd Street Project

			Н	lours of Operation	S
	Estimated No	oise Levels,	Ld (7am to	Le (7pm to	Ln (10pm to
	Leq from SC	UNDPLAN	7pm)	10pm)	7am)
Receptor	Leq	CNEL	12	3	9
R1	27.5	34.2	27.5	27.5	27.5
R2	35.7	42.4	35.7	35.7	35.7
R3	31.2	37.9	31.2	31.2	31.2
R4	33.5	40.2	33.5	33.5	33.5
R5	29.8	36.5	29.8	29.8	29.8
R6	43.5	50.2	43.5	43.5	43.5

		Ambient +				
	Ambient	Project	Increase		Ambient +	Increase
Receptor	CNEL	(CNEL)	(CNEL)	ambient (Leq)	Project (Leq)	(Leq)
R1	69.0	69.0	0.0	60.7	60.7	0.0
R2	69.4	69.4	0.0	63.6	63.6	0.0
R3	67.0	67.0	0.0	61.9	61.9	0.0
R4	66.4	66.4	0.0	58.7	58.7	0.0
R5	67.7	67.7	0.0	62.3	62.3	0.0
R6	67.8	67.9	0.1	62.8	62.9	0.1



Outdoor Noise Calculations

Project: 222 West 2nd Street Project

ALL LEVEL					Ho	urs of Operati	ons
					Ld (7am to	Le (7pm to	Ln (10pm to
	Estimated noi	se levels, Leq	(FROM SOUN	DPLAN)	7pm)	10pm)	7am)
Receptor	Sound System	Occupants	Total, Leq	CNEL	9	3	2
R1	43.3	27.0	43.4	45.5	42.2	43.4	36.9
R2	49.7	37.9	50.0	52.1	48.8	50.0	43.5
R3	51.3	36.9	51.5	53.6	50.3	51.5	45.0
R4	52.1	35.4	52.2	54.3	51.0	52.2	45.7
R5	55.0	32.4	55.0	57.1	53.8	55.0	48.5
R6	61.0	50.9	61.4	63.5	60.2	61.4	54.9

TOTAL COMBINED

			Ambient +		Project		
		Ambient	Project	Increase	Noise,	Ambient	Ambient +
Receptor	Project (CNEL)	(CNEL)	(CNEL)	(CNEL)	(Leq)	(Leq)	Project (Leq)
R1	45.5	69.0	69.0	0.0	43.4	60.7	60.8
R2	52.1	69.4	69.5	0.1	50.0	63.6	63.8
R3	53.6	67.0	67.2	0.2	51.5	61.9	62.3
R4	54.3	66.4	66.7	0.3	52.2	58.7	59.6
R5	57.1	67.7	68.1	0.4	55.0	62.3	63.0
R6	63.5	67.8	69.2	1.4	61.4	62.8	65.2



Loading and Trash Compactor Noise Calculations Project: 222 West 2nd Street Project

LOADING

	Estimated Levels, Lo SOUND	eq from	Ld (7am to 7pm)	Le (7pm to 10pm)	Ln (10pm to 7am)
Receptor	Leq	CNEL	3	3	0
R1	23.7	21.0	17.7	23.7	0.0
R2	32.4	29.6	26.4	32.4	0.0
R3	54.1	51.3	48.1	54.1	0.0
R4	38.0	35.2	32.0	38.0	0.0
R5	38.4	35.6	32.4	38.4	0.0
R6	52.0	49.2	46.0	52.0	0.0

TRASH COMPACTOR

	Estimated Levels, Lo SOUND	eq from	Ld (7am to 7pm)	Le (7pm to 10pm)	Ln (10pm to 7am)
Receptor	Leq	CNEL	3	3	0
R1	18.7	16.3	12.7	18.7	0.0
R2	26.3	23.5	20.3	26.3	0.0
R3	45.2	42.4	39.2	45.2	0.0
R4	28.3	25.5	22.3	28.3	0.0
R5	35.8	33.0	29.8	35.8	0.0
R6	43.2	40.4	37.2	43.2	0.0

TOTAL COMBINED

			Ambient +				Ambient +
	Project	Ambient	Project	Increase	Project	daytime	Project
Receptor	CNEL	CNEL	(CNEL)	(CNEL)	Noise, (Leq)	ambient (Leq)	(Leq)
R1	22.3	69.0	69.0	0.0	24.9	60.7	60.7
R2	30.5	69.4	69.4	0.0	33.4	63.6	63.6
R3	51.8	67.0	67.1	0.1	54.6	61.9	62.6
R4	35.6	66.4	66.4	0.0	38.4	58.7	58.7
R5	37.5	67.7	67.7	0.0	40.3	62.3	62.3
R6	49.7	67.8	67.9	0.1	52.5	62.8	63.2

222 West 2nd Project EIR Source Levels in dB(A) - Loading

3

Name	S	Source type	Lw		
			dB(A)		
Loading 1		Point	102.0		
Loading 2	F	Point	102.0		
				1	
			۹ES	22801 Crespi St Woodland Hills, CA 91364 USA	1

SoundPLAN 8.0

222 West 2nd Project EIR Assessed contribution level - Loading

Source	Ld	
	dB(A)	
Receiver R1 Ld 23.7 dB(A)		
Loading 1	20.7	
Loading 2	20.7	
Receiver R2 Ld 32.4 dB(A)		
Loading 1	28.8	
Loading 2	29.8	
Receiver R3 Ld 54.1 dB(A)		
Loading 1	51.7	
Loading 2	50.4	
Receiver R4 Ld 38.0 dB(A)		
Loading 1	35.1	
Loading 2	34.8	
Receiver R5 Ld 38.4 dB(A)		
Loading 1	36.8	
Loading 2	33.4	
Receiver R6 Ld 52.0 dB(A)		
Loading 1	49.0	
Loading 2	49.0	

AES 22801 Crespi St Woodland Hills, CA 91364 USA

222 West 2nd Project EIR Source Levels in dB(A) - Mechanical

Name	Source type	Lw	
		dB(A)	
AHU-1	Point	90.0	
AHU-2	Point	90.0	
AHU-3	Point	90.0	
AHU-4	Point	90.0	
AHU-5	Point	90.0	
AHU-6	Point	90.0	
CT-1	Point	100.0	
CT-2	Point	100.0	
CT-3	Point	100.0	
EF-1	Point	90.0	
EF-2	Point	90.0	

AES 22801 Crespi St Woodland Hills, CA 91364 USA

1

222 West 2nd Project EIR Assessed contribution level - Mechanical

9

1

Source	Ld	
	dB(A)	
Receiver R1 Ld 27.5 dB(A)		
AHU-1	9.3	
AHU-2	9.3	
AHU-3	9.2	
AHU-4	11.9	
AHU-5	11.9	
AHU-6	11.8	
CT-1	21.8	
CT-2	21.8	
CT-3	21.8	
EF-1	12.6	
EF-2	12.6	
Receiver R2 Ld 35.7 dB(A)		
AHU-1	13.4	
AHU-2	11.0	
AHU-3	11.1	
AHU-4	15.8	
AHU-5	24.0	
AHU-6	10.9	
CT-1	34.8	
CT-2	23.3	
CT-3	20.9	
EF-1	14.2	
EF-2	14.3	
Receiver R3 Ld 31.2 dB(A)		
AHU-1	14.2	
AHU-2	16.3	
AHU-3	13.5	
AHU-4	19.2	
AHU-5	18.7	
AHU-6	13.6	
CT-1	24.1	
CT-2	27.2	
CT-3	23.6	
EF-1	11.4	
EF-2	11.5	
Receiver R4 Ld 33.5 dB(A)		
AHU-1	14.6	
AHU-2	15.5	
AHU-3	17.7	

AES 22801 Crespi St Woodland Hills, CA 91364 USA

SoundPLAN 8.0

222 West 2nd Project EIR Assessed contribution level - Mechanical

Source	Ld
	dB(A)
AHU-4	12.4
AHU-5	12.4
AHU-6	12.4
CT-1	27.2
CT-2	27.8
CT-3	29.4
EF-1	12.2
EF-2	12.2
Receiver R5 Ld 29.8	
AHU-1	17.4
AHU-2	17.5
AHU-3	12.1
AHU-4	11.0
AHU-5	11.0
AHU-6	11.0
CT-1	25.3
CT-2	23.3
CT-3	23.3
EF-1	9.4
EF-2	9.4
Receiver R6 Ld 43.5	
AHU-1	15.9
AHU-2	15.9
AHU-3	18.3
AHU-4	26.0
AHU-5	33.3
AHU-6	21.3
CT-1	25.8
CT-2	41.0
CT-3	38.1
EF-1	19.6
EF-2	19.6
	10.0

AES 22801 Crespi St Woodland Hills, CA 91364 USA

2

222 West 2nd Project EIR Source Levels in dB(A) - People

3

lame	Source type	Lw		
		dB(A)		
eople - Ground Level	Area	95.3		
eople Level 8 Deck	Area	96.7		
ople Level 15 Deck	Area	95.5		
ople Level 27 Deck	Area	95.8		
	A	ES 228	01 Crespi St Woodland Hills, CA 91364 USA	

SoundPLAN 8.0

222 West 2nd Project EIR Assessed contribution level - People

9

1

Ld
dB(A)
)
21.5
23.8
17.2
18.4
)
28.3
34.5
33.8
23.6
)
27.4
30.5
34.8
23.4
)
29.6
29.0
32.2
20.1
)
26.3
20.2
30.7
17.1
)
50.0
42.8
33.9
25.0

AES 22801 Crespi St Woodland Hills, CA 91364 USA

SoundPLAN 8.0

222 West 2nd Project EIR Source Levels in dB(A) - Speakers

Name	Source type	Lw		
		dB(A)		
Speaker Level 1 - 1	Point	103.6		
Speaker Level 1 - 2	Point	103.6		
Speaker Level 1 - 3	Point	103.6		
Speaker Level 1 - 4	Point	103.6		
Speaker Level 8 Deck - 1	Point	113.6		
Speaker Level 8 Deck - 2	Point	113.6		
Speaker Level 8 Deck - 3	Point	113.6		
Speaker Level 8 Deck - 4	Point	113.6		
Speaker Level 8 Deck - 5	Point	113.6		
Speaker Level 8 Deck - 6	Point	113.6		
Speaker Level 15 - 1	Point	118.6		
Speaker Level 15 - 2	Point	118.6		
Speaker Level 15 - 3	Point	118.6		
Speaker Level 15 - 4	Point	118.6		
Speaker Level 27 - 1	Point	123.6		
Speaker Level 27 - 2	Point	123.6		
Speaker Level 27 - 3	Point	123.6		
Speaker Level 27 - 4	Point	123.6		

AES 22801 Crespi St Woodland Hills, CA 91364 USA

3

222 West 2nd Project EIR Assessed contribution level - Speakers

Source	Ld	
	dB(A)	
Receiver R1 Ld 43.3 dB(A)		
Speaker Level 1 - 1	14.9	
Speaker Level 1 - 2	12.3	
Speaker Level 1 - 3	13.1	
Speaker Level 1 - 4	7.2	
Speaker Level 15 - 1	22.8	
Speaker Level 15 - 2	20.4	
Speaker Level 15 - 3	19.7	
Speaker Level 15 - 4	17.0	
Speaker Level 27 - 1	38.5	
Speaker Level 27 - 2	38.6	
Speaker Level 27 - 3	29.0	
Speaker Level 27 - 4	27.3	
Speaker Level 8 Deck - 1	32.3	
Speaker Level 8 Deck - 2	24.9	
Speaker Level 8 Deck - 3	24.5	
Speaker Level 8 Deck - 4	34.3	
Speaker Level 8 Deck - 5	23.6	
Speaker Level 8 Deck - 6	22.1	
Receiver R2 Ld 49.7 dB(A)		
Speaker Level 1 - 1	27.7	
Speaker Level 1 - 2	25.3	
Speaker Level 1 - 3	23.1	
Speaker Level 1 - 4	23.7	
Speaker Level 15 - 1	42.5	
Speaker Level 15 - 2	41.7	
Speaker Level 15 - 3	41.0	
Speaker Level 15 - 4	19.2	
Speaker Level 27 - 1	36.0	
Speaker Level 27 - 2	32.3	
Speaker Level 27 - 3	36.1	
Speaker Level 27 - 4	41.1	
Speaker Level 8 Deck - 1	30.4	
Speaker Level 8 Deck - 2	37.9	
Speaker Level 8 Deck - 3	41.5	
Speaker Level 8 Deck - 4	33.7	
Speaker Level 8 Deck - 5	18.0	
Speaker Level 8 Deck - 6	14.9	
Receiver R3 Ld 51.3 dB(A)		
Speaker Level 1 - 1	22.8	

AES 22801 Crespi St Woodland Hills, CA 91364 USA

222 West 2nd Project EIR Assessed contribution level - Speakers

Source	Ld	
	dB(A)	
Speaker Level 1 - 2	24.2	
Speaker Level 1 - 3	38.1	
Speaker Level 1 - 4	28.4	
Speaker Level 15 - 1	44.0	
Speaker Level 15 - 2	45.1	
Speaker Level 15 - 3	46.0	
Speaker Level 15 - 4	31.6	
Speaker Level 27 - 1	25.5	
Speaker Level 27 - 2	34.4	
Speaker Level 27 - 3	39.5	
Speaker Level 27 - 4	39.8	
Speaker Level 8 Deck - 1	16.4	
Speaker Level 8 Deck - 2	35.1	
Speaker Level 8 Deck - 3	27.3	
Speaker Level 8 Deck - 4	33.8	
Speaker Level 8 Deck - 5	14.5	
Speaker Level 8 Deck - 6	16.8	
Receiver R4 Ld 52.1 dB(A)		
Speaker Level 1 - 1	19.4	
Speaker Level 1 - 2	10.6	
Speaker Level 1 - 3	15.8	
Speaker Level 1 - 4	23.0	
Speaker Level 15 - 1	22.6	
Speaker Level 15 - 2	23.8	
Speaker Level 15 - 3	23.9	
Speaker Level 15 - 4	51.3	
Speaker Level 27 - 1	26.1	
Speaker Level 27 - 2	37.5	
Speaker Level 27 - 3	37.8	
Speaker Level 27 - 4	27.9	
Speaker Level 8 Deck - 1	14.9	
Speaker Level 8 Deck - 2	21.1	
Speaker Level 8 Deck - 3	39.8	
Speaker Level 8 Deck - 4	32.0	
Speaker Level 8 Deck - 5	27.4	
Speaker Level 8 Deck - 6	34.0	
Receiver R5 Ld 55.0 dB(A)		
Speaker Level 1 - 1	17.1	
Speaker Level 1 - 2	26.0	
Speaker Level 1 - 3	26.1	

AES 22801 Crespi St Woodland Hills, CA 91364 USA

SoundPLAN 8.0

222 West 2nd Project EIR Assessed contribution level - Speakers

Courses	1.1
Source	Ld
	dB(A)
Speaker Level 1 - 4	26.2
Speaker Level 15 - 1	29.9
Speaker Level 15 - 2	30.8
Speaker Level 15 - 3	35.5
Speaker Level 15 - 4	54.7
Speaker Level 27 - 1	22.2
Speaker Level 27 - 2	38.3
Speaker Level 27 - 3	33.4
Speaker Level 27 - 4	27.5
Speaker Level 8 Deck - 1	13.6
Speaker Level 8 Deck - 2	34.0
Speaker Level 8 Deck - 3	17.8
Speaker Level 8 Deck - 4	28.4
Speaker Level 8 Deck - 5	14.2
Speaker Level 8 Deck - 6	15.1
Receiver R6 Ld 61.0 dB(A)	
Speaker Level 1 - 1	58.4
Speaker Level 1 - 2	48.5
Speaker Level 1 - 3	39.3
Speaker Level 1 - 4	38.2
Speaker Level 15 - 1	29.7
Speaker Level 15 - 2	28.9
Speaker Level 15 - 3	30.3
Speaker Level 15 - 4	43.7
Speaker Level 27 - 1	37.1
Speaker Level 27 - 2	40.0
Speaker Level 27 - 3	39.5
Speaker Level 27 - 4	38.3
Speaker Level 8 Deck - 1	43.2
Speaker Level 8 Deck - 2	46.6
Speaker Level 8 Deck - 3	51.3
Speaker Level 8 Deck - 4	45.9
Speaker Level 8 Deck - 5	46.5
Speaker Level 8 Deck - 6	51.4
Speaker Lever & Deck - 6	51.4

AES 22801 Crespi St Woodland Hills, CA 91364 USA

222 West 2nd Project EIR Source Levels in dB(A) - Trash

Name		Source type	Lw		
T 1 0 1			dB(A)		
Trash Compactor	r	Point	98.0		
		ŀ	AES 22	2801 Crespi St Woodland Hills, CA 91364 USA	1

222 West 2nd Project EIR Assessed contribution level - Trash

Source	Ld	
	dB(A)	
	UD(A)	
Receiver R1 Ld 18.7 dB(A)	40.7	
Trash Compactor	18.7	
Receiver R2 Ld 26.3 dB(A)	00.0	
Trash Compactor	26.3	
Receiver R3 Ld 45.2 dB(A)	45.0	
Trash Compactor	45.2	
Receiver R4 Ld 28.3 dB(A)		
Trash Compactor	28.3	
Receiver R5 Ld 35.8 dB(A)	05.0	
Trash Compactor	35.8	
Receiver R6 Ld 43.2 dB(A)	40.0	
Trash Compactor	43.2	
1		

1



PHV to ADT factor 8%

Off-Site Traffic Noise Calculations *Project: 222 West 2nd Project*

Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

EXISTING CONDITIONS	Roadway	Distance to Edge of	Distance to Centerline,	Speed	Traffic	Volume	PHV to	Barrier	Site Adjust.,	24-Hour
Roadway Segment	Width*, ft	Roadway, ft	feet	mph	PHV	ADT	ADT factor	Atten.	dBA	CNEL
Hill Street	,	,		•						
- Between 1st St. and 2nd St.	60	10	40	35	1,762	22,025	8%	0	0	68.8
- Between 2nd St. and 3rd St.	60	10	40	35	1,947	24,338	8%	0	0	69.2
Broadway										
- Between Temple St. and 1st St.	60	10	40	35	1,716	21,450	8%	0	0	68.7
- Between 1st St. and 2nd St.	60	10	40	35	1,657	20,713	8%	0	0	68.5
- Between 2nd St. and 3rd St.	50	10	35	35	1,497	18,713	8%	0	0	68.7
- Between 3rd St. and 4th St.	40	10	30	35	1,198	14,975	8%	0	0	68.4
- Between 4th St. and 5th St.	40	10	30	35	1,356	16,950	8%	0	0	68.9
Spring Street										
- Between Temple St. and 1st St.	70	10	45	35	1,636	20,450	8%	0	0	67.9
- Between 1st St. and 2nd St.	50	10	35	35	1,261	15,763	8%	0	0	67.9
- Between 2nd St. and 3rd St.	50	10	35	35	1,406	17,575	8%	0	0	68.4
- Between 3rd St. and 4th St.	50	10	35	35	1,515	18,938	8%	0	0	68.7
- Between 4th St. and 5th St.	50	10	35	35	1,334	16,675	8%	0	0	68.2
Main Street										
 Between Temple St. and 1st St. 	60	10	40	35	1,724	21,550	8%	0	0	68.7
- Between 1st St. and 2nd St.	50	10	35	35	1,672	20,900	8%	0	0	69.2
- Between 2nd St. and 3rd St.	50	10	35	35	2,119	26,488	8%	0	0	70.2
- Between 3rd St. and 4th St.	50	10	35	35	2,700	33,750	8%	0	0	71.2
- Between 4th St. and 5th St.	50	10	35	35	2,567	32,088	8%	0	0	71.0
1st Street										
- Between Hill St. and Broadway	70	10	45	35	2,256	28,200	8%	0	0	69.3
 Between Broadway and Main St. 	70	10	45	35	1,921	24,013	8%	0	0	68.6
- Between Main St. and Los Angeles	70	10	45	35	1,742	21,775	8%	0	0	68.1
2nd Street										
- Between Hill St. and Broadway	40	10	30	35	1,289	16,113	8%	0	0	68.7



EXISTING CONDITIONS		Distance to	Distance to						Site	
	Roadway	Edge of	Centerline,	Speed	Traffic	Volume	PHV to	Barrier	Adjust.,	24-Hour
Roadway Segment	Width*, ft	Roadway, ft	feet	mph	PHV	ADT	ADT factor	Atten.	dBA	CNEL
 Between Broadway and Spring St. 	40	10	30	35	1,223	15,288	8%	0	0	68.5
 Between Spring St. and Main St. 	40	10	30	35	1,093	13,663	8%	0	0	68.0
- Between Main St. and Los Angeles	40	10	30	35	993	12,413	8%	0	0	67.6
3rd Street										
- Between Hill St. and Broadway	40	10	30	35	1,644	20,550	8%	0	0	69.8
- Between Broadway and Main St.	40	10	30	35	1,933	24,163	8%	0	0	70.5
- Between Main St. and Los Angeles	50	10	35	35	2,403	30,038	8%	0	0	70.7
4th Street										
- Between Hill St. and Broadway	40	10	30	35	1,478	18,475	8%	0	0	69.3
- Between Broadway and Main St.	40	10	30	35	1,610	20,125	8%	0	0	69.7
- Between Main St. and Los Angeles	40	10	30	35	1,661	20,763	8%	0	0	69.8

* Estimated based on Google Earth map.

** Calculated using FHWA's TNM Version 2.5 Computer Noise Model.



PHV to ADT factor 8%

Off-Site Traffic Noise Calculations *Project: 222 West 2nd*

Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

EXISTING + PROJECT CONDITIONS		Distance to	Distance to						Site	
	Roadway	Edge of	Centerline,	Speed	Traffic	Volume	PHV to	Barrier	Adjust.,	24-Hour
Roadway Segment	Width*, ft	Roadway, ft	feet	mph	PHV	ADT	ADT factor	Atten.	dBA	CNEL
Hill Street										
- Between 1st St. and 2nd St.	60	10	40	35	1,769	22,113	8%	0	0	68.8
- Between 2nd St. and 3rd St.	60	10	40	35	1,964	24,550	8%	0	0	69.3
Broadway										
 Between Temple St. and 1st St. 	60	10	40	35	1,885	23,563	8%	0	0	69.1
- Between 1st St. and 2nd St.	60	10	40	35	1,837	22,963	8%	0	0	69.0
- Between 2nd St. and 3rd St.	50	10	35	35	1,738	21,725	8%	0	0	69.3
- Between 3rd St. and 4th St.	40	10	30	35	1,285	16,063	8%	0	0	68.7
- Between 4th St. and 5th St.	40	10	30	35	1,416	17,700	8%	0	0	69.1
Spring Street										
- Between Temple St. and 1st St.	70	10	45	35	1,734	21,675	8%	0	0	68.1
- Between 1st St. and 2nd St.	50	10	35	35	1,359	16,988	8%	0	0	68.3
- Between 2nd St. and 3rd St.	50	10	35	35	1,498	18,725	8%	0	0	68.7
- Between 3rd St. and 4th St.	50	10	35	35	1,527	19,088	8%	0	0	68.8
- Between 4th St. and 5th St.	50	10	35	35	1,341	16,763	8%	0	0	68.2
Main Street										
- Between Temple St. and 1st St.	60	10	40	35	1,724	21,550	8%	0	0	68.7
- Between 1st St. and 2nd St.	50	10	35	35	1,672	20,900	8%	0	0	69.2
- Between 2nd St. and 3rd St.	50	10	35	35	2,123	26,538	8%	0	0	70.2
- Between 3rd St. and 4th St.	50	10	35	35	2,704	33,800	8%	0	0	71.2
- Between 4th St. and 5th St.	50	10	35	35	2,571	32,138	8%	0	0	71.0
1st Street										
- Between Hill St. and Broadway	70	10	45	35	2,266	28,325	8%	0	0	69.3
- Between Broadway and Main St.	70	10	45	35	1,921	24,013	8%	0	0	68.6
- Between Main St. and Los Angeles	70	10	45	35	1,742	21,775	8%	0	0	68.1
2nd Street										
- Between Hill St. and Broadway	40	10	30	35	1,310	16,375	8%	0	0	68.8



EXISTING + PROJECT CONDITIONS		Distance to	Distance to						Site	
	Roadway	Edge of	Centerline,	Speed	Traffic	Volume	PHV to	Barrier	Adjust.,	24-Hour
Roadway Segment	Width*, ft	Roadway, ft	feet	mph	PHV	ADT	ADT factor	Atten.	dBA	CNEL
- Between Broadway and Spring St.	40	10	30	35	1,236	15,450	8%	0	0	68.5
- Between Spring St. and Main St.	40	10	30	35	1,110	13,875	8%	0	0	68.1
- Between Main St. and Los Angeles	40	10	30	35	1,007	12,588	8%	0	0	67.7
3rd Street										
- Between Hill St. and Broadway	40	10	30	35	1,678	20,975	8%	0	0	69.9
- Between Broadway and Main St.	40	10	30	35	1,951	24,388	8%	0	0	70.5
- Between Main St. and Los Angeles	50	10	35	35	2,412	30,150	8%	0	0	70.7
4th Street										
- Between Hill St. and Broadway	40	10	30	35	1,505	18,813	8%	0	0	69.4
- Between Broadway and Main St.	40	10	30	35	1,620	20,250	8%	0	0	69.7
- Between Main St. and Los Angeles	40	10	30	35	1,682	21,025	8%	0	0	69.9

* Estimated based on Google Earth map.

** Calculated using FHWA's TNM Version 2.5 Computer Noise Model.



PHV to ADT factor 8%

Off-Site Traffic Noise Calculations *Project: 222 West 2nd*

Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
leavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

FUTURE NO PROJECT CONDITIONS		Distance to	Distance to						Site	
Deedway Compart	Roadway	Edge of	Centerline,	Speed		Volume	PHV to	Barrier Atten.	Adjust.,	24-Hour CNEL
Roadway Segment	Width*, ft	Roadway, ft	feet	mph	PHV	ADT	ADT factor	Atten.	dBA	UNEL
Hill Street										
- Between 1st St. and 2nd St.	60	10	40	35	2,081	26,013	8%	0	0	69.5
- Between 2nd St. and 3rd St.	60	10	40	35	2,302	28,775	8%	0	0	69.9
Broadway										
 Between Temple St. and 1st St. 	60	10	40	35	2,255	28,188	8%	0	0	69.9
 Between 1st St. and 2nd St. 	60	10	40	35	2,228	27,850	8%	0	0	69.8
 Between 2nd St. and 3rd St. 	50	10	35	35	2,099	26,238	8%	0	0	70.1
- Between 3rd St. and 4th St.	40	10	30	35	1,730	21,625	8%	0	0	70.0
- Between 4th St. and 5th St.	40	10	30	35	1,958	24,475	8%	0	0	70.5
Spring Street										
- Between Temple St. and 1st St.	70	10	45	35	1,990	24,875	8%	0	0	68.7
- Between 1st St. and 2nd St.	50	10	35	35	1,583	19,788	8%	0	0	68.9
- Between 2nd St. and 3rd St.	50	10	35	35	1,812	22,650	8%	0	0	69.5
- Between 3rd St. and 4th St.	50	10	35	35	2,045	25,563	8%	0	0	70.0
- Between 4th St. and 5th St.	50	10	35	35	1,927	24,088	8%	0	0	69.8
Main Street										
- Between Temple St. and 1st St.	60	10	40	35	2,190	27,375	8%	0	0	69.7
- Between 1st St. and 2nd St.	50	10	35	35	2,131	26,638	8%	0	0	70.2
- Between 2nd St. and 3rd St.	50	10	35	35	2,696	33,700	8%	0	0	71.2
- Between 3rd St. and 4th St.	50	10	35	35	3,520	44,000	8%	0	0	72.4
- Between 4th St. and 5th St.	50	10	35	35	3,169	39,613	8%	0	0	71.9
1st Street						,				
- Between Hill St. and Broadway	70	10	45	35	2,569	32,113	8%	0	0	69.8
- Between Broadway and Main St.	70	10	45	35	2,165	27,063	8%	0	0	69.1
- Between Main St. and Los Angeles	70	10	45	35	1,929	24,113	8%	0	0	68.6
2nd Street	10		.0	20	.,520	,. 10	070	3	5	00.0
- Between Hill St. and Broadway	40	10	30	35	1,815	22,688	8%	0	0	70.2



FUTURE NO PROJECT CONDITIONS		Distance to	Distance to						Site	
	Roadway	Edge of	Centerline,	Speed	Traffic	Volume	PHV to	Barrier	Adjust.,	24-Hour
Roadway Segment	Width*, ft	Roadway, ft	feet	mph	PHV	ADT	ADT factor	Atten.	dBA	CNEL
- Between Broadway and Spring St.	40	10	30	35	1,760	22,000	8%	0	0	70.1
- Between Spring St. and Main St.	40	10	30	35	1,514	18,925	8%	0	0	69.4
- Between Main St. and Los Angeles	40	10	30	35	1,407	17,588	8%	0	0	69.1
3rd Street										
- Between Hill St. and Broadway	40	10	30	35	2,093	26,163	8%	0	0	70.8
- Between Broadway and Main St.	40	10	30	35	2,350	29,375	8%	0	0	71.3
- Between Main St. and Los Angeles	50	10	35	35	2,819	35,238	8%	0	0	71.4
4th Street										
- Between Hill St. and Broadway	40	10	30	35	2,185	27,313	8%	0	0	71.0
- Between Broadway and Main St.	40	10	30	35	2,382	29,775	8%	0	0	71.4
- Between Main St. and Los Angeles	40	10	30	35	2,234	27,925	8%	0	0	71.1

* Estimated based on Google Earth map.

** Calculated using FHWA's TNM Version 2.5 Computer Noise Model.



PHV to ADT factor 8%

Off-Site Traffic Noise Calculations *Project: 222 West 2nd*

Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

FUTURE + PROJECT CONDITIONS		Distance to	Distance to						Site	
	Roadway	Edge of	Centerline,	Speed	Traffic	Volume	PHV to	Barrier	Adjust.,	24-Hour
Roadway Segment	Width*, ft	Roadway, ft	feet	mph	PHV	ADT	ADT factor	Atten.	dBA	CNEL
Hill Street										
- Between 1st St. and 2nd St.	60	10	40	35	2,088	26,100	8%	0	0	69.5
- Between 2nd St. and 3rd St.	60	10	40	35	2,319	28,988	8%	0	0	70.0
Broadway										
 Between Temple St. and 1st St. 	60	10	40	35	2,424	30,300	8%	0	0	70.2
- Between 1st St. and 2nd St.	60	10	40	35	2,408	30,100	8%	0	0	70.1
- Between 2nd St. and 3rd St.	50	10	35	35	2,340	29,250	8%	0	0	70.6
- Between 3rd St. and 4th St.	40	10	30	35	1,817	22,713	8%	0	0	70.2
- Between 4th St. and 5th St.	40	10	30	35	2,018	25,225	8%	0	0	70.7
Spring Street										
- Between Temple St. and 1st St.	70	10	45	35	2,088	26,100	8%	0	0	68.9
- Between 1st St. and 2nd St.	50	10	35	35	1,681	21,013	8%	0	0	69.2
- Between 2nd St. and 3rd St.	50	10	35	35	1,905	23,813	8%	0	0	69.7
- Between 3rd St. and 4th St.	50	10	35	35	2,057	25,713	8%	0	0	70.1
- Between 4th St. and 5th St.	50	10	35	35	1,950	24,375	8%	0	0	69.8
Main Street										
- Between Temple St. and 1st St.	60	10	40	35	2,190	27,375	8%	0	0	69.7
- Between 1st St. and 2nd St.	50	10	35	35	2,131	26,638	8%	0	0	70.2
- Between 2nd St. and 3rd St.	50	10	35	35	2,700	33,750	8%	0	0	71.2
- Between 3rd St. and 4th St.	50	10	35	35	3,524	44,050	8%	0	0	72.4
- Between 4th St. and 5th St.	50	10	35	35	3,173	39,663	8%	0	0	71.9
1st Street										
- Between Hill St. and Broadway	70	10	45	35	2,579	32,238	8%	0	0	69.8
- Between Broadway and Main St.	70	10	45	35	2,165	27,063	8%	0	0	69.1
- Between Main St. and Los Angeles	70	10	45	35	1,929	24,113	8%	0	0	68.6
2nd Street										
- Between Hill St. and Broadway	40	10	30	35	1,836	22,950	8%	0	0	70.3



	Distance to	Distance to						Site	
Roadway	Edge of	Centerline,	Speed	Traffic	Volume	PHV to	Barrier	Adjust.,	24-Hour
Width*, ft	Roadway, ft	feet	mph	PHV	ADT	ADT factor	Atten.	dBA	CNEL
40	10	30	35	1,773	22,163	8%	0	0	70.1
40	10	30	35	1,532	19,150	8%	0	0	69.5
40	10	30	35	1,421	17,763	8%	0	0	69.2
40	10	30	35	2,127	26,588	8%	0	0	70.9
40	10	30	35	2,368	29,600	8%	0	0	71.4
50	10	35	35	2,828	35,350	8%	0	0	71.4
40	10	30	35	2,212	27,650	8%	0	0	71.1
40	10	30	35	2,393	29,913	8%	0	0	71.4
40	10	30	35	2,255	28,188	8%	0	0	71.2
	Width*, ft 40 40 40 40 40 50 40 40 40	Roadway Width*, ft Edge of Roadway, ft 40 10 40 10 40 10 40 10 40 10 40 10 40 10 40 10 40 10 40 10 40 10 40 10 40 10 40 10	Roadway Width*, ft Edge of Roadway, ft Centerline, feet 40 10 30 40 10 30 40 10 30 40 10 30 40 10 30 40 10 30 40 10 30 40 10 30 40 10 30 50 10 35 40 10 30 40 10 30 40 10 30	Roadway Width*, ft Edge of Roadway, ft Centerline, feet Speed mph 40 10 30 35 40 10 30 35 40 10 30 35 40 10 30 35 40 10 30 35 40 10 30 35 40 10 30 35 40 10 30 35 40 10 30 35 40 10 30 35 40 10 30 35 40 10 30 35 40 10 30 35 40 10 30 35	Roadway Width*, ft Edge of Roadway, ft Centerline, feet Speed mph Traffic PHV 40 10 30 35 1,773 40 10 30 35 1,532 40 10 30 35 1,532 40 10 30 35 1,421 40 10 30 35 2,127 40 10 30 35 2,368 50 10 35 35 2,828 40 10 30 35 2,212 40 10 30 35 2,212 40 10 30 35 2,212 40 10 30 35 2,393	Roadway Width*, ftEdge of Roadway, ftCenterline, feetSpeed mphTraffic Volume PHV401030351,77322,163401030351,53219,150401030351,42117,763401030352,12726,588401030352,36829,600501035352,82835,350401030352,21227,650401030352,29329,913	Roadway Width*, ft Edge of Roadway, ft Centerline, feet Speed mph Traffic Volume PHV PHV to ADT ADT factor 40 10 30 35 1,773 22,163 8% 40 10 30 35 1,532 19,150 8% 40 10 30 35 1,421 17,763 8% 40 10 30 35 2,127 26,588 8% 40 10 30 35 2,368 29,600 8% 40 10 30 35 2,828 35,350 8% 40 10 30 35 2,828 35,350 8% 40 10 30 35 2,212 27,650 8% 40 10 30 35 2,393 29,913 8%	Roadway Width*, ftEdge of Roadway, ftCenterline, feetSpeed mphTraffic Volume PHVPHV to ADTBarrier ADT factorBarrier Atten.401030351,77322,1638%0401030351,53219,1508%0401030351,42117,7638%0401030352,12726,5888%0401030352,36829,6008%0401030352,82835,3508%0401030352,21227,6508%0401030352,39329,9138%0	Roadway Width*, ftEdge of Roadway, ftCenterline, feetSpeed mphTraffic Volume PHVPHV to ADTBarrier ADT factorAdjust., Atten.401030351,77322,1638%00401030351,53219,1508%00401030351,42117,7638%00401030352,12726,5888%00401030352,36829,6008%00401035352,82835,3508%00401030352,21227,6508%00401030352,239329,9138%00

* Estimated based on Google Earth map.

** Calculated using FHWA's TNM Version 2.5 Computer Noise Model.