

Noise Calculation Worksheets

1360 Vine Project

Noise Calculations Worksheets

Provided by Acoustical Engineering Services

Ambient Noise Measurements



Location: R1 -

Date: 4/11/2018

Time	Overload	Leq	Lmax	L10	L90
10:45:44 AM N	lo	55.2	62.1	58.3	51.3
10:46:44 AM N	lo	55.7	61.2	58.8	51.2
10:47:44 AM N	lo	54.6	60.3	57.3	52.1
10:48:44 AM N	lo	54.6	62.8	57.4	50.9
10:49:44 AM N	lo	54	60.4	56.9	50.7
10:50:44 AM N	lo	54.8	58.9	57.3	51.6
10:51:44 AM N	lo	55.2	58.3	56.8	53.2
10:52:44 AM N	lo	56.5	64.5	58.8	50.7
10:53:44 AM N	lo	54.6	63.8	56.1	50.9
10:54:44 AM N	lo	52.3	59.8	53.8	49.3
10:55:44 AM N	lo	53.1	56.4	54.8	50.8
10:56:44 AM N	lo	55.9	67.8	57.9	51.3
10:57:44 AM N	lo	57.6	69.2	59.2	50.2
10:58:44 AM N	lo	53	56.7	55.2	50.1
10:59:44 AM N	lo	54	61.9	55.7	50.5

55.0

Time Overload	Leq	Lmax	L10	L90
9:59:19 PM No	56.3	62.6	60.4	50.8
10:00:19 PM No	50	57.5	51.9	46.1
10:01:19 PM No	50.4	54.5	51.9	47.9
10:02:19 PM No	61	65.5	64.6	51.4
10:03:19 PM No	53.1	59.1	56.4	46.3
10:04:19 PM No	50.5	57.2	53.2	46
10:05:19 PM No	49.9	53.6	52.5	46.7
10:06:19 PM No	52.4	62.6	55.4	45.6
10:07:19 PM No	49.9	56.1	52.9	45.8
10:08:19 PM No	51.5	59.2	55.2	45
10:09:19 PM No	52.9	60.1	57	44.6
10:10:19 PM No	48.2	52	50	45.6
10:11:19 PM No	49.1	52.2	51	46.5
10:12:19 PM No	50.1	57	52.9	46.4
10:13:19 PM No	50.1	54.3	52.8	46.1
	•	•		

53.4



Location: R2 -

Date: 4/11/2018

Time Overload	Leq	Lmax	L10	L90
11:05:42 AM No	54.4	59.5	56.6	52.1
11:06:42 AM No	54.7	58.6	56.7	52.8
11:07:42 AM No	55	59.8	57.5	51.7
11:08:42 AM No	56	58.5	57	54.2
11:09:42 AM No	54.4	56.3	55.6	52.9
11:10:42 AM No	53.7	57.2	55.2	52
11:11:42 AM No	52.3	55.6	53.2	51.5
11:12:42 AM No	52.4	59.6	53.5	50.7
11:13:42 AM No	62.4	68.5	67.4	51.9
11:14:42 AM No	57.5	65	60.1	54.6
11:15:42 AM No	56.5	65.1	58.2	54.5
11:16:42 AM No	55.4	64.1	57.3	52.4
11:17:42 AM No	52.2	56.3	54.1	49.9
11:18:42 AM No	51.5	54.3	53.3	49.6
11:19:42 AM No	52.2	55.7	54.2	49.5
	55.8			
Time Overload	Leq	Lmax	L10	L90
10:20:47 PM No	53.6	58.6	55.4	49.6

10:21:47 PM No 49.4 54.9 51.5 47.4 10:22:47 PM No 48.9 57.3 50.2 47.6 10:23:47 PM No 47.8 51.7 48.8 47 10:24:47 PM No 48.5 55.5 50.3 46.8 10:25:47 PM No 47.6 55.3 48.3 46.7 10:26:47 PM No 47 48.2 49.5 49.1 10:27:47 PM No 49 53.4 49.7 48 10:28:47 PM No 48.8 51.7 49.8 47.9 10:29:47 PM No 48.8 56.8 49.2 47.7 10:30:47 PM No 49.1 55.3 50.2 47.7 10:31:47 PM No 48.7 47.4 53.3 50.1 10:32:47 PM No 48.2 50.2 49.3 47.5 10:33:47 PM No 49.4 50 47.7 55.8 10:34:47 PM No 48.2 51.5 49 47.4

49.2



Location: R3

Date: 4/11/2018

10:49:51 PM No

10:50:51 PM No

10:51:51 PM No

10:52:51 PM No

10:53:51 PM No

10:54:51 PM No

10:55:51 PM No

Time Overload	Leq	Lmax	L10	L90
11:32:14 AM No	58.1	65	60.9	55.1
11:33:14 AM No	59.9	62.9	61.6	58.3
11:34:14 AM No	58.9	65.4	61.7	55.7
11:35:14 AM No	60.4	68.6	64.1	56
11:36:14 AM No	56.3	57.7	57.1	55.5
11:37:14 AM No	58.2	67.3	58.9	55.6
11:38:14 AM No	57.7	62.5	58.9	56.5
11:39:14 AM No	58.3	64.1	59.7	56.8
11:40:14 AM No	62.3	74.2	66.6	56.5
11:41:14 AM No	60.5	68.2	63.7	56.7
11:42:14 AM No	57.8	62.2	59.9	56.2
11:43:14 AM No	57.5	62.6	59.9	55.7
11:44:14 AM No	57.6	62.9	60.6	54.6
11:45:14 AM No	58.6	63.5	61.9	55.7
11:46:14 AM No	58.6	62.9	60.7	56.6
	59.0			
Time Overload	Leq	Lmax	L10	L90
10:41:51 PM No	61.2	68.7	63.6	55.9
10:42:51 PM No	69.2	77	73.5	61.3
10:43:51 PM No	71.2	83.7	73.8	53.7
10:44:51 PM No	59.4	70.5	61	52.1
10:45:51 PM No	53	57.6	54.4	51.7
10:46:51 PM No	55.6	65.6	57.9	51.7
10:47:51 PM No	53.3	56.9	54.3	52.3
10:48:51 PM No	52.4	54.2	52.7	52

56.2 **56.1**

56.4

55.2

59.4

57.2

53.2

52.5

66.4

65.8

67.2

65.8

58.7

58.7

63.1

58.5

56.1

64.2

61.3

54.4

53.4

60.3

52.1

51.9

52.7

52.3

51.7

51.352.2



Location: R4

Date: 4/11/2018

Time Overload	Leq	Lmax	L10	L90
12:12:42 PM No	68.9	78.1	74.4	59.6
12:13:42 PM No	74.9	84.7	78.8	60.7
12:14:42 PM No	69.5	79	73.2	61.2
12:15:42 PM No	67.3	73.1	70.7	61.5
12:16:42 PM No	72.8	79	76.5	67.5
12:17:42 PM No	66.4	69.5	68.8	60.7
12:18:42 PM No	65.6	72.2	68.6	60.6
12:19:42 PM No	73.4	84.8	76.1	61.2
12:20:42 PM No	71.1	78.4	75.3	64.2
12:21:42 PM No	70.8	77.3	75.4	61.3
12:22:42 PM No	70.2	77.6	74.4	62.8
12:23:42 PM No	72	79.9	76.2	65.1
12:24:42 PM No	67	71.7	70.3	61
12:25:42 PM No	76.4	83.2	80.4	71.2
12:26:42 PM No	73.4	81.5	77	65.1
	71.7			
Time Overload	Lea	Imax	110	190

Time Overload	Leq	Lmax	L10	L90
11:21:27 PM No	63.8	70.4	67.8	52.5
11:22:27 PM No	66.4	73	72.2	56.5
11:23:27 PM No	64.2	72.2	67.6	57.6
11:24:27 PM No	64.3	71.6	68.9	54.1
11:25:27 PM No	67.9	76.2	72	57.4
11:26:27 PM No	62.4	68.3	66.7	53.1
11:27:27 PM No	64.2	69.5	68.1	54
11:28:27 PM No	68.1	73.9	72.8	53
11:29:27 PM No	63.7	70.7	68.9	52.8
11:30:27 PM No	63	69	66.8	56.5
11:31:27 PM No	62.2	70.1	67.7	54.3
11:32:27 PM No	67.2	75.9	70.9	55.4
11:33:27 PM No	64.9	69.7	68.1	56.1
11:34:27 PM No	65.3	74.6	68.3	55.5
11:35:27 PM No	66.7	73.5	70.7	52.9

65.4



Location: R5

Date: 4/11/2018

Time	Overload	Leq	Lmax	L10	L90
11:52:39 AM	No	73.6	79.4	76.8	71
11:53:39 AM	No	69.9	74.4	71.2	68.2
11:54:39 AM	No	68.8	71.5	70.9	66.8
11:55:39 AM	No	69.2	72.6	71.7	67.3
11:56:39 AM	No	73.3	80.3	77.3	68.8
11:57:39 AM	No	71.3	74.9	73.5	68.1
11:58:39 AM	No	69.4	76.5	70.9	67.5
11:59:39 AM	No	69.5	75.9	70.7	67.9
12:00:39 PM	No	70.6	74.6	72.6	67.5
12:01:39 PM	No	72.8	78.8	74.3	69.7
12:02:39 PM	No	70.2	73.1	70.9	68.6
12:03:39 PM	No	68.9	70.7	70.3	68
12:04:39 PM	No	69.2	72	71.1	67.5
12:05:39 PM	No	70.1	73	71.6	67.8
12:06:39 PM	No	66.7	80.8	66	60.8
		70.6			
Time	Overload	Leq	Lmax	L10	L90
11:01:13 PM	No	63.7	74.7	67.6	53.2
11:02:13 PM	No	60.8	68.8	64.5	54
11:03:13 PM	No	68.9	80.8	72.8	56.3
11:04:13 PM	No	63.3	71.3	66.8	54.9
11:05:13 PM	No	57.5	66	59.1	54.3
11:06:13 PM	No	60.7	67.3	64.4	56.1
11:07:13 PM	No	61.8	69.5	67.5	53.8
11:08:13 PM	No	64.4	75.7	67	58.5
11:09:13 PM	No	64.1	69.9	68.1	56.3
11:10:13 PM	No	60.9	66.3	64.2	55.7
11:11:13 PM	No	59.7	68.4	63.5	53.5
11:12:13 PM	No	61.2	72	64.3	53.6
11:13:13 PM	No	60.6	66.2	64.7	52.8
11:14:13 PM	No	59.7	66.2	62.9	55.2
11:15:13 PM	No	61.8	72.2	67.1	53.5

62.9

Construction Noise & Vibration Calculations



FROM SPREADSHEET

Estimated Construction Noise Levels, dBA Leq

												Max
		Closest		Grading/	Mat		Building			Significance		above
Rec.	Description	Distance	Demolition	Excavation	Foundation	Foundation	Construction	Paving	Ambient	Threshold	Impacts	Threshold
R1		60	82.7	80.3	79.5	82.0	83.2	79.2	55.0	60.0	Yes	23.2
R2		10	98.1	96.0	93.3	94.7	97.7	93.3	55.8	60.8	Yes	37.3
R3		65	82.5	81.0	79.5	82.0	83.0	79.4	59.0	64.0	Yes	19.0
R4		265	70.8	69.8	68.9	71.8	71.9	68.4	71.7	76.7	No	-4.8
R5		445	66.4	65.5	64.7	67.7	67.7	64.1	70.6	75.6	No	-7.9



Construction Phase: Demolition

Equipment

	Reference			Estimated
No. of	Noise Level at	Acoustical	Distance to	Noise
Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
1	90	20%	60	0
1	81	40%	80	0
1	79	40%	80	0
1	79	40%	100	0
1	78	40%	100	0
1	76	40%	125	0
	Equip. 1 1 1 1 1 1	No. of Equip. Noise Level at 50ft, Lmax 1 90 1 81 1 79 1 79 1 78	No. of Equip. Noise Level at 50ft, Lmax Acoustical Usage Factor 1 90 20% 1 81 40% 1 79 40% 1 79 40% 1 78 40%	No. of Equip. Noise Level at 50ft, Lmax Acoustical Usage Factor Distance to Receptor, ft 1 90 20% 60 1 81 40% 80 1 79 40% 80 1 79 40% 100 1 78 40% 100

6

Receptor: R1

Results:

1-hour Leq: 82.7



Construction Phase: Grading/Excavation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Bore/Drill Rig	1	84	20%	60	0
Excavator	1	81	40%	80	0
Crane	1	81	16%	80	0
Welders	1	74	40%	100	0
Excavator	1	81	40%	100	0
Concrete Pump	1	81	20%	125	0
Water Truck	1	76	40%	125	0
Rubber Tired Loaders	1	79	40%	150	0
Excavator	1	81	40%	150	0

9

Receptor: R1

Results:

1-hour Leq: 79.7



Construction Phase: Mat Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixers	1	80	50%	60	0
Concrete Pump	1	81	20%	80	0
Crane	1	81	16%	80	0
Tractor/Loader/Backhoe	1	79	40%	100	0
Concrete Pump	3	81	20%	100	0
Welders	1	74	40%	125	0
Cement and Mortar Mixers	1	80	50%	125	0

9

Receptor: R1

Results:

1-hour Leq: 79.5



Construction Phase: Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Plate Compactor	1	83	20%	60	0
Cement and Mortar Mixer	1	80	50%	80	0
Concrete Saw	1	90	20%	80	0
Crane	1	81	16%	100	0
Fork Lift	1	75	20%	100	0
Concrete Pump	1	81	20%	125	0
Fork Lift	1	75	20%	125	0
Plate Compactor	1	83	20%	150	0
Rough Terrain Forklifts	2	75	20%	150	0
Welders	2	74	40%	150	0
Cement and Mortar Mixer	1	80	50%	150	0
Plate Compactor	2	83	20%	150	0

15

Receptor: R1

Results:

1-hour Leq: 82.0



Construction Phase: Building Construction

Equipment

	Reference			Estimated
No. of	Noise Level at	Acoustical	Distance to	Noise
Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
1	90	20%	60	0
1	81	16%	80	0
1	80	50%	80	0
3	78	40%	100	0
1	75	20%	100	0
2	75	20%	125	0
1	81	20%	125	0
1	83	20%	150	0
2	74	40%	150	0
1	81	16%	150	0
2	75	20%	150	0
1	83	20%	150	0
	Equip. 1 1 1 3 1 2 1 1 2 1 2 2	No. of Equip. Soft, Lmax 1 90 1 81 1 80 3 78 1 75 2 75 1 81 1 83 2 74 1 81 2 75 1 81 2 75 1 81 3 83	No. of Equip. Noise Level at 50ft, Lmax Acoustical Usage Factor 1 90 20% 1 81 16% 1 80 50% 3 78 40% 1 75 20% 2 75 20% 1 81 20% 1 83 20% 2 74 40% 1 81 16% 2 75 20% 1 81 20% 2 75 20% 1 83 20%	No. of Equip. Noise Level at 50ft, Lmax Acoustical Usage Factor Distance to Receptor, ft 1 90 20% 60 1 81 16% 80 1 80 50% 80 3 78 40% 100 1 75 20% 100 2 75 20% 125 1 81 20% 150 2 74 40% 150 2 75 20% 150 1 81 16% 150 2 75 20% 150 1 81 16% 150 2 75 20% 150 1 83 20% 150 1 83 20% 150

17

Receptor: R1

Results:

1-hour Leq: 83.2



Construction Phase: Paving

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixer	1	80	50%	60	0
Paving Equipment	1	77	50%	80	0
Roller	1	80	20%	80	0
Skid Steer Loaders	2	79	40%	100	0
Tractor/Loader/Backhoe	2	79	40%	100	0

7

Receptor: R1

Results:

1-hour Leq: 79.2



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%	10	0
Excavator	1	81	40%	10	0
Rubber Tired Loader	1	79	40%	30	0
Tractor/Loader/Backhoe	1	79	40%	30	0
Air Compressor	1	78	40%	55	0
Water Truck	1	76	40%	55	0

6

Receptor: R2

Results:

1-hour Leq: 98.1



Construction Phase: Grading/Excavation

Equipment

		Reference		- 1.	Estimated
Decembetion	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Bore/Drill Rig	1	84	20%	10	0
Excavator	1	81	40%	10	0
Crane	1	81	16%	30	0
Welders	1	74	40%	30	0
Excavator	1	81	40%	55	0
Concrete Pump	1	81	20%	55	0
Water Truck	1	76	40%	80	0
Rubber Tired Loaders	1	79	40%	80	0
Excavator	1	81	40%	105	0

9

Receptor: R2

Results:

1-hour Leq: 94.3



Construction Phase: Mat Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixers	1	80	50%	10	0
Concrete Pump	1	81	20%	10	0
Crane	1	81	16%	30	0
Tractor/Loader/Backhoe	1	79	40%	30	0
Concrete Pump	3	81	20%	55	0
Welders	1	74	40%	55	0
Cement and Mortar Mixers	1	80	50%	80	0
	Cement and Mortar Mixers Concrete Pump Crane Tractor/Loader/Backhoe Concrete Pump Welders	DescriptionEquip.Cement and Mortar Mixers1Concrete Pump1Crane1Tractor/Loader/Backhoe1Concrete Pump3Welders1	Description No. of Equip. Noise Level at Soft, Lmax Cement and Mortar Mixers 1 80 Concrete Pump 1 81 Crane 1 81 Tractor/Loader/Backhoe 1 79 Concrete Pump 3 81 Welders 1 74	Description No. of Equip. Noise Level at 50ft, Lmax Acoustical Usage Factor Cement and Mortar Mixers 1 80 50% Concrete Pump 1 81 20% Crane 1 81 16% Tractor/Loader/Backhoe 1 79 40% Concrete Pump 3 81 20% Welders 1 74 40%	Description No. of Equip. Noise Level at 50ft, Lmax Acoustical Usage Factor Distance to Receptor, ft Cement and Mortar Mixers 1 80 50% 10 Concrete Pump 1 81 20% 10 Crane 1 81 16% 30 Tractor/Loader/Backhoe 1 79 40% 30 Concrete Pump 3 81 20% 55 Welders 1 74 40% 55

9

Receptor: R2

Results:

1-hour Leq: 93.3



Construction Phase: Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Plate Compactor	1	83	20%	10	0
Cement and Mortar Mixer	1	80	50%	10	0
Concrete Saw	1	90	20%	30	0
Crane	1	81	16%	30	0
Fork Lift	1	75	20%	55	0
Concrete Pump	1	81	20%	55	0
Fork Lift	1	75	20%	80	0
Plate Compactor	1	83	20%	80	0
Rough Terrain Forklifts	2	75	20%	105	0
Welders	2	74	40%	105	0
Cement and Mortar Mixer	1	80	50%	130	0
Plate Compactor	2	83	20%	130	0

15

Receptor: R2

Results:

1-hour Leq: 94.7



Construction Phase: Building Construction

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%	10	0
Crane	1	81	16%	10	0
Cement and Mortar Mixer	1	80	50%	30	0
Air Compressor	3	78	40%	30	0
Aerial Lift	1	75	20%	55	0
Fork Lift	2	75	20%	55	0
Concrete Pump	1	81	20%	80	0
Plate Compactor	1	83	20%	80	0
Welders	2	74	40%	105	0
Crane	1	81	16%	105	0
Aerial Lift	2	75	20%	130	0
Plate Compactor	1	83	20%	130	0

17

Receptor: R2

Results:

1-hour Leq: 97.7



Construction Phase: Paving

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixer	1	80	50%	10	0
Paving Equipment	1	77	50%	10	0
Roller	1	80	20%	30	0
Skid Steer Loaders	2	79	40%	30	0
Tractor/Loader/Backhoe	2	79	40%	55	0

7

Receptor: R2

Results:

1-hour Leq: 93.3



Construction Phase: Demolition

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%	65	0
Excavator	1	81	40%	65	0
Rubber Tired Loader	1	79	40%	85	0
Tractor/Loader/Backhoe	1	79	40%	85	0
Air Compressor	1	78	40%	105	0
Water Truck	1	76	40%	105	0

6

Receptor: R3

Results:

1-hour Leq: 82.5



Construction Phase: Grading/Excavation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Bore/Drill Rig	1	84	20%	65	0
Excavator	1	81	40%	65	0
Crane	1	81	16%	85	0
Welders	1	74	40%	85	0
Excavator	1	81	40%	105	0
Concrete Pump	1	81	20%	105	0
Water Truck	1	76	40%	125	0
Rubber Tired Loaders	1	79	40%	125	0
Excavator	1	81	40%	145	0

9

Receptor: R3

Results:

1-hour Leq: 80.0



Construction Phase: Mat Foundation

Equipment

	No. of	Reference Noise Level at	Acoustical	Distance to	Estimated Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixers	1	80	50%	65	0
Concrete Pump	1	81	20%	65	0
Crane	1	81	16%	85	0
Tractor/Loader/Backhoe	1	79	40%	85	0
Concrete Pump	3	81	20%	105	0
Welders	1	74	40%	105	0
Cement and Mortar Mixers	1	80	50%	125	0

9

Receptor: R3

Results:

1-hour Leq: 79.5



Construction Phase: Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Plate Compactor	1	83	20%	65	0
Cement and Mortar Mixer	1	80	50%	65	0
Concrete Saw	1	90	20%	85	0
Crane	1	81	16%	85	0
Fork Lift	1	75	20%	105	0
Concrete Pump	1	81	20%	105	0
Fork Lift	1	75	20%	125	0
Plate Compactor	1	83	20%	125	0
Rough Terrain Forklifts	2	75	20%	145	0
Welders	2	74	40%	145	0
Cement and Mortar Mixer	1	80	50%	165	0
Plate Compactor	2	83	20%	165	0

15

Receptor: R3

Results:

1-hour Leq: 82.0



Construction Phase: Building Construction

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%	65	0
Crane	1	81	16%	65	0
Cement and Mortar Mixer	1	80	50%	85	0
Air Compressor	3	78	40%	85	0
Aerial Lift	1	75	20%	105	0
Fork Lift	2	75	20%	105	0
Concrete Pump	1	81	20%	125	0
Plate Compactor	1	83	20%	125	0
Welders	2	74	40%	145	0
Crane	1	81	16%	145	0
Aerial Lift	2	75	20%	165	0
Plate Compactor	1	83	20%	165	0

17

Receptor: R3

Results:

1-hour Leq: 83.0



Construction Phase: Paving

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixer	1	80	50%	65	0
Paving Equipment	1	77	50%	65	0
Roller	1	80	20%	85	0
Skid Steer Loaders	2	79	40%	85	0
Tractor/Loader/Backhoe	2	79	40%	105	0

7

Receptor: R3

Results:

1-hour Leq: 79.4



Construction Phase: Demolition

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%	265	0
Excavator	1	81	40%	265	0
Rubber Tired Loader	1	79	40%	285	0
Tractor/Loader/Backhoe	1	79	40%	285	0
Air Compressor	1	78	40%	305	0
Water Truck	1	76	40%	305	0

6

Receptor: R4

Results:

1-hour Leq: 70.8



Construction Phase: Grading/Excavation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Bore/Drill Rig	1	84	20%	265	0
Excavator	1	81	40%	265	0
Crane	1	81	16%	285	0
Welders	1	74	40%	285	0
Excavator	1	81	40%	305	0
Concrete Pump	1	81	20%	305	0
Water Truck	1	76	40%	325	0
Rubber Tired Loaders	1	79	40%	325	0
Excavator	1	81	40%	345	0

9

Receptor: R4

Results:

1-hour Leq: 69.4



Construction Phase: Mat Foundation

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Cement and Mortar Mixers	1	80	50%	265	0
Concrete Pump	1	81	20%	265	0
Crane	1	81	16%	285	0
Tractor/Loader/Backhoe	1	79	40%	285	0
Concrete Pump	3	81	20%	305	0
Welders	1	74	40%	305	0
Cement and Mortar Mixers	1	80	50%	325	0

9

Receptor: R4

Results:

1-hour Leq: 68.9



Construction Phase: Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Plate Compactor	1	83	20%	265	0
Cement and Mortar Mixer	1	80	50%	265	0
Concrete Saw	1	90	20%	285	0
Crane	1	81	16%	285	0
Fork Lift	1	75	20%	305	0
Concrete Pump	1	81	20%	305	0
Fork Lift	1	75	20%	325	0
Plate Compactor	1	83	20%	325	0
Rough Terrain Forklifts	2	75	20%	345	0
Welders	2	74	40%	345	0
Cement and Mortar Mixer	1	80	50%	365	0
Plate Compactor	2	83	20%	365	0

15

Receptor: R4

Results:

1-hour Leq: 71.8



Construction Phase: Building Construction

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%	265	0
Crane	1	81	16%	265	0
Cement and Mortar Mixer	1	80	50%	285	0
Air Compressor	3	78	40%	285	0
Aerial Lift	1	75	20%	305	0
Fork Lift	2	75	20%	305	0
Concrete Pump	1	81	20%	325	0
Plate Compactor	1	83	20%	325	0
Welders	2	74	40%	345	0
Crane	1	81	16%	345	0
Aerial Lift	2	75	20%	365	0
Plate Compactor	1	83	20%	365	0

17

Receptor: R4

Results:

1-hour Leq: 71.9



Construction Phase: Paving

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixer	1	80	50%	265	0
Paving Equipment	1	77	50%	265	0
Roller	1	80	20%	285	0
Skid Steer Loaders	2	79	40%	285	0
Tractor/Loader/Backhoe	2	79	40%	305	0

7

Receptor: R4

Results:

1-hour Leq: 68.4



Construction Phase: Demolition

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%	445	0
Excavator	1	81	40%	445	0
Rubber Tired Loader	1	79	40%	465	0
Tractor/Loader/Backhoe	1	79	40%	465	0
Air Compressor	1	78	40%	485	0
Water Truck	1	76	40%	485	0

6

Receptor: R5

Results:

1-hour Leq: 66.4



Construction Phase: Grading/Excavation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Bore/Drill Rig	1	84	20%	445	0
Excavator	1	81	40%	445	0
Crane	1	81	16%	465	0
Welders	1	74	40%	465	0
Excavator	1	81	40%	485	0
Concrete Pump	1	81	20%	485	0
Water Truck	1	76	40%	505	0
Rubber Tired Loaders	1	79	40%	505	0
Excavator	1	81	40%	525	0

9

Receptor: R5

Results:

1-hour Leq: 65.2



Construction Phase: Mat Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixers	1	80	50%	445	0
Concrete Pump	1	81	20%	445	0
Crane	1	81	16%	465	0
Tractor/Loader/Backhoe	1	79	40%	465	0
Concrete Pump	3	81	20%	485	0
Welders	1	74	40%	485	0
Cement and Mortar Mixers	1	80	50%	505	0

9

Receptor: R5

Results:

1-hour Leq: 64.7



Construction Phase: Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Plate Compactor	1	83	20%	445	0
Cement and Mortar Mixer	1	80	50%	445	0
Concrete Saw	1	90	20%	465	0
Crane	1	81	16%	465	0
Fork Lift	1	75	20%	485	0
Concrete Pump	1	81	20%	485	0
Fork Lift	1	75	20%	505	0
Plate Compactor	1	83	20%	505	0
Rough Terrain Forklifts	2	75	20%	525	0
Welders	2	74	40%	525	0
Cement and Mortar Mixer	1	80	50%	545	0
Plate Compactor	2	83	20%	545	0

15

Receptor: R5

Results:

1-hour Leq: 67.7



Construction Phase: Building Construction

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%	445	0
Crane	1	81	16%	445	0
Cement and Mortar Mixer	1	80	50%	465	0
Air Compressor	3	78	40%	465	0
Aerial Lift	1	75	20%	485	0
Fork Lift	2	75	20%	485	0
Concrete Pump	1	81	20%	505	0
Plate Compactor	1	83	20%	505	0
Welders	2	74	40%	525	0
Crane	1	81	16%	525	0
Aerial Lift	2	75	20%	545	0
Plate Compactor	1	83	20%	545	0

17

Receptor: R5

Results:

1-hour Leq: 67.7



Construction Phase: Paving

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixer	1	80	50%	445	0
Paving Equipment	1	77	50%	445	0
Roller	1	80	20%	465	0
Skid Steer Loaders	2	79	40%	465	0
Tractor/Loader/Backhoe	2	79	40%	485	0

7

Receptor: R5

Results:

1-hour Leq: 64.1



FROM SPREADSHEET

Estimated Construction Noise Levels, dBA Leq

												Max
		Closest		Grading/	Mat		Building			Significance		above
Rec.	Description	Distance	Demolition	Excavation	Foundation	Foundation	Construction	Paving	Ambient	Threshold	Impacts	Threshold
R1		60	82.7	79.2	79.5	82.0	83.2	79.2	55.0	60.0	Yes	23.2
R2		10	98.1	94.3	93.3	94.7	97.7	93.3	55.8	60.8	Yes	37.3
R3		65	82.5	79.5	79.5	82.0	83.0	79.4	59.0	64.0	Yes	19.0
R4		265	70.8	68.4	68.9	71.8	71.9	68.4	71.7	76.7	No	-4.8
R5		445	66.4	64.1	64.7	67.7	67.7	64.1	70.6	75.6	No	-7.9



Construction Phase: Demolition

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
Excavator	1	81	40%	80	0
Rubber Tired Loader	1	79	40%	80	0
Tractor/Loader/Backhoe	1	79	40%	100	0
Air Compressor	1	78	40%	100	0
Water Truck	1	76	40%	125	0

6

Receptor: R1

Results:

1-hour Leq: 82.7



Construction Phase: Grading/Excavation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Bore/Drill Rig	1	84	20%	60	0
Excavator	1	81	40%	80	0
Crane	1	81	16%	80	0
Welders	1	74	40%	100	0
Excavator	1	81	40%	100	0
Concrete Pump	1	81	20%	125	0
Water Truck	1	76	40%	125	0

Receptor: R1

Results:

1-hour Leq: 79.2



Construction Phase: Mat Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixers	1	80	50%	60	0
Concrete Pump	1	81	20%	80	0
Crane	1	81	16%	80	0
Tractor/Loader/Backhoe	1	79	40%	100	0
Concrete Pump	3	81	20%	100	0
Welders	1	74	40%	125	0
Cement and Mortar Mixers	1	80	50%	125	0

9

Receptor: R1

Results:

1-hour Leq: 79.5



Construction Phase: Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Plate Compactor	1	83	20%	60	0
Cement and Mortar Mixer	1	80	50%	80	0
Concrete Saw	1	90	20%	80	0
Crane	1	81	16%	100	0
Fork Lift	1	75	20%	100	0
Concrete Pump	1	81	20%	125	0
Fork Lift	1	75	20%	125	0
Plate Compactor	1	83	20%	150	0
Rough Terrain Forklifts	2	75	20%	150	0
Welders	2	74	40%	150	0
Cement and Mortar Mixer	1	80	50%	150	0
Plate Compactor	2	83	20%	150	0

15

Receptor: R1

Results:

1-hour Leq: 82.0



Construction Phase: Building Construction

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
Crane	1	81	16%	80	0
Cement and Mortar Mixer	1	80	50%	80	0
Air Compressor	3	78	40%	100	0
Aerial Lift	1	75	20%	100	0
Fork Lift	2	75	20%	125	0
Concrete Pump	1	81	20%	125	0
Plate Compactor	1	83	20%	150	0
Welders	2	74	40%	150	0
Crane	1	81	16%	150	0
Aerial Lift	2	75	20%	150	0
Plate Compactor	1	83	20%	150	0

17

Receptor: R1

Results:

1-hour Leq: 83.2



Construction Phase: Paving

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixer	1	80	50%	60	0
Paving Equipment	1	77	50%	80	0
Roller	1	80	20%	80	0
Skid Steer Loaders	2	79	40%	100	0
Tractor/Loader/Backhoe	2	79	40%	100	0

7

Receptor: R1

Results:

1-hour Leq: 79.2



Construction Phase: Demolition

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%	10	0
Excavator	1	81	40%	10	0
Rubber Tired Loader	1	79	40%	30	0
Tractor/Loader/Backhoe	1	79	40%	30	0
Air Compressor	1	78	40%	55	0
Water Truck	1	76	40%	55	0

6

Receptor: R2

Results:

1-hour Leq: 98.1



Construction Phase: Grading/Excavation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Bore/Drill Rig	1	84	20%	10	0
Excavator	1	81	40%	10	0
Crane	1	81	16%	30	0
Welders	1	74	40%	30	0
Excavator	1	81	40%	55	0
Concrete Pump	1	81	20%	55	0
Water Truck	1	76	40%	80	0

Receptor: R2

Results:

1-hour Leq: 94.3



Construction Phase: Mat Foundation

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Cement and Mortar Mixers	1	80	50%	10	0
Concrete Pump	1	81	20%	10	0
Crane	1	81	16%	30	0
Tractor/Loader/Backhoe	1	79	40%	30	0
Concrete Pump	3	81	20%	55	0
Welders	1	74	40%	55	0
Cement and Mortar Mixers	1	80	50%	80	0

9

Receptor: R2

Results:

1-hour Leq: 93.3



Construction Phase: Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Plate Compactor	1	83	20%	10	0
Cement and Mortar Mixer	1	80	50%	10	0
Concrete Saw	1	90	20%	30	0
Crane	1	81	16%	30	0
Fork Lift	1	75	20%	55	0
Concrete Pump	1	81	20%	55	0
Fork Lift	1	75	20%	80	0
Plate Compactor	1	83	20%	80	0
Rough Terrain Forklifts	2	75	20%	105	0
Welders	2	74	40%	105	0
Cement and Mortar Mixer	1	80	50%	130	0
Plate Compactor	2	83	20%	130	0

15

Receptor: R2

Results:

1-hour Leq: 94.7



Construction Phase: Building Construction

Equipment

	Reference			Estimated
No. of	Noise Level at	Acoustical	Distance to	Noise
Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
1	90	20%	10	0
1	81	16%	10	0
1	80	50%	30	0
3	78	40%	30	0
1	75	20%	55	0
2	75	20%	55	0
1	81	20%	80	0
1	83	20%	80	0
2	74	40%	105	0
1	81	16%	105	0
2	75	20%	130	0
1	83	20%	130	0
	Equip. 1 1 1 3 1 2 1 1 2 1 2 2	No. of Equip. Soft, Lmax 1 90 1 81 1 80 3 78 1 75 2 75 1 81 1 83 2 74 1 81 2 75 1 81 2 75 1 81 3 83	No. of Equip. Noise Level at 50ft, Lmax Acoustical Usage Factor 1 90 20% 1 81 16% 1 80 50% 3 78 40% 1 75 20% 2 75 20% 1 81 20% 1 83 20% 2 74 40% 1 81 16% 2 75 20% 1 81 20% 2 75 20% 1 83 20%	No. of Equip. Noise Level at 50ft, Lmax Acoustical Usage Factor Distance to Receptor, ft 1 90 20% 10 1 81 16% 10 1 80 50% 30 3 78 40% 30 1 75 20% 55 2 75 20% 55 1 81 20% 80 1 83 20% 80 2 74 40% 105 1 81 16% 105 2 75 20% 130 1 83 20% 130 1 83 20% 130

17

Receptor: R2

Results:

1-hour Leq: 97.7



Construction Phase: Paving

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixer	1	80	50%	10	0
Paving Equipment	1	77	50%	10	0
Roller	1	80	20%	30	0
Skid Steer Loaders	2	79	40%	30	0
Tractor/Loader/Backhoe	2	79	40%	55	0

7

Receptor: R2

Results:

1-hour Leq: 93.3



Construction Phase: Demolition

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%	65	0
Excavator	1	81	40%	65	0
Rubber Tired Loader	1	79	40%	85	0
Tractor/Loader/Backhoe	1	79	40%	85	0
Air Compressor	1	78	40%	105	0
Water Truck	1	76	40%	105	0

6

Receptor: R3

Results:

1-hour Leq: 82.5



Construction Phase: Grading/Excavation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Bore/Drill Rig	1	84	20%	65	0
Excavator	1	81	40%	65	0
Crane	1	81	16%	85	0
Welders	1	74	40%	85	0
Excavator	1	81	40%	105	0
Concrete Pump	1	81	20%	105	0
Water Truck	1	76	40%	125	0

Receptor: R3

Results:

1-hour Leq: 79.5



Construction Phase: Mat Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixers	1	80	50%	65	0
Concrete Pump	1	81	20%	65	0
Crane	1	81	16%	85	0
Tractor/Loader/Backhoe	1	79	40%	85	0
Concrete Pump	3	81	20%	105	0
Welders	1	74	40%	105	0
Cement and Mortar Mixers	1	80	50%	125	0

9

Receptor: R3

Results:

1-hour Leq: 79.5



Construction Phase: Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Plate Compactor	1	83	20%	65	0
Cement and Mortar Mixer	1	80	50%	65	0
Concrete Saw	1	90	20%	85	0
Crane	1	81	16%	85	0
Fork Lift	1	75	20%	105	0
Concrete Pump	1	81	20%	105	0
Fork Lift	1	75	20%	125	0
Plate Compactor	1	83	20%	125	0
Rough Terrain Forklifts	2	75	20%	145	0
Welders	2	74	40%	145	0
Cement and Mortar Mixer	1	80	50%	165	0
Plate Compactor	2	83	20%	165	0

15

Receptor: R3

Results:

1-hour Leq: 82.0



Construction Phase: Building Construction

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%	65	0
Crane	1	81	16%	65	0
Cement and Mortar Mixer	1	80	50%	85	0
Air Compressor	3	78	40%	85	0
Aerial Lift	1	75	20%	105	0
Fork Lift	2	75	20%	105	0
Concrete Pump	1	81	20%	125	0
Plate Compactor	1	83	20%	125	0
Welders	2	74	40%	145	0
Crane	1	81	16%	145	0
Aerial Lift	2	75	20%	165	0
Plate Compactor	1	83	20%	165	0

17

Receptor: R3

Results:

1-hour Leq: 83.0



Construction Phase: Paving

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixer	1	80	50%	65	0
Paving Equipment	1	77	50%	65	0
Roller	1	80	20%	85	0
Skid Steer Loaders	2	79	40%	85	0
Tractor/Loader/Backhoe	2	79	40%	105	0

7

Receptor: R3

Results:

1-hour Leq: 79.4



Construction Phase: Demolition

Equipment

	No. of	Reference Noise Level at	Acoustical	Distance to	Estimated Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Concrete Saw	1	90	20%	265	0
Excavator	1	81	40%	265	0
Rubber Tired Loader	1	79	40%	285	0
Tractor/Loader/Backhoe	1	79	40%	285	0
Air Compressor	1	78	40%	305	0
Water Truck	1	76	40%	305	0

6

Receptor: R4

Results:

1-hour Leq: 70.8



Construction Phase: Grading/Excavation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Bore/Drill Rig	1	84	20%	265	0
Excavator	1	81	40%	265	0
Crane	1	81	16%	285	0
Welders	1	74	40%	285	0
Excavator	1	81	40%	305	0
Concrete Pump	1	81	20%	305	0
Water Truck	1	76	40%	325	0

Receptor: R4

Results:

1-hour Leq: 68.4



Construction Phase: Mat Foundation

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
<u> </u>	Equip.	<u> </u>			•
Cement and Mortar Mixers	1	80	50%	265	0
Concrete Pump	1	81	20%	265	0
Crane	1	81	16%	285	0
Tractor/Loader/Backhoe	1	79	40%	285	0
Concrete Pump	3	81	20%	305	0
Welders	1	74	40%	305	0
Cement and Mortar Mixers	1	80	50%	325	0

9

Receptor: R4

Results:

1-hour Leq: 68.9



Construction Phase: Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Plate Compactor	1	83	20%	265	0
Cement and Mortar Mixer	1	80	50%	265	0
Concrete Saw	1	90	20%	285	0
Crane	1	81	16%	285	0
Fork Lift	1	75	20%	305	0
Concrete Pump	1	81	20%	305	0
Fork Lift	1	75	20%	325	0
Plate Compactor	1	83	20%	325	0
Rough Terrain Forklifts	2	75	20%	345	0
Welders	2	74	40%	345	0
Cement and Mortar Mixer	1	80	50%	365	0
Plate Compactor	2	83	20%	365	0

15

Receptor: R4

Results:

1-hour Leq: 71.8



Construction Phase: Building Construction

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%	265	0
Crane	1	81	16%	265	0
Cement and Mortar Mixer	1	80	50%	285	0
Air Compressor	3	78	40%	285	0
Aerial Lift	1	75	20%	305	0
Fork Lift	2	75	20%	305	0
Concrete Pump	1	81	20%	325	0
Plate Compactor	1	83	20%	325	0
Welders	2	74	40%	345	0
Crane	1	81	16%	345	0
Aerial Lift	2	75	20%	365	0
Plate Compactor	1	83	20%	365	0

17

Receptor: R4

Results:

1-hour Leq: 71.9



Construction Phase: Paving

Equipment

	Reference			Estimated
No. of	Noise Level at	Acoustical	Distance to	Noise
Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
1	80	50%	265	0
1	77	50%	265	0
1	80	20%	285	0
2	79	40%	285	0
2	79	40%	305	0
	Equip. 1 1 1 2	No. of Equip. Noise Level at 50ft, Lmax 1 80 1 77 1 80 2 79	No. of Equip. Noise Level at 50ft, Lmax Acoustical Usage Factor 1 80 50% 1 77 50% 1 80 20% 2 79 40%	No. of Equip. Noise Level at 50ft, Lmax Acoustical Usage Factor Distance to Receptor, ft 1 80 50% 265 1 77 50% 265 1 80 20% 285 2 79 40% 285

7

Receptor: R4

Results:

1-hour Leq: 68.4



Construction Phase: Demolition

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%	445	0
Excavator	1	81	40%	445	0
Rubber Tired Loader	1	79	40%	465	0
Tractor/Loader/Backhoe	1	79	40%	465	0
Air Compressor	1	78	40%	485	0
Water Truck	1	76	40%	485	0

6

Receptor: R5

Results:

1-hour Leq: 66.4



Construction Phase: Grading/Excavation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Bore/Drill Rig	1	84	20%	445	0
Excavator	1	81	40%	445	0
Crane	1	81	16%	465	0
Welders	1	74	40%	465	0
Excavator	1	81	40%	485	0
Concrete Pump	1	81	20%	485	0
Water Truck	1	76	40%	505	0

Receptor: R5

Results:

1-hour Leq: 64.1



Construction Phase: Mat Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixers	1	80	50%	445	0
Concrete Pump	1	81	20%	445	0
Crane	1	81	16%	465	0
Tractor/Loader/Backhoe	1	79	40%	465	0
Concrete Pump	3	81	20%	485	0
Welders	1	74	40%	485	0
Cement and Mortar Mixers	1	80	50%	505	0

9

Receptor: R5

Results:

1-hour Leq: 64.7



Construction Phase: Foundation

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Plate Compactor	1	83	20%	445	0
Cement and Mortar Mixer	1	80	50%	445	0
Concrete Saw	1	90	20%	465	0
Crane	1	81	16%	465	0
Fork Lift	1	75	20%	485	0
Concrete Pump	1	81	20%	485	0
Fork Lift	1	75	20%	505	0
Plate Compactor	1	83	20%	505	0
Rough Terrain Forklifts	2	75	20%	525	0
Welders	2	74	40%	525	0
Cement and Mortar Mixer	1	80	50%	545	0
Plate Compactor	2	83	20%	545	0

15

Receptor: R5

Results:

1-hour Leq: 67.7



Construction Phase: Building Construction

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%	445	0
Crane	1	81	16%	445	0
Cement and Mortar Mixer	1	80	50%	465	0
Air Compressor	3	78	40%	465	0
Aerial Lift	1	75	20%	485	0
Fork Lift	2	75	20%	485	0
Concrete Pump	1	81	20%	505	0
Plate Compactor	1	83	20%	505	0
Welders	2	74	40%	525	0
Crane	1	81	16%	525	0
Aerial Lift	2	75	20%	545	0
Plate Compactor	1	83	20%	545	0

17

Receptor: R5

Results:

1-hour Leq: 67.7



Construction Phase: Paving

Equipment

		Reference			Estimated
	No. of	Noise Level at	Acoustical	Distance to	Noise
Description	Equip.	50ft, Lmax	Usage Factor	Receptor, ft	Shielding, dBA
Cement and Mortar Mixer	1	80	50%	445	0
Paving Equipment	1	77	50%	445	0
Roller	1	80	20%	465	0
Skid Steer Loaders	2	79	40%	465	0
Tractor/Loader/Backhoe	2	79	40%	485	0

7

Receptor: R5

Results:

1-hour Leq: 64.1



Off-Site Haul Trucks

Maximum Number of Truck One

	Way Trips (d	elivery/haul)	Worke	er Trips	Project N	loise Levels	Amb	pient	Ambient	t+Project
_		Per Hour (10-		Trips during				Sunset		Sunset
Phase	Per Day	hr day)	Daily Trips	Pk Hr.	Vine St.	Sunset Blvd.	Vine St.	Blvd.	Vine St.	Blvd.
1. Demolition (6hrs)	20	4	25	10	56.9	56.9	71.7	71.7	71.8	71.8
2. Grading/Excavation (6hrs)	190	32	75	30	65.6	65.6	71.7	71.7	72.7	72.7
3. Mat Pour	350	35	25	10	65.9	65.9	71.7	71.7	72.7	72.7
4. Foundation	100	10	175	70	61.8	61.8	71.7	71.7	72.1	72.1
Building Construction	30	3	500	200	61.9	61.9	71.7	71.7	72.1	72.1
6. Paving	30	3	50	20	56.5	56.5	71.7	71.7	71.8	71.8

Hauls: 6 hours, applicable to Demolition and Grading phases

INPUT: ROADWAYS								1360	Vine Street P	roject		
Eyestone Environmental Sean Bui						18 February	2019					
Seall Bui						TIMINI Z.J						
INPUT: ROADWAYS								Average	pavement typ	e shall be	used unles	S
PROJECT/CONTRACT:	1360 Vine	e Street Pr	oject					a State h	ighway agend	y substant	iates the u	se
RUN:	Construc	tion Truck	s - Dem	o Phase				of a diffe	rent type with	the appro	val of FHW	A
Roadway		Points										
Name	Width	Name	No.	Coordina	ates	(pavement)		Flow Co	ntrol		Segment	
				X		Y	Z	Control	Speed	Percent	Pvmt	On
								Device	Constraint	Vehicles	Type	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 1,0	00.0	0.0	0.00)				

INPUT: TRAFFIC FOR LAeq1h Volumes	П					13	60 Vine S	Street P	roject			
Eyestone Environmental				27 Jul	y 2020							
Sean Bui				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	1360 Vine Stre	eet Pro	ject		1							
RUN:	Construction	Trucks	- Demo l	Phase								
Roadway	Points											
Name	Name	No.	Segmen	it								
			Autos		MTrucks	S	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	10	35	0	0	4	35	0	0	0	C
	point2	2	2									

INPUT: RECEIVERS				OFFICE	OFTION			1360 Vine	Street	Project	
Eyestone Environmental						18 Februa	ry 2019				
Sean Bui						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	1360 \	/ine St	reet Project								
RUN:	Const	ruction	n Trucks - Der	no Phase							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels	and Cr	iteria	Activ
			X	Υ	Z	above	Existing	Impact C	riteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
At 45 feet from Roadway CL	8	1	500.0	45.0	0.00	4.92	0.00	66	3	10.0	8.0 Y

OFFICE OPTION 1360 Vine Street Project

RESULTS: SOUND LEVELS

RESULTS: SOUND LEVELS							1.	360 Vine S	treet Proje	ect				
Eyestone Environmental								27 July 20	20					
Sean Bui								TNM 2.5						
								Calculated	d with TNI	VI 2.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		1360 Vi	ine Street F	Project										
RUN:		Constr	uction Truc	cks - Demo P	hase									
BARRIER DESIGN:		INPUT	HEIGHTS						Average	pavement typ	e shall be use	d unless		
									a State h	ighway agend	y substantiat	es the us	е	
ATMOSPHERICS:		68 deg	F, 50% RH						of a diffe	rent type with	approval of F	HWA.		
Receiver														
Name	No.	#DUs	Existing	No Barrier						With Barrie	<u> </u>			
			LAeq1h	LAeq1h			Increase over	existing	Туре	Calculated	Noise Redu	ction		
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Ca	alculated
								Sub'l Inc					m	inus
													G	oal
			dBA	dBA	dBA		dB	dB		dBA	dB	dB	dE	3
At 45 feet from Roadway CL	3	3 1	0.0	56.9	9	66	56.9	10		56.	9 0.0	D	8	-8.
Dwelling Units		# DUs	Noise Re	duction										
			Min	Avg	Max									
			dB	dB	dB									
All Selected		1	0.0	0.0)	0.0								
All Impacted		C	0.0	0.0)	0.0								
All that meet NR Goal		C	0.0	0.0)	0.0								

INPUT: ROADWAYS								1360	Vine Street Pi	roject		
Eyestone Environmental Sean Bui					18 Februar	y 2019						
INPUT: ROADWAYS					111111 2.0		Δ	verage	pavement typ	e shall be	used unles	iS:
PROJECT/CONTRACT:	1360 Vine	□ e Street Pr	oject					_	ighway agend			
RUN:	Construc	tion Truck	s - Grad	ding Phase			0	of a diffe	rent type with	the approv	val of FHW	A
Roadway		Points										
Name	Width	Name	No.	Coordinat	es (pavement)		F	low Cor	ntrol		Segment	
				X	Y	Z	С	Control	Speed	Percent	Pvmt	On
							D	Device	Constraint	Vehicles	Type	Struct?
										Affected		
	ft			ft	ft	ft			mph	%		
Haul Route	12.0	point1		1 (0.0	.0 0	.00 5	Signal	0.00	100	Average	
		point2		2 1,000	0.0	.0 0	.00					

OFFICE OPTION 1360 Vino Street Project

INPUT: TRAFFIC FOR LAeq1h Volumes						13	60 Vine S	Street P	roject			
Eyestone Environmental				27 Jul	y 2020							
Sean Bui				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	1360 Vine \$	Street Pro	ject		'							
RUN:	Construction	on Trucks	- Gradin	g Phas	е							
Roadway	Points											
Name	Name	No.	Segmen	nt								
			Autos		MTruck	S	HTrucks	•	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 30	35	0	0	32	35	0	0	0) (
	point2		2									

INPUT: RECEIVERS								1360 Vine	Street Pro	ject	
Eyestone Environmental						18 Februa	ry 2019				
Sean Bui						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	1360 \	/ine St	reet Project								
RUN:	Const	ructior	Trucks - Gra	ding Phase							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	a	Active
			X	Υ	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receptor at 45 feet	8	1	500.0	45.0	0.00	4.92	0.00	66	10.0	8	.0 Y

OFFICE OPTION 1360 Vine Street Project

RESULTS: SOUND LEVELS

TRESCETO: GOGIND EEVELO							000 VIII.0 0					
Eyestone Environmental							27 July 20	20				
Sean Bui							TNM 2.5					
							Calculated	d with TNI	VI 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		1360 Vi	ine Street F	Project								
RUN:		Constr	uction Truc	cks - Grading	Phase							
BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement type	e shall be use	d unless	
								a State h	ighway agenc	y substantiat	es the us	е
ATMOSPHERICS:		68 deg	F, 50% RH	l				of a diffe	rent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	3	8 1	0.0	65.6	6	6 65.6	3 10		65.6	0.0)	8 -8.
Dwelling Units		# DUs	Noise Re	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.	0						
All Impacted		C	0.0	0.0	0.	0						
All that meet NR Goal		C	0.0	0.0	0.	0						

INPUT: ROADWAYS							136	0 Vine Street P	roject		
Eyestone Environmental					25 August 2	020					
Sean Bui					TNM 2.5						
INPUT: ROADWAYS							Averag	e pavement typ	e shall be u	used unles	S
PROJECT/CONTRACT:	1360 Vine	Street Pro	oject				a State	highway agend	y substant	iates the u	se
RUN:	tion Phase			of a dif	ferent type with	the approv	al of FHW	۵/			
Roadway		Points									
Name	Width	Name	No.	Coordinates	(pavement)		Flow C	ontrol		Segment	
				X	Y	Z	Contro	Speed	Percent	Pvmt	On
							Device	Constraint	Vehicles	Type	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				

OFFICE OPTION 1360 Vine Street Project

INPUT: TRAFFIC FOR LAeq1h Volumes						1	1360 Vine	Street	Project			
Eventone Environmental				25 A	augt 202	^						
Eyestone Environmental					gust 202	U						
Sean Bui				TNM 2	2.5		1					
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	1360 Vine S	Street Pro	oject									
RUN:	Const. Trucks - Mat Foundation Phase											
Roadway	Points											
Name	Name	No.	Segmen	nt								
			Autos		MTruck	s	HTrucks	6	Buses		Motorcy	ycles
			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 10	35	5 0) (0 35	35	0	0	C)
	point2	:	2									

INPUT: RECEIVERS				OTTIOL	OFTION			1360 Vine	Street P	roject	
Eyestone Environmental						25 August	2020				
Sean Bui						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	1360	√ine St	reet Project								
RUN:	Const	. Truck	s - Mat Found	lation Phase							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels	and Crite	eria	Active
			X	Υ	Z	above	Existing	Impact C	riteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receptor at 45 feet	8	1	500.0	45.0	0.00	4.92	0.00	60	6 10	0.0	8.0 Y

RESULTS: SOUND LEVELS				Ol	-FIC	L	OPTION	 1360 Vine \$	Street Pro	oject				
Eyestone Environmental								25 August	2020					
Sean Bui								TNM 2.5						
								Calculated	d with TN	M 2.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		1360 Vi	ne Street P	Project										
RUN:		Const.	Trucks - Ma	at Foundatio	n Phase	•								
BARRIER DESIGN:		INPUT	HEIGHTS						Average	pavement typ	shall be us	ed unless		
									a State h	ighway agenc	y substantiat	es the use	•	
ATMOSPHERICS:		68 deg	F, 50% RH						of a diffe	erent type with	approval of	HWA.		
Receiver														
Name N	ο.	#DUs	Existing	No Barrier						With Barrier				
			LAeq1h	LAeq1h			Increase over	existing	Туре	Calculated	Noise Redu	ction		
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calcu	lated
								Sub'l Inc					minus	5
													Goal	
			dBA	dBA	dBA		dB	dB		dBA	dB	dB	dB	
Receptor at 45 feet	8	1	0.0	65.9		66	65.9	10		65.9	0.0)	8	-8.
Dwelling Units		# DUs	Noise Red	duction										
			Min	Avg	Max									
			dB	dB	dB									
All Selected			0.0	0.0										

0.0

0.0

0.0

0.0

0

0.0

0.0

All Impacted

All that meet NR Goal

25

1

INPUT: ROADWAYS			<u>'</u>	JFF		JETION		136	0 Vine Street P	roject		
Eyestone Environmental						18 February	2019					
Sean Bui						TNM 2.5						
INPUT: ROADWAYS								Averag	e pavement typ	e shall be	used unles	S
PROJECT/CONTRACT:	1360 Vin	e Street P	roject					a State	highway agend	y substant	iates the u	se
RUN:	Construc	tion Truc	ks - Fou	ndatio	on Phase			of a diff	erent type with	the appro	val of FHW	A
Roadway		Points										
Name	Width	Name	No.	Cod	ordinates	(pavement)		Flow Co	ontrol		Segment	
				X		Υ	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	00 Signal	0.00	100	Average	
		point2		2	1,000.0	0.0	0.0	00				

INPUT: TRAFFIC FOR LAeq1h Volumes	П					13	60 Vine S	Street P	roject			
Eyestone Environmental				27 Jul	y 2020							
Sean Bui				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	1360 Vine Str	eet Pro	ject	1	'							
RUN:	Construction Trucks - Foundation Phase											
Roadway	Points											
Name	Name	No.	Segmen	it								
			Autos		MTrucks	S	HTrucks	•	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	70	35	0	0	10	35	0	0	0) (
	point2	2	2									

INPUT: RECEIVERS								1360 Vine	Street Pro	ject	
Eyestone Environmental						18 Februa	ry 2019				
Sean Bui						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	1360 \	/ine St	reet Project								
RUN:	Const	ruction	n Trucks - Fou	ındation Pha	se						
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	a	Active
			X	Υ	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'I	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receptor at 45 feet	8	1	500.0	45.0	0.00	4.92	0.00	66	10.0	8.	0 Y

OFFICE OPTION 1360 Vine Street Project

RESULTS: SOUND LEVELS

RESULTS: SOUND LEVELS							1,	360 Vine S	treet Proj	ect				
Eyestone Environmental								27 July 20	20					
Sean Bui								TNM 2.5						
								Calculated	d with TN	M 2.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		1360 V	ine Street F	Project										
RUN:		Constr	uction Truc	cks - Foundat	ion Phas	e								
BARRIER DESIGN:		INPUT	HEIGHTS						Average	pavement t	ype shall be us	ed unles	s	
									a State h	ighway age	ncy substantia	tes the u	se	
ATMOSPHERICS:		68 deg	F, 50% RH	ĺ					of a diffe	rent type w	ith approval of	FHWA.		
Receiver														
Name	No.	#DUs	Existing	No Barrier						With Barr	ier			
			LAeq1h	LAeq1h		Increas	e over	existing	Туре	Calculate	d Noise Redu	ction		
				Calculated	Crit'n	Calcula	ted	Crit'n	Impact	LAeq1h	Calculated	Goal	Calcu	lated
								Sub'l Inc					minus	3
													Goal	
			dBA	dBA	dBA	dB		dB		dBA	dB	dB	dB	
Receptor at 45 feet	8	8 1	0.0	61.8	3	66	61.8	10		6	61.8 0.	0	8	-8.0
Dwelling Units		# DUs	Noise Re	duction										
			Min	Avg	Max									
			dB	dB	dB									
All Selected		1	0.0	0.0) (0.0								
All Impacted		(0.0	0.0) (0.0								
All that meet NR Goal		(0.0	0.0) (0.0								

INPUT: ROADWAYS							1360	Vine Street P	oject		
Eyestone Environmental					18 February	2019					
Sean Bui					TNM 2.5						
INPUT: ROADWAYS							Average	pavement typ	e shall be u	used unles	S
PROJECT/CONTRACT:	1360 Vine	e Street Pr	oject				a State h	ighway agend	y substant	iates the u	se
RUN:	Construc	tion Truck	s - Buildi	ng Phase			of a diffe	rent type with	the approv	al of FHW	A
Roadway		Points									
Name	Width	Name	No.	Coordinates	(pavement)	-	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	0.0	0.0	0.0	00 Signal	0.00	100	Average	
		point2	2	1,000.0	0.0	0.0	00				

OFFICE OPTION 1360 Vino Street Project

INPUT: TRAFFIC FOR LAeq1h Volumes						13	60 Vine S	Street P	roject		T	
Eyestone Environmental				27 Jul	y 2020							
Sean Bui				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	1360 Vine \$	Street Pro	ject		'							
RUN:	Construction	Construction Trucks - Building Phase										
Roadway	Points											
Name	Name	No.	Segmen	nt								
			Autos		MTruck	S	HTrucks	•	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	3	35	0	0	0) (
	point2		2									

INPUT: RECEIVERS		-				·	<u> </u>	1360 Vine	Street Pro	ject	
Eyestone Environmental						18 Februa	ry 2019				
Sean Bui						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	1360 \	/ine St	reet Project								
RUN:	Const	ruction	n Trucks - Bui	Iding Phase							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	a	Active
			X	Υ	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receptor at 45 feet	8	1	500.0	45.0	0.00	4.92	0.00	66	10.0	8.	.0 Y

OFFICE OPTION 1360 Vine Street Project

RESULTS: SOUND LEVELS

RESOLICE SOSIND ELVELS						•	000 VIII.0 0					
Eyestone Environmental							27 July 20	20				
Sean Bui							TNM 2.5					
							Calculated	d with TNI	VI 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		1360 Vi	ine Street P	Project								
RUN:		Constr	uction Truc	cks - Building	Phase							
BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement type	shall be use	d unless	
								a State h	ighway agenc	y substantiate	es the use	•
ATMOSPHERICS:		68 deg	F, 50% RH	l				of a diffe	rent 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	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	3	3 1	0.0	61.9	60	61.9	10		61.9	0.0)	8 -8.
Dwelling Units		# DUs	Noise Re	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0	D						
All Impacted		C	0.0	0.0	0.0	D						
All that meet NR Goal		C	0.0	0.0	0.0	O						

INPUT: ROADWAYS							1360	Vine Street Pr	oject		
Eyestone Environmental					18 February	2019					
Sean Bui					TNM 2.5						
INPUT: ROADWAYS							Average	pavement typ	e shall be u	used unles	S
PROJECT/CONTRACT:	1360 Vine	Street P	roject				a State h	ighway agend	y substant	iates the u	se
RUN:	Construc	tion Trucl	ks - Pavir	ng Phase			of a diffe	rent type with	the approv	al of FHW	A
Roadway		Points									
Name	Width	Name	No.	Coordinates	(pavement)		Flow Cor	itrol		Segment	
				X	Υ	Z	Control	Speed	Percent	Pvmt	On
							Device	Constraint	Vehicles	Туре	Struct?
									Affected		
	ft			ft	ft	ft		mph	%		
laul Route	12.0	point1	1	0.0	0.0	כ	0.00 Signal	0.00	100	Average	
		point2	2	1,000.0	0.0)	0.00				

OFFICE OPTION 1360 Vino Street Project

INPUT: TRAFFIC FOR LAeq1h Volumes						13	60 Vine S	Street P	roject		T	
Eyestone Environmental				27 Jul	y 2020							
Sean Bui				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	1360 Vine \$	Street Pro	oject		'							
RUN:	Construction	Construction Trucks - Paving Phase										
Roadway	Points											
Name	Name	No.	Segmer	nt								
			Autos		MTruck	S	HTrucks	•	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 20	35	0	0	3	35	0	0	0) (
	point2		2									1

INPUT: RECEIVERS				OFFIC						1360 Vine	Street Pro	ject	
Eyestone Environmental								18 Februa	ry 2019				
Sean Bui								TNM 2.5					
INPUT: RECEIVERS													
PROJECT/CONTRACT:	1360 \	/ine St	reet P	roject		1							
RUN:	Const	ruction	n Truc	ks - Paving Phas	е								
Receiver													
Name	No.	#DUs	Coor	dinates (ground)				Height	Input Sou	nd Levels a	and Criteria	ā	Active
			X	Υ		Z		above	Existing	Impact Cri	iteria	NR	in
								Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft		ft		ft	dBA	dBA	dB	dB	
Receptor at 45 feet	8	1		500.0	45.0		0.00	4.92	0.00	66	10.0	8.0	Υ

OFFICE OPTION 1360 Vine Street Project

RESULTS: SOUND LEVELS

RESOLICE GOODS ELVELS							71110					
Eyestone Environmental							27 July 20	20				
Sean Bui							TNM 2.5					
							Calculated	d with TNI	VI 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		1360 V	ine Street F	Project								
RUN:		Constr	uction Truc	cks - Paving F	hase							
BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement type	shall be use	d unless	
								a State h	ighway agenc	y substantiate	es the use	•
ATMOSPHERICS:		68 deg	F, 50% RH	l				of a diffe	rent 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	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	8	8 1	0.0	56.5	6	6 56.5	5 10		56.5	0.0)	8 -8.0
Dwelling Units		# DUs	Noise Re	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.	0						
All Impacted		C	0.0	0.0	0.	0						
All that meet NR Goal		C	0.0	0.0	0.	0						



Project: 1360 Vine Project - RESIDENTIAL OPTION

Off-Site Haul Trucks

Maximum Number of Truck One

	Way Trips (c	lelivery/haul)	Worke	er Trips	Project N	loise Levels	Amb	pient	Ambient	+Project
_		Per Hour (10-		Trips during				Sunset		Sunset
Phase	Per Day	hr day)	Daily Trips	Pk Hr.	Vine St.	Sunset Blvd.	Vine St.	Blvd.	Vine St.	Blvd.
1. Demolition (6hrs)	20	4	25	10	56.9	56.9	71.7	71.7	71.8	71.8
2. Grading/Excavation (6hrs)	170	29	75	30	65.2	65.2	71.7	71.7	72.6	72.6
3. Mat Foundation	350	35	25	10	65.9	65.9	71.7	71.7	72.7	72.7
4. Foundation	100	10	175	70	61.8	61.8	71.7	71.7	72.1	72.1
5. Building Construction	30	3	500	200	61.9	61.9	71.7	71.7	72.1	72.1
6. Paving	30	3	50	20	56.5	56.5	71.7	71.7	71.8	71.8

Hauls: 6 hours, applicable to Demolition and Grading phases

INPUT: ROADWAYS		П					1360	Vine Street P	roject		1
Eyestone Environmental					18 February	2019					
Sean Bui					TNM 2.5						
INPUT: ROADWAYS							Average	pavement typ	e shall be	used unles	S
PROJECT/CONTRACT:	1360 Vine	Street Pr	oject				a State h	ighway agend	y substant	iates the u	se
RUN:	Construc	tion Truck	s - Demo	o Phase			of a diffe	erent type with	the appro	val of FHW	A
Roadway		Points									
Name	Width	Name	No.	Coordinates	s (pavement)		Flow Co	ntrol		Segment	
				X	Υ	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				

veh/hr mph

0

veh/hr

0

mph

35

veh/hr mph

0

veh/hr

0

mph

0

0

INPUT: TRAFFIC FOR LAeq1h Volumes							1360 Vine	Street	t Project			
Eyestone Environmental Sean Bui				27 Jul	y 2020 2.5							
INPUT: TRAFFIC FOR LAeq1h Volumes PROJECT/CONTRACT: RUN:	1360 Vine S		-	Phase								
Roadway Name	Points Name	No.	Segme	nt								
		110.	Autos		MTruck	S	HTruck	S	Buses	1	Motorc	ycles
			V	S	V	S	V	S	V	S	V	S

veh/hr

1

2

10

point1

point2

mph

35

Haul Route

INPUT: RECEIVERS								1360 Vine	Street Pro	ject	
Eyestone Environmental						18 Februa	ry 2019				
Sean Bui						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	1360 \	/ine St	reet Project								
RUN:	Const	ructior	n Trucks - Der	no Phase							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	3	Active
			X	Υ	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
At 45 feet from Roadway CL	8	1	500.0	45.0	0.00	4.92	0.00	66	10.0	8.0	Y

RESULTS: SOUND LEVELS

1360 Vine Street Project

									,			
Eyestone Environmental							27 July 20)20				
Sean Bui							TNM 2.5					
							_ Calculate	d with TN	M 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		1360 V	ine Street P	roject								
RUN:		Constr	uction Truc	ks - Demo Pl	nase							
BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement typ	e shall be use	ed unless	
								a State h	nighway agenc	y substantiat	es the use	
ATMOSPHERICS:		68 deg	F, 50% RH					of a diffe	erent type with	approval of F	HWA.	
Receiver		7										
Name	No.	#DUs	Existing	No Barrier					With Barrier	•		
			LAeq1h	LAeq1h		Increase ove	r existing	Type	Calculated	Noise Reduc	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
At 45 feet from Roadway CL		8 1	0.0	56.9)	66 56.	9 10)	56.9	0.0	3	3 -8
Dwelling Units		# DUs	Noise Red	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0) (0.0						
All Impacted		(0.0	0.0) (0.0						
All that meet NR Goal			0.0	0.0) (0.0						

INPUT: ROADWAYS									1360	Vine Street Pr	oject		
Eyestone Environmental						18 Februa	y 2019	9					
Sean Bui						TNM 2.5							
INPUT: ROADWAYS								Δ	verage _l	pavement typ	 e shall be ι	used unles	S
PROJECT/CONTRACT:	1360 Vine	e Street Pr	oject					а	State hi	ghway agenc	y substant	iates the us	se
RUN:	Construc	tion Truck	s - Grad	ling F	Phase			o	of a differ	ent type with	the approv	al of FHW	A
Roadway		Points											
Name	Width	Name	No.	Cod	ordinates	(pavement)	F	low Con	trol		Segment	
				X		Υ	Z	C	Control	Speed	Percent	Pvmt	On
								C	Device	Constraint	Vehicles	Туре	Struct?
											Affected		
	ft			ft		ft	ft			mph	%		
Haul Route	12.0	point1		1	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						13	60 Vine S	Street P	roject			
Eyestone Environmental				27 Jul	y 2020							
Sean Bui				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	1360 Vine S	treet Pro	ject	'								
RUN:	Constructio	n Trucks	- Gradin	g Phas	е							
Roadway	Points											
Name	Name	No.	Segmen	it								
			Autos		MTrucks	S	HTrucks	•	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	30	35	0	0	29	35	0	0	0	(

2

point2

INPUT: RECEIVERS								1360 Vine	Street Pro	ject	
Eyestone Environmental						18 Februa	ry 2019				
Sean Bui						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	1360 \	/ine St	reet Project		1						
RUN:	Const	ructior	n Trucks - Gra	ding Phase							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	ā	Active
			X	Υ	Z	above	Existing	Impact Cri	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receptor at 45 feet	8	1	500.0	45.0	0.00	4.92	0.00	66	10.0	8.0) Y

RESULTS: SOUND LEVELS

1360 Vine Street Project

											_		
Eventone Environmental								27 July 20	20				
Eyestone Environmental								27 July 20	120				
Sean Bui								TNM 2.5					
								Calculate	d with TN	M 2.5			
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		1360 V	ine Street F	Project									
RUN:		Constr	uction True	cks - Grading	Phase								
BARRIER DESIGN:		INPUT	HEIGHTS						Average	pavement typ	e shall be use	d unles	s
									a State h	ighway agend	y substantiat	es the u	se
ATMOSPHERICS:		68 deg	F, 50% RF	ł					of a diffe	rent type with	approval of F	HWA.	
Receiver													
Name	No.	#DUs	Existing	No Barrier						With Barrie	•		
			LAeq1h	LAeq1h			Increase over	r existing	Туре	Calculated	Noise Reduc	ction	
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculate
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA		dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	3	8 1	0.0	65.2	2	66	65.2	2 10		65.	2 0.0)	8 -
Dwelling Units		# DUs	Noise Re	duction									
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0	0.0)	0.0							
All Impacted		(0.0	0.0)	0.0							
All that meet NR Goal			0.0	0.0)	0.0							

INPUT: ROADWAYS							1360	Vine Street P	roject		
Eyestone Environmental					25 August 2	020					
Sean Bui					TNM 2.5						
INPUT: ROADWAYS							Average	pavement typ	e shall be i	used unles	S
PROJECT/CONTRACT:	1360 Vin	e Street P	Project				a State h	ighway agend	y substant	iates the u	se
RUN:	Const Tr	ucks - Ma	t Foundat	ion Phase			of a diffe	rent type with	the approv	al of FHW	A
Roadway		Points									
Name	Width	Name	No.	Coordinates	(pavement)		Flow Co	ntrol		Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt	On
							Device	Constraint	Vehicles	Type	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						1	360 Vine	Street	Project		1	
Eyestone Environmental				25 Aug	∣ gust 2020	0						
Sean Bui				TNM 2	5		I					
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	1360 Vine \$	Street Pro	oject									
RUN:	Const Truc	ks - Mat	Foundation	e								
Roadway	Points											
Name	Name	No.	Segmer	nt								
			Autos		MTruck	S	HTrucks	;	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 10	35	C	0	35	35	0	0	0	1
	point2		2									

INPUT: RECEIVERS								1360 Vine	Street Pro	ject	
Eyestone Environmental						25 August	2020				
Sean Bui						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	1360 \	/ine St	reet Project								
RUN:	Const	Trucks	s - Mat Found	ation Phase							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	a	Active
			X	Υ	Z	above	Existing	Impact Cri	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receptor at 45 feet	8	1	500.0	45.0	0.00	4.92	0.00	66	10.0	8.0	Υ

RESULTS: SOUND LEVELS							1360 Vine	Street Pro	ject			
Eyestone Environmental							25 Augus	t 2020				
Sean Bui							TNM 2.5					
							Calculate	d with TNI	M 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		1360 V	ine Street F	Project								
RUN:		Const	Trucks - Ma	at Foundation	Phase							
BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement typ	e shall be use	d unless	
								a State h	ighway agend	y substantiat	es the use)
ATMOSPHERICS:		68 deg	F, 50% RH	l						approval of F		
Receiver												
lame	No.	#DUs	Existing	No Barrier					With Barrie	r		
			LAeq1h	LAeq1h		Increase over	existing	Type	Calculated	Noise Reduc	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	3	3 1	0.0	65.9	66	65.9	9 10		65.	9 0.0)	8 -8
Dwelling Units		# DUs	Noise Re	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0)						
All Impacted		(0.0	0.0	0.0)						

0.0

0.0

0.0

All that meet NR Goal

JT: ROADWAYS										oject		
					18 Februa	ry 201	19					
					TNM 2.5							
								Average	pavement typ	e shall be ι	used unles	S
1360 Vine	e Street Pr	oject						a State h	ighway agend	y substant	iates the u	se
Construc	tion Truck	s - Foun	datio	on Phase				of a diffe	rent type with	the approv	al of FHW	A
	Points											
Width	Name	No.	Cod	ordinates	(pavemen	:)		Flow Cor	itrol		Segment	
			X		Υ	Z		Control	Speed	Percent	Pvmt	On
								Device	Constraint	Vehicles	Туре	Struct?
										Affected		
ft			ft		ft	ft			mph	%		
12.0	point1	1		0.0		0.0	0.00	Signal	0.00	100	Average	
	point2	2		1,000.0		0.0	0.00					
	Width ft	Construction Truck Points Width Name ft 12.0 point1	Points Width Name No. ft 12.0 point1 1	Construction Trucks - Foundation Points Width Name No. X ft 12.0 point1 1	1360 Vine Street Project Construction Trucks - Foundation Phase Points Width Name No. Coordinates X ft ft ft 12.0 point1 1 0.0	1360 Vine Street Project Construction Trucks - Foundation Phase Points Width Name No. Coordinates (pavement X Y) ft ft ft ft ft 12.0 point1 1 0.0 (6)	1360 Vine Street Project Construction Trucks - Foundation Phase Points Width Name No. Coordinates (pavement) X Y Z ft ft ft ft ft ft ft 12.0 point1 1 0.0 0.0	1360 Vine Street Project Construction Trucks - Foundation Phase Points Width Name No. Coordinates (pavement) X Y Z ft ft ft ft ft ft 12.0 point1 1 0.0 0.0 0.00	18 February 2019 TNM 2.5 Average 1360 Vine Street Project Construction Trucks - Foundation Phase Of a difference Points Width Name No. Coordinates (pavement) Flow Cordinates Control Device ft ft ft ft ft ft ft f	TNM 2.5 Average pavement typ 1360 Vine Street Project Construction Trucks - Foundation Phase Points Width Name No. Coordinates (pavement) X Y Z Control Speed Device Constraint ft ft ft ft ft mph 12.0 point1 1 0.0 0.0 0.00 Signal 0.00	TNM 2.5 Average pavement type shall be to a State highway agency substant of a different type with the approximation Phase Points Width Name No. Coordinates (pavement) X Y Z Control Speed Percent Vehicles Device Constraint Vehicles Affected ft ft ft ft mph % 12.0 point1 1 0.0 0.0 0.00 Signal 0.00 100	TNM 2.5 Average pavement type shall be used unles a State highway agency substantiates the used unles of a different type with the approval of FHW. Points Width Name No. Coordinates (pavement) X Y Z Control Speed Percent Pvmt Device Constraint Vehicles Type Affected ft ft ft ft ft ft mph % 12.0 point1 1 0.0 0.0 0.00 Signal 0.00 100 Average

INPUT: TRAFFIC FOR LAeq1h Volumes							1360 Vine	Stree	t Project			
Eyestone Environmental Sean Bui				27 Ju	uly 2020 2.5							
INPUT: TRAFFIC FOR LAeq1h Volumes PROJECT/CONTRACT: RUN:	1360 Vine S		•	ndation	Phaeo							
		JII IIUCK	5 - 1 Oui	Iualion	riiase							
Roadway	Points		_									
Name	Name	No.	Segm	ent								
			Autos	;	MTruc	ks	HTruc	ks	Buses		Motorc	ycles
			V	S	V	S	V	S	V	S	V	S
										\rightarrow		

mph

35

veh/hr

mph

0

0

veh/hr

mph

35

10

veh/hr

mph

0

0

veh/hr

mph

0

0

veh/hr

1

2

70

point1

point2

Haul Route

INPUT: RECEIVERS								1360 Vine	Street Pro	ject	
Eyestone Environmental						18 Februa	ry 2019				
Sean Bui						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	1360	√ine St	reet Project								
RUN:	Const	ruction	n Trucks - Fou	ındation Pha	se						
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	a	Active
			X	Υ	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receptor at 45 feet	8	1	500.0	45.0	0.00	4.92	0.00	66	10.0	8.0	Y

RESULTS: SOUND LEVELS

1360 Vine Street Project

									,			
Eyestone Environmental							27 July 20)20				
Sean Bui							TNM 2.5					
							Calculate	d with TN	M 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		1360 V	ine Street P	roject								
RUN:		Constr	uction Truc	ks - Foundat	ion Phase							
BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement typ	e shall be use	d unless	
								a State h	nighway agenc	y substantiate	es the use	
ATMOSPHERICS:		68 deg	F, 50% RH					of a diffe	erent type with	approval of F	HWA.	
Receiver												
lame	No.	#DUs	Existing	No Barrier					With Barrier	•		
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet		8 1	0.0	61.8	6	6 61.8	3 10)	61.8	0.0	3 (-8
Dwelling Units		# DUs	Noise Re	duction								
_			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.	0						
All Impacted		(0.0	0.0	0.	0						
All that meet NR Goal			0.0	0.0	0.	0						

INPUT: ROADWAYS	JT: ROADWAYS										oject		
Eyestone Environmental						18 Februa	ry 201	19					
Sean Bui						TNM 2.5							
INPUT: ROADWAYS									Average	pavement typ	e shall be ι	used unles	S
PROJECT/CONTRACT:	1360 Vine	e Street Pr	oject						a State h	ighway agend	y substant	iates the u	se
RUN:	Construc	tion Truck	s - Buildi	ing l	Phase				of a diffe	rent type with	the approv	al of FHW	A
Roadway		Points											
Name	Width	Name	No.	Cod	ordinates	(pavement)		Flow Cor	itrol		Segment	
				X		Υ	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

1360 Vine Street Project

Freetone Freetone montel				07 1	- 2020							
Eyestone Environmental				27 July	y 2020							
Sean Bui				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	1360 Vine Str	eet Pro	ject	'	'							
RUN:	Construction	Trucks	- Buildin	g Phas	е							
Roadway	Points											
Name	Name	No.	Segmen	t								
			Autos		MTruck	s	HTrucks	;	Buses		Motorcy	cles
			V	S	٧	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	3	35	0	0	0	(
	point2	2										

INPUT: RECEIVERS								1360 Vine	Street Pro	ject	
Eyestone Environmental						18 Februa	ry 2019				
Sean Bui						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	1360	√ine St	reet Project		'						
RUN:	Const	ruction	n Trucks - Bui	Iding Phase							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	a	Active
			X	Υ	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receptor at 45 feet	8	1	500.0	45.0	0.00	4.92	0.00	66	10.0	8.0	Y

RESULTS: SOUND LEVELS

1360 Vine Street Project

		1			ſ						1	
Eyestone Environmental							27 July 20	120				
Sean Bui							TNM 2.5					
Jean Bui							Calculate	d with TN	IM 2 5			
RESULTS: SOUND LEVELS							Calculate	u with th	11VI 2.3			
		4000 17										
PROJECT/CONTRACT:			ine Street F	-								
RUN:		_		ks - Building	Phase							
BARRIER DESIGN:		INPUT	HEIGHTS					_	pavement typ			
								a State h	nighway agend	y substantiate	es the use)
ATMOSPHERICS:		68 deg	F, 50% RH					of a diffe	erent type with	approval of F	HWA.	
Receiver												
lame	No.	#DUs	Existing	No Barrier					With Barrie	<u>r</u>		
		İ	LAeq1h	LAeq1h		Increase over	rexisting	Type	Calculated	Noise Reduc	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc		-			minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	3	8 ′	0.0	61.9		61.9	9 10)	61.9	9 0.0)	8 -8
Dwelling Units		# DUs	Noise Re	duction								
ū			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	C	.0						
All Impacted		(0.0	0.0	C	.0						
All that meet NR Goal		(0.0	0.0	C	.0						

PUT: ROADWAYS										Vine Street Pr	roject		
Eyestone Environmental						18 Februar	y 201	19					
Sean Bui						TNM 2.5							
INPUT: ROADWAYS									Average	pavement typ	e shall be u	used unles	S
PROJECT/CONTRACT:	1360 Vine	e Street Pr	oject						a State h	ighway agend	y substant	iates the u	se
RUN:	Construc	tion Truck	s - Pavii	ng Pi	hase				of a diffe	rent type with	the approv	al of FHW	A
Roadway		Points											
Name	Width	Name	No.	Co	ordinates (pavement)		Flow Cor	ntrol		Segment	
				X	,	Y	Z		Control	Speed	Percent	Pvmt	On
				Ì					Device	Constraint	Vehicles	Туре	Struct?
											Affected		
	ft			ft	i	ft	ft			mph	%		
Haul Route	12.0	point1	1		0.0	C	.0	0.00	Signal	0.00	100	Average	
		point2	2	2	1,000.0	C	0.0	0.00					

INPUT: TRAFFIC FOR LAeq1h Volumes 1360 Vine Street Project Eyestone Environmental 27 July 2020 Sean Bui **TNM 2.5** INPUT: TRAFFIC FOR LAeq1h Volumes PROJECT/CONTRACT: 1360 Vine Street Project RUN: **Construction Trucks - Paving Phase** Roadway Points Namo Namo No

Ivaille	INAILIE	INO.	Segmen	11.								
			Autos		MTruck	s	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	20	35	0	0	3	35	0	0	0	0
	point2	2										
	Point		.									

INPUT: RECEIVERS								1360 Vine	Street Pro	ect	
Eyestone Environmental						18 Februa	ry 2019				
Sean Bui						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	1360	Vine St	reet Project								
RUN:	Cons	truction	n Trucks - Pav	ing Phase							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	ì	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	
Receptor at 45 feet	8	3 1	500.0	45.0	0.00	4.92	0.00	66	10.0	8.0	Y

RESULTS: SOUND LEVELS

1360 Vine Street Project

								_				
Eyestone Environmental							27 July 20	20				
Sean Bui							TNM 2.5					
<u> </u>							Calculate	d with TN	M 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		1360 V	ine Street F	Project								
RUN:				ks - Paving F	hase							
BARRIER DESIGN:			HEIGHTS					Average	pavement typ	e shall be use	ed unless	
								_	nighway agend			;
ATMOSPHERICS:		68 deg	F, 50% RH						erent type with	-		
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrie	r		
			LAeq1h	LAeq1h	-	Increase over	existing	Type	Calculated	Noise Reduc	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	8	8 ′	1 0.0	56.5	(56.5	5 10)	56.	5 0.0	D	8 -8
Dwelling Units		# DUs	Noise Re	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		•	1 0.0	0.0	0	.0						
All Impacted		(0.0	0.0	0	.0						
All that meet NR Goal		(0.0	0.0	0	.0						

INPUT: ROADWAYS								1360	Vine			
Eyestone Environmental					2 Feb	ruary 2	2022					
Sean Bui					TNM	2.5						
INPUT: ROADWAYS								Average	pavement typ	e shall be ι	used unles	S
PROJECT/CONTRACT:	1360 Vin	9						a State h	ighway agend	y substant	iates the u	se
RUN:	Construc	tion Truck	ks - Cum	ulati	ve			of a diffe	rent type with	the approv	al of FHW	A
Roadway		Points										
Name	Width	Name	No.	Cod	ordinates (pave	ment)		Flow Cor	itrol		Segment	
				X	Y		Z	Control	Speed	Percent	Pvmt	On
				Ì				Device	Constraint	Vehicles	Type	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	1,000.0	0.0)	0.00				

INPUT: TRAFFIC FOR LAeq1h Volumes						1;	360 Vine				T	
Eyestone Environmental				2 Febr	uary 202	2						
Sean Bui				TNM 2	. 5		I					
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	1360 Vine											
RUN:	Constructi	on Trucks	- Cumul	ative								
Roadway	Points											
Name	Name	No.	Segmer	nt								
			Autos		MTruck	s	HTrucks	;	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	30	35	0	0	236	35	0	0	0) (
	point2	2	2									

INPUT: RECEIVERS								1360 Vine	!			
Eyestone Environmental						2 Februar	y 2022					
Sean Bui						TNM 2.5						
INPUT: RECEIVERS												
PROJECT/CONTRACT:	1360	/ine			1							
RUN:	Const	ruction	n Trucks - Cur	mulative								
Receiver												
Name	No.	#DUs	Coordinates	(ground)		Height	Input Soul	nd Levels	and Cri	teria	Act	ive
			X	Υ	Z	above	Existing	Impact Cr	iteria	NR	in	
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Cal	c.
			ft	ft	ft	ft	dBA	dBA	dB	dB		
Receptor at 45 feet	8	1	250.0	45.0	0.00	4.92	0.00	66	3 1	10.0	8.0	Y

						1360 Vine						
						2 Februar	 v 2022					
							,					
							d with TNN	125				
						Calculate		n 2.5				
	1360 V	ina										
			ko Cumulo	tivo								
			KS - Culliula	uve					 			
	INPUI	HEIGHTS										
									-		ise	
	_ 68 deg	, F, 50% RH					of a differ	rent type with	approval of F	HWA.		
No.	#DUs	Existing	No Barrier					With Barrie	<u>r</u>			
		LAeq1h	LAeq1h		Increase ove	er existing	Туре	Calculated	Noise Reduc	ction		
			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	
	8 1	0.0	75.0)	66 75.	.0 10	Snd Lvl	75.	0.0)	8	-8.0
	# DUs	Noise Re	duction									
		Min	Avg	Max								
		+		dB								
		dB	иь	u.D								
	1	dB			0.0							
	1	-	0.0)	0.0							
		Constr INPUT 68 deg No. #DUs	No. #DUS Existing LAeq1h dBA # DUS Noise Ref	Construction Trucks - Cumular INPUT HEIGHTS 68 deg F, 50% RH No. #DUs Existing No Barrier LAeq1h LAeq1h Calculated dBA dBA 8 1 0.0 75.0 # DUs Noise Reduction Min Avg	Construction Trucks - Cumulative INPUT HEIGHTS 68 deg F, 50% RH No. #DUs Existing No Barrier LAeq1h LAeq1h Calculated Crit'n dBA dBA dBA dBA 8 1 0.0 75.0 #DUs Noise Reduction	Construction Trucks - Cumulative INPUT HEIGHTS	2 Februar TNM 2.5 Calculated	2 February 2022 TNM 2.5 Calculated with TNM	2 February 2022 TNM 2.5 Calculated with TNM 2.5	2 February 2022 TNM 2.5 Calculated with TNM 2.5 1360 Vine Construction Trucks - Cumulative INPUT HEIGHTS Average pavement type shall be use a State highway agency substantiat of a different type with approval of for a dif	2 February 2022 TNM 2.5 Calculated with TNM 2.5	2 February 2022 TNM 2.5 Calculated with TNM 2.5 Construction Trucks - Cumulative INPUT HEIGHTS Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. No. #DUs Existing No Barrier LAeq1h LAeq1h LAeq1h Increase over existing Calculated Crit'n Calculated Crit'n Sub'l Inc Sub'l Inc #DUS Noise Reduction Min Avg Max #DUS Noise Reduction 1360 Vine



Project: 1360 Vine 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 with n= 1.5 (for receptors 25 feet or greater)

n= **1.1** (for receptors less than 25 feet, per Caltrans procedure)

ON-SITE CONSTRUCTION ACTIVITIES

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

			Estimate	d Vibration Le	vels at neares	t off-site build	ing structures	(distance in fe	et), PPV
		Reference Vibration Levels at 25	Single-Story Commercial building to the North	Single-Story Commercial Building the South	Single-Story Commercial building to the west	Residential buildings to the east	Residential building to the north	Residential to the south	
Equipment		ft., PPV	50	60	85	10	70	78	
Large Bulldozer		0.089	0.032	0.024	0.014	0.244	0.019	0.016	
Caisson Drilling		0.089	0.032	0.024	0.014	0.244	0.019	0.016	
Loaded Trucks		0.076	0.027	0.020	0.012	0.208	0.016	0.014	
Jackhammer		0.035	0.012	0.009	0.006	0.096	0.008	0.006	
Small bulldozer		0.003	0.001	0.001	0.001	0.008	0.001	0.001	
	Significance Th	nreshold, PPV	0.3	0.2	0.3	0.12	0.12	0.12	

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

	Reference Vibration	Estir	mated Vibratio	on Levels at Of	f-Site Recepto	ors (at note dis	tance in feet), VdB
	Levels at 25	R1	R2	R3	R4	R5	
Equipment	ft., VdB	75	10	70	265	445	
Large Bulldozer	87	73	99	74	56	49	
Caisson Drilling	87	73	99	74	56	49	
Loaded Trucks	86	72	98	73	55	48	
Jackhammer	79	65	91	66	48	41	
Small bulldozer	58	44	70	45	27	20	
;	Significance Threshold, VdB	72	72	72	72	72	

OFF-SITE CONSTRUCTION HAUL TRUCKS

Table 3: Off-Site Haul Trucks - Building Damage

Tubic 3. Off Site Haar Hacks	Juliung Dumug	-						
	Reference Vibration		Estimat	ted Vibration L	evels at noted	l distance in fe	et, PPV	
Equipment	Levels at 50 ft., PPV	20						
Typical road surface	0.00565	0.022						
Significance ⁻	Threshold, PPV	0.12						

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

Table 4: Off-Site Haul Trucks - Human Annoyance

Tubic 4. Off Site Haar Hacks II	aa , y a.							
	Reference Vibration		Estimat	ed Vibration L	evels at noted	distance in fe	et, VdB	
Equipment	Levels at 50 ft., VdB	25						
Typical road surface	63	72						
Significance T	hreshold, VdB	72						

Ref. Levels based on FTA Figure 7-3

Date Printed: 10/6/2020

Operation Noise Calculations



Project Composite Noise Calculations (CNEL) Project: 1360 Vine Project OFFICE OPTION

						Project	Ambient +	
Receptor	Ambient	Traffic ^a	Mechanical	Loading	Outdoor	Composite	Project	Increase
R1	58.4	59.9	48.4	25.3	53.5	61.1	62.9	4.5
R2	56.1	41.2	46.5	15.0	51.2	52.8	57.8	1.7
R3	61.5	62.5	43.5	57.0	51.7	63.9	65.9	4.4
R4	72.2	60.5	46.5	19.7	44.1	60.8	72.5	0.3
R5	70.5	55.1	44.2	14.1	47.5	56.1	70.7	0.2

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

		Traffic I	Noise Levels,	CNEL					distance to	
	Roadway		Existing +	Project	distance to		Existing +		Center	adj. for
Receptor	Segment	Existing	Project	Only	roadway, ft	Existing	Project	barrier	Line	distance
R1	Afton	56.2	61.5	59.9	20	57.4	62.7	0	30	-1.2
R2	Vine	52.7	53.0	41.2	350	72.0	72.3	10	45	-9.3
R3	De Longpre	62.6	65.6	62.5	20	63.8	66.8	0	30	-1.2
R4	Vine	72.0	72.3	60.5	10	72.0	72.3	0	45	0.0
R5	De Longpre	66.6	66.9	55.1	10	66.6	66.9	0	30	0.0



Outdoor Mechanical Equipment Noise Calculations Project: 1360 Vine Project OFFICE OPTION

Hours of Operations

	Estimated No	oise Levels,	Ld (7am to	Le (7pm to	Ln (10pm to	
	Leq from SOUNDPLAN		7pm)	10pm)	7am)	
Receptor	Leq	CNEL	12	3	9	
R1	41.7	48.4	41.7	41.7	41.7	
R2	39.8	46.5	39.8	39.8	39.8	
R3	36.8	43.5	36.8	36.8	36.8	
R4	39.8	46.5	39.8	39.8	39.8	
R5	37.5	44.2	37.5	37.5	37.5	

		Ambient +			
	Ambient	Project	Increase		Ambient +
Receptor	CNEL	(CNEL)	(CNEL)	ambient (Leq)	Project (Leq)
R1	58.4	58.8	0.4	53.4	53.7
R2	56.1	56.5	0.4	49.2	49.7
R3	61.5	61.6	0.1	56.1	56.2
R4	72.2	72.2	0.0	65.4	65.4
R5	70.5	70.5	0.0	62.9	62.9



Loading and Trash Compactor Noise Calculations Project: 1360 Vine Project OFFICE OPTION

	Estimate Levels, Le SOUND	eq from	Ld (7am to 7pm)	Le (7pm to 10pm)	Ln (10pm to 7am)
Receptor	Leq	CNEL	3	3	0
R1	28.1	25.3	22.1	28.1	0.0
R2	17.3	15.0	11.3	17.3	0.0
R3	59.8	57.0	53.8	59.8	0.0
R4	22.4	19.7	16.4	22.4	0.0
R5	16.2	14.1	10.2	16.2	0.0

			Ambient +		Project		Ambient +
	Project	Ambient	Project	Increase	Noise,	daytime	Project
Receptor	CNEL	CNEL	(CNEL)	(CNEL)	(Leq)	ambient (Leq)	(Leq)
R1	25.3	58.4	58.4	0.0	28.1	55.0	55.0
R2	15.0	56.1	56.1	0.0	17.4	55.8	55.8
R3	57.0	61.5	62.8	1.3	59.8	59.0	62.4
R4	19.7	72.2	72.2	0.0	22.4	71.7	71.7
R5	14.1	70.5	70.5	0.0	16.3	70.6	70.6



Outdoor Noise Calculations
Project: 1360 Vine Project 1360 Vine Project **OFFICE OPTION**

Hours of Operations

	Treate of operations									
					Ld (7am to	Le (7pm to	Ln (10pm to			
	Estimated nois	DPLAN)	7pm)	10pm)	7am)					
Receptor	Sound System	Occupants	Total, Leq	CNEL	12	3	4			
R1	48.7	40.8	49.4	53.5	49.4	49.4	45.9			
R2	45.8	41.4	47.1	51.2	47.1	47.1	43.6			
R3	47.3	36.2	47.6	51.7	47.6	47.6	44.1			
R4	39.9	24.8	40.0	44.1	40.0	40.0	36.5			
R5	43.4	23.0	43.4	47.5	43.4	43.4	39.9			

			Ambient +		Project		
		Ambient	Project	Increase	Noise,	Ambient	Ambient +
Receptor	Project (CNEL)	(CNEL)	(CNEL)	(CNEL)	(Leq)	(Leq)	Project (Leq)
R1	53.5	58.4	59.6	1.2	49.4	53.4	54.9
R2	51.2	56.1	57.3	1.2	47.1	49.2	51.3
R3	51.7	61.5	61.9	0.4	47.6	56.1	56.7
R4	44.1	72.2	72.2	0.0	40.0	65.4	65.4
R5	47.5	70.5	70.5	0.0	43.4	62.9	62.9



Project Composite Noise Calculations (CNEL) Project: 1360 Vine Project RESIDENTIAL OPTION

						Project	Ambient +	
Receptor	Ambient	Traffic ^a	Mechanical	Loading	Outdoor	Composite	Project	Increase
R1	58.4	49.6	47.8	30.2	58.5	59.3	61.9	3.5
R2	56.1	39.4	48.2	17.2	55.2	56.1	59.1	3.0
R3	61.5	58.7	49.0	56.4	52.5	61.6	64.5	3.0
R4	72.2	58.7	47.7	20.6	52.0	59.8	72.4	0.2
R5	70.5	53.3	48.6	21.6	55.7	58.2	70.7	0.2

^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	
	Roadway		Existing +	Project	distance to		Existing +		Center	adj. for
Receptor	Segment	Existing	Project	Only	roadway, ft	Existing	Project	barrier	Line	distance
R1	Afton	56.5	57.3	49.6	20	57.4	58.2	0	45	-0.9
R2	Vine	52.7	52.9	39.4	350	72.0	72.2	10	45	-9.3
R3	De Longpre	62.6	64.1	58.7	20	63.8	65.3	0	30	-1.2
R4	Vine	72.0	72.2	58.7	10	72.0	72.2	0	45	0.0
R5	De Longpre	66.6	66.8	53.3	10	66.6	66.8	0	30	0.0



Outdoor Mechanical Equipment Noise Calculations Project: 1360 Vine Project RESIDENTIAL OPTION

Hours of Operations

	Estimated No	oise Levels,	Ld (7am to	Le (7pm to	Ln (10pm to
	Leq from SOUNDPLAN		7pm)	10pm)	7am)
Receptor	Leq	CNEL	12	3	9
R1	41.1	47.8	41.1	41.1	41.1
R2	41.5	48.2	41.5	41.5	41.5
R3	42.3	49.0	42.3	42.3	42.3
R4	41.0	47.7	41.0	41.0	41.0
R5	41.9	48.6	41.9	41.9	41.9

		Ambient +			
	Ambient				Ambient +
Receptor	CNEL	(CNEL)	(CNEL)	ambient (Leq)	Project (Leq)
R1	58.4	58.8	0.4	53.4	53.6
R2	56.1	56.7	0.6	49.2	49.9
R3	61.5	61.7	0.2	56.1	56.3
R4	72.2	72.2	0.0	65.4	65.4
R5	70.5	70.5	0.0	62.9	62.9



Loading and Trash Compactor Noise Calculations Project: 1360 Vine Project RESIDENTIAL OPTION

	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	33.0	30.2	27.0	33.0	0.0
R2	19.7	17.2	13.7	19.7	0.0
R3	59.2	56.4	53.2	59.2	0.0
R4	23.3	20.6	17.3	23.3	0.0
R5	24.3	21.6	18.3	24.3	0.0

			Ambient +		Project		Ambient +
	Project	Ambient	Project	Increase	Noise,	daytime	Project
Receptor	CNEL	CNEL	(CNEL)	(CNEL)	(Leq)	ambient (Leq)	(Leq)
R1	30.2	58.4	58.4	0.0	33.0	55.0	55.0
R2	17.2	56.1	56.1	0.0	19.7	55.8	55.8
R3	56.4	61.5	62.7	1.2	59.2	59.0	62.1
R4	20.6	72.2	72.2	0.0	23.3	71.7	71.7
R5	21.6	70.5	70.5	0.0	24.3	70.6	70.6



Outdoor Noise Calculations

Project: 1360 Vine Project

RESIDENTIAL OPTION

Hours of Operations

						are or operan	
					Ld (7am to	Le (7pm to	Ln (10pm to
	Estimated nois	se levels, Leq	(FROM SOUN	DPLAN)	7pm)	10pm)	7am)
Receptor	Sound System	Occupants	Total, Leq	CNEL	12	3	4
R1	53.9	44.5	54.4	58.5	54.4	54.4	50.9
R2	50.9	38.6	51.1	55.2	51.1	51.1	47.6
R3	47.9	38.5	48.4	52.5	48.4	48.4	44.9
R4	47.7	34.1	47.9	52.0	47.9	47.9	44.4
R5	51.5	33.7	51.6	55.7	51.6	51.6	48.1

			Ambient +		Project		
		Ambient	Project	Increase	Noise,	Ambient	Ambient +
Receptor	Project (CNEL)	(CNEL)	(CNEL)	(CNEL)	(Leq)	(Leq)	Project (Leq)
R1	58.5	58.4	61.5	3.1	54.4	53.4	56.9
R2	55.2	56.1	58.7	2.6	51.1	49.2	53.3
R3	52.5	61.5	62.0	0.5	48.4	56.1	56.8
R4	52.0	72.2	72.2	0.0	47.9	65.4	65.5
R5	55.7	70.5	70.6	0.1	51.6	62.9	63.2

1360 Vine Project - Office Option Source Levels in dB(A) - Mechanical (Office Option)

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Name	Source type	Lw	
		dB(A)	
Mechanical (Office Option)	Point	100.0	
Mechanical (Office Option)	Point	100.0	
Mechanical (Office Option)	Point	100.0	
Mechanical (Office Option)	Point	100.0	
Mechanical (Office Option)	Point	100.0	
Mechanical (Office Option)	Point	100.0	
Mechanical (Office Option)	Point	100.0	
Mechanical (Office Option)	Point	100.0	
Mechanical (Office Option)	Point	100.0	
Mechanical (Office Option)	Point	100.0	

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Source	Source type	Leq,d	
300100	Course type	dB(A)	
D D4 1 44-7 10/4)		ub(A)	
Receiver R1 Ld 41.7 dB(A)	la · ·	I	
Mechanical (Office Option)	Point	29.7	
Mechanical (Office Option)	Point	31.8	
Mechanical (Office Option)	Point	33.0	
Mechanical (Office Option)	Point	26.9	
Mechanical (Office Option)	Point	29.7	
Mechanical (Office Option)	Point	32.7	
Mechanical (Office Option)	Point	32.3	
Mechanical (Office Option)	Point	33.2	
Mechanical (Office Option)	Point	32.9	
Mechanical (Office Option)	Point	31.5	
Receiver R2 Ld 39.8 dB(A)			
Mechanical (Office Option)	Point	29.7	
Mechanical (Office Option)	Point	29.7	
Mechanical (Office Option)	Point	29.8	
Mechanical (Office Option)	Point	23.6	
Mechanical (Office Option)	Point	23.5	
Mechanical (Office Option)	Point	32.8	
Mechanical (Office Option)	Point	32.4	
Mechanical (Office Option)	Point	32.3	
Mechanical (Office Option)	Point	26.9	
Mechanical (Office Option)	Point	27.1	
Receiver R3 Ld 36.8 dB(A)			
Mechanical (Office Option)	Point	29.6	
Mechanical (Office Option)	Point	25.1	
Mechanical (Office Option)	Point	25.5	
Mechanical (Office Option)	Point	22.7	
Mechanical (Office Option)	Point	23.2	
Mechanical (Office Option)	Point	28.0	
Mechanical (Office Option)	Point	29.1	
Mechanical (Office Option)	Point	30.2	
Mechanical (Office Option)	Point	21.1	
Mechanical (Office Option)	Point	22.7	
Receiver R4 Ld 39.8 dB(A)			
Mechanical (Office Option)	Point	25.6	
Mechanical (Office Option)	Point	28.7	
Mechanical (Office Option)	Point	32.0	
Mechanical (Office Option)	Point	29.6	
Mechanical (Office Option)	Point	28.9	
Mechanical (Office Option)	Point	26.7	
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1360 Vine Project - Office Option Contribution level - Mechanical (Office Option)

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Page 2

Source	Source type	Leq,d	
		dB(A)	
Mechanical (Office Option)	Point	28.5	
Mechanical (Office Option)	Point	30.6	
Mechanical (Office Option)	Point	31.8	
Mechanical (Office Option)	Point	31.5	
Receiver R5 Ld 37.5 dB(A)			
Mechanical (Office Option)	Point	22.4	
Mechanical (Office Option)	Point	23.0	
Mechanical (Office Option)	Point	25.0	
Mechanical (Office Option)	Point	31.7	
Mechanical (Office Option)	Point	28.9	
Mechanical (Office Option)	Point	21.2	
Mechanical (Office Option)	Point	22.4	
Mechanical (Office Option)	Point	24.1	
Mechanical (Office Option)	Point	31.4	
Mechanical (Office Option)	Point	28.8	

1360 Vine Project - Office Option Source Levels in dB(A) - Loading (Office Option)

3

Name	Source type	Lw
		dB(A)
Loading 1 (Office Option)	Point	102.0
Loading 2 (Office Option)	Point	102.0
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1360 Vine Project - Office Option Contribution level - Loading (Office Option)

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Source	Source type	Leq,d	
		dB(A)	
Receiver R1 Ld 28.1 dB(A)			
Loading 2 (Office Option)	Point	27.8	
Loading 1 (Office Option)	Point	15.7	
Receiver R2 Ld 17.3 dB(A)			
Loading 2 (Office Option)	Point	14.4	
Loading 1 (Office Option)	Point	14.2	
Receiver R3 Ld 59.8 dB(A)			
Loading 2 (Office Option)	Point	56.7	
Loading 1 (Office Option)	Point	56.8	
Receiver R4 Ld 22.4 dB(A)			
Loading 2 (Office Option)	Point	10.1	
Loading 1 (Office Option)	Point	22.1	
Receiver R5 Ld 16.2 dB(A)			
Loading 2 (Office Option)	Point	13.6	
Loading 1 (Office Option)	Point	12.8	
			_

1360 Vine Project - Office Option Source Levels in dB(A) - People (Office Option)

3

Name	Source type	Lw	
		-ID(A)	
Pania Laval 4 Office Ontice	A 11.0 0	dB(A)	
eople Level 1 Office Option	Area	85.9	
People Level 17 (Office Option)	Area	91.0	

1360 Vine Project - Office Option Contribution level - People (Office Option)

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Source	Source type	Leq,d			
		dB(A)			
Receiver R1 Ld 40.8 dB(A)					
People Level 1 Office Option	Area	40.8			
People Level 17 (Office Option)	Area	17.6			
Receiver R2 Ld 41.4 dB(A)					
People Level 1 Office Option	Area	41.4			
People Level 17 (Office Option)	Area	22.0			
Receiver R3 Ld 36.2 dB(A)					
People Level 1 Office Option	Area	35.7			
People Level 17 (Office Option)	Area	26.4			
Receiver R4 Ld 24.8 dB(A)					
People Level 1 Office Option	Area	24.3			
People Level 17 (Office Option)	Area	15.3			
Receiver R5 Ld 23.0 dB(A)					
People Level 1 Office Option	Area	6.6			
People Level 17 (Office Option)	Area	22.9			
	·	·			

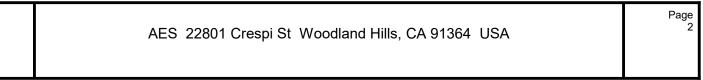
Name	Source type	Lw	
		dB(A)	
Speaker Level 1 (Office Option)	Point	93.6	
Speaker Level 1 (Office Option)	Point	93.6	
Speaker Level 1 (Office Option)	Point	93.6	
Speaker Level 1 (Office Option)	Point	93.6	
Speaker Level 1 (Office Option)	Point	93.6	
Speaker Level 1 (Office Option)	Point	93.6	
Speakers Level 17 (Office Option)	Point	118.6	
Speakers Level 17 (Office Option)	Point	118.6	
Speakers Level 17 (Office Option)	Point	118.6	
Speakers Level 17 (Office Option)	Point	118.6	
Speakers Level 17 (Office Option)	Point	118.6	
Speakers Level 17 (Office Option)	Point	118.6	

Source	Source type	Leq,d			
	1	dB(A)			
Receiver R1 Ld 48.7 dB(A)					
Speaker Level 1 (Office Option) Point					
Speaker Level 1 (Office Option)	Point	35.7 38.3			
Speaker Level 1 (Office Option)	Point	37.6			
Speaker Level 1 (Office Option)	Point	45.7			
Speaker Level 1 (Office Option)	Point	39.0			
Speaker Level 1 (Office Option)	Point	39.3			
Speakers Level 17 (Office Option)	Point	26.0			
Speakers Level 17 (Office Option)	Point	28.6			
Speakers Level 17 (Office Option)	Point	21.9			
Speakers Level 17 (Office Option)	Point	21.1			
Speakers Level 17 (Office Option)	Point	31.9			
Speakers Level 17 (Office Option)	Point	32.7			
Receiver R2 Ld 45.8 dB(A)					
Speaker Level 1 (Office Option)	Point	40.7			
Speaker Level 1 (Office Option)	Point	34.9			
Speaker Level 1 (Office Option)	Point	30.3			
Speaker Level 1 (Office Option)	Point	31.9			
Speaker Level 1 (Office Option)	Point	33.5			
Speaker Level 1 (Office Option)	Point	30.7			
Speakers Level 17 (Office Option)	Point	33.4			
Speakers Level 17 (Office Option)	Point	40.8			
Speakers Level 17 (Office Option)	Point	23.3			
Speakers Level 17 (Office Option)	Point	22.5			
Speakers Level 17 (Office Option)	Point	30.5			
Speakers Level 17 (Office Option)	Point	31.6			
Receiver R3 Ld 47.3 dB(A)					
Speaker Level 1 (Office Option)	Point	26.8			
Speaker Level 1 (Office Option)	Point	25.3			
Speaker Level 1 (Office Option)	Point	25.9			
Speaker Level 1 (Office Option)	Point	32.4			
Speaker Level 1 (Office Option)	Point	28.4			
Speaker Level 1 (Office Option)	Point	33.5			
Speakers Level 17 (Office Option)	Point	38.1			
Speakers Level 17 (Office Option)	Point	39.5			
Speakers Level 17 (Office Option)	Point	35.1			
Speakers Level 17 (Office Option)	Point	34.5			
Speakers Level 17 (Office Option)	Point	40.7			
Speakers Level 17 (Office Option)	Point	41.6			
Receiver R4 Ld 39.9 dB(A)					

1360 Vine Project - Office Option Contribution level - Speakers (Office Option)

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Source	Source type	Leq,d	
		dB(A)	
Speaker Level 1 (Office Option)	Point	4.9	
Speaker Level 1 (Office Option)	Point	21.3	
Speaker Level 1 (Office Option)	Point	21.6	
Speaker Level 1 (Office Option)	Point	11.8	
Speaker Level 1 (Office Option)	Point	23.0	
Speaker Level 1 (Office Option)	Point	13.6	
Speakers Level 17 (Office Option)	Point	37.6	
Speakers Level 17 (Office Option)	Point	24.5	
Speakers Level 17 (Office Option)	Point	17.0	
Speakers Level 17 (Office Option)	Point	17.4	
Speakers Level 17 (Office Option)	Point	33.0	
Speakers Level 17 (Office Option)	Point	30.3	
Receiver R5 Ld 43.4 dB(A)			
Speaker Level 1 (Office Option)	Point	-6.3	
Speaker Level 1 (Office Option)	Point	-7.1	
Speaker Level 1 (Office Option)	Point	-7.0	
Speaker Level 1 (Office Option)	Point	-2.6	
Speaker Level 1 (Office Option)	Point	4.8	
Speaker Level 1 (Office Option)	Point	-1.3	
Speakers Level 17 (Office Option)	Point	40.5	
Speakers Level 17 (Office Option)	Point	38.3	
Speakers Level 17 (Office Option)	Point	28.6	
Speakers Level 17 (Office Option)	Point	32.0	
Speakers Level 17 (Office Option)	Point	29.5	
Speakers Level 17 (Office Option)	Point	29.0	



Name	Source type	Lw	
		dB(A)	
MECHANICAL 1 (Residential Option)	Point	100.0	
MECHANICAL 2 (Residential Option)	Point	100.0	
MECHANICAL 3 (Residential Option)	Point	100.0	
MECHANICAL 4 (Residential Option)	Point	100.0	
MECHANICAL 5 (Residential Option)	Point	100.0	
MECHANICAL 6 (Residential Option)	Point	100.0	
MECHANICAL 7 (Residential Option)	Point	100.0	
MECHANICAL 8 (Residential Option)	Point	100.0	
MECHANICAL 9 (Residential Option)	Point	100.0	
MECHANICAL 10 (Residential Option)	Point	100.0	
MECHANICAL 11 (Residential Option)	Point	100.0	
MECHANICAL 12 (Residential Option)	Point	100.0	

1360 Vine Project - Residential Option Assessed contribution level - Mechanical (Residential Option)

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Receiver R1	Source	Ld	
Receiver R1 Ld 41.1 dB(A)	304.00		
MECHANICAL 1 (Residential Option) 28.2 MECHANICAL 2 (Residential Option) 28.8 MECHANICAL 3 (Residential Option) 29.2 MECHANICAL 4 (Residential Option) 30.1 MECHANICAL 6 (Residential Option) 30.1 MECHANICAL 7 (Residential Option) 33.9 MECHANICAL 7 (Residential Option) 29.5 MECHANICAL 9 (Residential Option) 29.5 MECHANICAL 10 (Residential Option) 30.5 MECHANICAL 11 (Residential Option) 29.2 MECHANICAL 12 (Residential Option) 28.9 MECHANICAL 12 (Residential Option) 28.9 MECHANICAL 12 (Residential Option) 27.8 MECHANICAL 2 (Residential Option) 29.6 MECHANICAL 2 (Residential Option) 29.0 MECHANICAL 5 (Residential Option) 29.0 MECHANICAL 5 (Residential Option) 29.3 MECHANICAL 5 (Residential Option) 32.2 MECHANICAL 6 (Residential Option) 32.2 MECHANICAL 8 (Residential Option) 32.2 MECHANICAL 1 (Residential Option) 32.2 MECHANICAL 1 (Residential Option) 29.9	Desciver D1 Ld 44.4 dD(A)	(I)	
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	MECHANICAL 12 (Residential Option)	29.2	

1360 Vine Project - Residential Option Assessed contribution level - Mechanical (Residential Option)

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Source	Ld	
	dB(A)	
Receiver R4 Ld 41.0 dB(A)	(, ,	
MECHANICAL 1 (Residential Option)	28.4	
MECHANICAL 2 (Residential Option)	33.4	
MECHANICAL 3 (Residential Option)	28.2	
MECHANICAL 4 (Residential Option)	28.1	
MECHANICAL 5 (Residential Option)	29.8	
MECHANICAL 6 (Residential Option)	26.4	
MECHANICAL 7 (Residential Option)	33.2	
MECHANICAL 8 (Residential Option)	28.0	
MECHANICAL 9 (Residential Option)	27.2	
MECHANICAL 10 (Residential Option)	30.0	
MECHANICAL 11 (Residential Option)	27.0	
MECHANICAL 12 (Residential Option)	33.4	
Receiver R5 Ld 41.9 dB(A)		
MECHANICAL 1 (Residential Option)	33.4	
MECHANICAL 2 (Residential Option)	33.3	
MECHANICAL 3 (Residential Option)	33.3	
MECHANICAL 4 (Residential Option)	33.4	
MECHANICAL 5 (Residential Option)	33.3	
MECHANICAL 6 (Residential Option)	27.8	
MECHANICAL 7 (Residential Option)	27.5	
MECHANICAL 8 (Residential Option)	27.6	
MECHANICAL 9 (Residential Option)	27.7	
MECHANICAL 10 (Residential Option)	27.5	
MECHANICAL 11 (Residential Option)	29.6	
MECHANICAL 12 (Residential Option)	29.1	

1360 Vine Project - Residential Option Source Levels in dB(A) - Loading (Residential Option)

3

Name	Source type	Lw
		dB(A)
Loading 1 (Residential Option)	Point	102.0
Loading 2 (Residential Option)	Point	102.0

1360 Vine Project - Residential Option Assessed contribution level - Loading (Residential Option)

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Source	Source type	Ld		
		dB(A)		
Receiver R1 FI G Ld 33.0 dB(A)				
Loading 1 (Residential Option)	Point	30.0		
Loading 2 (Residential Option)	Point	29.9		
Receiver R2 FI G Ld 19.7 dB(A)				
Loading 1 (Residential Option)	Point	16.8		
Loading 2 (Residential Option)	Point	16.7		
Receiver R3 FI G Ld 59.2 dB(A)				
Loading 1 (Residential Option)	Point	56.5		
Loading 2 (Residential Option)	Point	56.0		
Receiver R4 FI G Ld 23.3 dB(A)	Receiver R4 FI G Ld 23.3 dB(A)			
Loading 1 (Residential Option)	Point	12.2		
Loading 2 (Residential Option)	Point	23.0		
Receiver R5 FI G Ld 24.3 dB(A)	Receiver R5 FI G Ld 24.3 dB(A)			
Loading 1 (Residential Option)	Point	23.0		
Loading 2 (Residential Option)	Point	18.3		

1360 Vine Project - Residential Option Source Levels in dB(A) - People (Residential Option)

3

Name	Source type	Lw
		dB(A)
Level 10 People (Residential Option)	Area	95.4
People Level 1 (Residential Option)	Area	85.3

1360 Vine Project - Residential Option Assessed contribution level - People (Residential Option)

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Source	Ld		
	dB(A)		
Receiver R1 Ld 44.5 dB(A)			
People Level 1 (Residential Option)	44.2		
Level 10 People (Residential Option)	33.2		
Receiver R2 Ld 38.6 dB(A)			
People Level 1 (Residential Option)	36.6		
Level 10 People (Residential Option)	34.3		
Receiver R3 Ld 38.5 dB(A)			
People Level 1 (Residential Option)	37.7		
Level 10 People (Residential Option)	31.0		
Receiver R4 Ld 34.1 dB(A)			
People Level 1 (Residential Option)	19.7		
Level 10 People (Residential Option)	33.9		
Receiver R5 Ld 33.7 dB(A)			
People Level 1 (Residential Option)	9.4		
Level 10 People (Residential Option)	33.6		

Name	Source type	Lw	
		dB(A)	
Speakers Level 1 (Residential Option)	Point	93.6	
Speakers Level 1 (Residential Option)	Point	93.6	
Speakers Level 1 (Residential Option)	Point	93.6	
Speakers Level 1 (Residential Option)	Point	93.6	
Speakers Level 1 (Residential Option)	Point	93.6	
Speakers Level 1 (Residential Option)	Point	93.6	
Speakers Level 1 (Residential Option)	Point	93.6	
Speakers Level 1 (Residential Option)	Point	93.6	
Speakers Level 10 (Residential Option)	Point	118.6	
Speakers Level 10 (Residential Option)	Point	118.6	
Speakers Level 10 (Residential Option)	Point	118.6	
Speakers Level 10 (Residential Option)	Point	118.6	
Speakers Level 10 (Residential Option)	Point	118.6	
Speakers Level 10 (Residential Option)	Point	118.6	

1360 Vine Project - Residential Option Assessed contribution level - Speakers (Residential Option)

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Source	Ld	
	dB(A)	
Receiver R1 Ld 53.9 dB(A)	,	
Speakers Level 1 (Residential Option)	48.9	
Speakers Level 1 (Residential Option)	34.7	
Speakers Level 1 (Residential Option)	37.8	
Speakers Level 1 (Residential Option)	42.5	
Speakers Level 1 (Residential Option)	31.2	
Speakers Level 1 (Residential Option)	44.3	
Speakers Level 1 (Residential Option)	28.3	
Speakers Level 1 (Residential Option)	46.8	
Speakers Level 10 (Residential Option)	43.7	
Speakers Level 10 (Residential Option)	34.8	
Speakers Level 10 (Residential Option)	41.1	
Speakers Level 10 (Residential Option)	34.3	
Speakers Level 10 (Residential Option)	34.3	
Speakers Level 10 (Residential Option)	43.0	
Receiver R2 Ld 50.9 dB(A)		
Speakers Level 1 (Residential Option)	32.1	
Speakers Level 1 (Residential Option)	35.0	
Speakers Level 1 (Residential Option)	41.4	
Speakers Level 1 (Residential Option)	29.4	
Speakers Level 1 (Residential Option)	37.3	
Speakers Level 1 (Residential Option)	33.1	
Speakers Level 1 (Residential Option)	30.9	
Speakers Level 1 (Residential Option)	10.3	
Speakers Level 10 (Residential Option)	45.5	
Speakers Level 10 (Residential Option)	33.5	
Speakers Level 10 (Residential Option)	46.9	
Speakers Level 10 (Residential Option)	33.2	
Speakers Level 10 (Residential Option)	33.2	
Speakers Level 10 (Residential Option)	36.9	

1360 Vine Project - Residential Option Assessed contribution level - Speakers (Residential Option)

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Source	Ld	
	dB(A)	
Receiver R3 Ld 47.9 dB(A)	,	
Speakers Level 1 (Residential Option)	38.9	
Speakers Level 1 (Residential Option)	27.3	
Speakers Level 1 (Residential Option)	27.6	
Speakers Level 1 (Residential Option)	30.7	
Speakers Level 1 (Residential Option)	30.8	
Speakers Level 1 (Residential Option)	44.5	
Speakers Level 1 (Residential Option)	36.7	
Speakers Level 1 (Residential Option)	6.6	
Speakers Level 10 (Residential Option)	39.2	
Speakers Level 10 (Residential Option)	33.5	
Speakers Level 10 (Residential Option)	37.8	
Speakers Level 10 (Residential Option)	25.5	
Speakers Level 10 (Residential Option)	25.7	
Speakers Level 10 (Residential Option)	24.6	
Receiver R4 Ld 47.7 dB(A)		
Speakers Level 1 (Residential Option)	17.0	
Speakers Level 1 (Residential Option)	21.1	
Speakers Level 1 (Residential Option)	0.9	
Speakers Level 1 (Residential Option)	27.6	
Speakers Level 1 (Residential Option)	13.7	
Speakers Level 1 (Residential Option)	-0.6	
Speakers Level 1 (Residential Option)	5.1	
Speakers Level 1 (Residential Option)	33.9	
Speakers Level 10 (Residential Option)	40.5	
Speakers Level 10 (Residential Option)	41.7	
Speakers Level 10 (Residential Option)	33.8	
Speakers Level 10 (Residential Option)	38.5	
	37.9	
Speakers Level 10 (Residential Option) Speakers Level 10 (Residential Option)	41.5	

1360 Vine Project - Residential Option Assessed contribution level - Speakers (Residential Option)

Source	Ld	
	dB(A)	
Receiver R5 Ld 51.5 dB(A)		
Speakers Level 1 (Residential Option)	-2.1	
Speakers Level 1 (Residential Option)	11.0	
Speakers Level 1 (Residential Option)	-4.3	
Speakers Level 1 (Residential Option)	9.1	
Speakers Level 1 (Residential Option)	-1.8	
Speakers Level 1 (Residential Option)	0.8	
Speakers Level 1 (Residential Option)	0.4	
Speakers Level 1 (Residential Option)	-3.6	
Speakers Level 10 (Residential Option)	34.2	
Speakers Level 10 (Residential Option)	46.0	
Speakers Level 10 (Residential Option)	34.4	
Speakers Level 10 (Residential Option)	46.6	
Speakers Level 10 (Residential Option)	46.9	
Speakers Level 10 (Residential Option)	22.2	



Project: 1360 Vine Project - RESIDENTIAL OPTION

Traffic Distribution as % of ADT				
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		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
Vine Street										
 Between Hollywood Blvd. and Sunset Blvd. 	70	10	45	35	2,163	21,630	10%	0	0	71.7
- Between Sunset Blvd. and De Longpre Ave.	70	10	45	35	2,355	23,550	10%	0	0	72.1
- Between De Longpre Ave. and Fountain Ave.	70	10	45	35	2,332	23,320	10%	0	0	72.0
- Between Fountain Ave. and Santa Monica	70	10	45	35	2,325	23,250	10%	0	0	72.0
Sunset Boulevard										
- Between Ivar Ave. and Vine St.	70	10	45	35	2,558	25,580	10%	0	0	72.4
- Between Vine St. and El Centro Ave.	70	10	45	35	2,712	27,120	10%	0	0	72.7
De Longpre										
- Between Ivar Ave. and Vine St.	40	10	30	30	456	4,560	10%	0	0	66.6
 Between Vine St. and El Centro Ave. 	40	10	30	30	238	2,380	10%	0	0	63.8
Fountain Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	30	983	9,830	10%	0	0	70.0
- Between Vine St. and El Centro Ave.	40	10	30	30	973	9,730	10%	0	0	69.9
Homewood Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	25	46	460	10%	0	0	56.9
Afton Place										
- Between Vine St. and El Centro Ave.	40	10	30	25	52	520	10%	0	0	57.4

^{*} Estimated based on Google Earth map.

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



Project: 1360 Vine Project - RESIDENTIAL OPTION

Traffic Distribution as % of ADT				
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 (SCENARIO 1)	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
Vine Street										
 Between Hollywood Blvd. and Sunset Blvd. 	70	10	45	35	2,175	21,750	10%	0	0	71.7
 Between Sunset Blvd. and De Longpre Ave. 	70	10	45	35	2,409	24,090	10%	0	0	72.2
- Between De Longpre Ave. and Fountain Ave.	70	10	45	35	2,417	24,170	10%	0	0	72.2
- Between Fountain Ave. and Santa Monica	70	10	45	35	2,354	23,540	10%	0	0	72.1
Sunset Boulevard										
- Between Ivar Ave. and Vine St.	70	10	45	35	2,591	25,910	10%	0	0	72.5
 Between Vine St. and El Centro Ave. 	70	10	45	35	2,722	27,220	10%	0	0	72.7
De Longpre										
- Between Ivar Ave. and Vine St.	40	10	30	30	475	4,750	10%	0	0	66.8
 Between Vine St. and El Centro Ave. 	40	10	30	30	331	3,310	10%	0	0	65.3
Fountain Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	30	1,036	10,360	10%	0	0	70.2
 Between Vine St. and El Centro Ave. 	40	10	30	30	985	9,850	10%	0	0	70.0
Homewood Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	25	47	470	10%	0	0	57.0
Afton Place										
- Between Vine St. and El Centro Ave.	40	10	30	25	63	630	10%	0	0	58.2

^{*} Estimated based on Google Earth map.

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



Project: 1360 Vine Project - RESIDENTIAL OPTION

Traffic Distribution as % of ADT				
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 NO PROJECT 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
Vine Street										
 Between Hollywood Blvd. and Sunset Blvd. 	70	10	45	35	2,592	25,920	10%	0	0	72.5
 Between Sunset Blvd. and De Longpre Ave. 	70	10	45	35	2,938	29,380	10%	0	0	73.0
- Between De Longpre Ave. and Fountain Ave.	70	10	45	35	2,910	29,100	10%	0	0	73.0
- Between Fountain Ave. and Santa Monica	70	10	45	35	2,909	29,090	10%	0	0	73.0
Sunset Boulevard										
- Between Ivar Ave. and Vine St.	70	10	45	35	3,851	38,510	10%	0	0	74.2
- Between Vine St. and El Centro Ave.	70	10	45	35	4,182	41,820	10%	0	0	74.6
De Longpre										
- Between Ivar Ave. and Vine St.	40	10	30	30	708	7,080	10%	0	0	68.6
- Between Vine St. and El Centro Ave.	40	10	30	30	257	2,570	10%	0	0	64.2
Fountain Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	30	1,157	11,570	10%	0	0	70.7
- Between Vine St. and El Centro Ave.	40	10	30	30	1,110	11,100	10%	0	0	70.5
Homewood Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	25	132	1,320	10%	0	0	61.5
Afton Place										
- Between Vine St. and El Centro Ave.	40	10	30	25	54	540	10%	0	0	57.6

^{*} Estimated based on Google Earth map.

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



Project: 1360 Vine Project - RESIDENTIAL OPTION

Traffic Distribution as % of ADT				
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 (SCENARIO 1)	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
Vine Street										
 Between Hollywood Blvd. and Sunset Blvd. 	70	10	45	35	2,604	26,040	10%	0	0	72.5
 Between Sunset Blvd. and De Longpre Ave. 	70	10	45	35	2,992	29,920	10%	0	0	73.1
- Between De Longpre Ave. and Fountain Ave.	70	10	45	35	2,995	29,950	10%	0	0	73.1
- Between Fountain Ave. and Santa Monica	70	10	45	35	2,938	29,380	10%	0	0	73.0
Sunset Boulevard										
- Between Ivar Ave. and Vine St.	70	10	45	35	3,884	38,840	10%	0	0	74.2
- Between Vine St. and El Centro Ave.	70	10	45	35	4,192	41,920	10%	0	0	74.6
De Longpre										
- Between Ivar Ave. and Vine St.	40	10	30	30	727	7,270	10%	0	0	68.7
- Between Vine St. and El Centro Ave.	40	10	30	30	350	3,500	10%	0	0	65.5
Fountain Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	30	1,210	12,100	10%	0	0	70.9
- Between Vine St. and El Centro Ave.	40	10	30	30	1,122	11,220	10%	0	0	70.6
Homewood Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	25	134	1,340	10%	0	0	61.5
Afton Place										
- Between Vine St. and El Centro Ave.	40	10	30	25	65	650	10%	0	0	58.4

^{*} Estimated based on Google Earth map.

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



Project: 1360 Vine Project - OFFICE OPTION

Traffic Distribution as % of ADT				
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		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
Vine Street										
 Between Hollywood Blvd. and Sunset Blvd. 	70	10	45	35	2,163	21,630	10%	0	0	71.7
- Between Sunset Blvd. and De Longpre Ave.	70	10	45	35	2,355	23,550	10%	0	0	72.1
- Between De Longpre Ave. and Fountain Ave.	70	10	45	35	2,332	23,320	10%	0	0	72.0
- Between Fountain Ave. and Santa Monica	70	10	45	35	2,325	23,250	10%	0	0	72.0
Sunset Boulevard										
- Between Ivar Ave. and Vine St.	70	10	45	35	2,558	25,580	10%	0	0	72.4
- Between Vine St. and El Centro Ave.	70	10	45	35	2,712	27,120	10%	0	0	72.7
De Longpre										
- Between Ivar Ave. and Vine St.	40	10	30	30	456	4,560	10%	0	0	66.6
- Between Vine St. and El Centro Ave.	40	10	30	30	238	2,380	10%	0	0	63.8
Fountain Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	30	983	9,830	10%	0	0	70.0
- Between Vine St. and El Centro Ave.	40	10	30	30	973	9,730	10%	0	0	69.9
Homewood Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	25	46	460	10%	0	0	56.9
Afton Place										
- Between Vine St. and El Centro Ave.	40	10	30	25	52	520	10%	0	0	57.4

^{*} Estimated based on Google Earth map.

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



Project: 1360 Vine Project - OFFICE OPTION

Traffic Distribution as % of ADT				
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 (SCENARIO 1)	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
Vine Street										
- Between Hollywood Blvd. and Sunset Blvd.	70	10	45	35	2,184	21,840	10%	0	0	71.7
- Between Sunset Blvd. and De Longpre Ave.	70	10	45	35	2,495	24,950	10%	0	0	72.3
- Between De Longpre Ave. and Fountain Ave.	70	10	45	35	2,447	24,470	10%	0	0	72.2
- Between Fountain Ave. and Santa Monica	70	10	45	35	2,391	23,910	10%	0	0	72.1
Sunset Boulevard										
- Between Ivar Ave. and Vine St.	70	10	45	35	2,617	26,170	10%	0	0	72.5
- Between Vine St. and El Centro Ave.	70	10	45	35	2,772	27,720	10%	0	0	72.8
De Longpre										
- Between Ivar Ave. and Vine St.	40	10	30	30	485	4,850	10%	0	0	66.9
- Between Vine St. and El Centro Ave.	40	10	30	30	440	4,400	10%	0	0	66.5
Fountain Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	30	1,057	10,570	10%	0	0	70.3
- Between Vine St. and El Centro Ave.	40	10	30	30	984	9,840	10%	0	0	70.0
Homewood Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	25	46	460	10%	0	0	56.9
Afton Place										
- Between Vine St. and El Centro Ave.	40	10	30	25	58	580	10%	0	0	57.9

^{*} Estimated based on Google Earth map.

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



Project: 1360 Vine Project - OFFICE OPTION

Traffic Distribution as % of ADT				
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 (SCENARIO 2)	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
Vine Street										
 Between Hollywood Blvd. and Sunset Blvd. 	70	10	45	35	2,188	21,880	10%	0	0	71.8
- Between Sunset Blvd. and De Longpre Ave.	70	10	45	35	2,505	25,050	10%	0	0	72.3
- Between De Longpre Ave. and Fountain Ave.	70	10	45	35	2,435	24,350	10%	0	0	72.2
- Between Fountain Ave. and Santa Monica	70	10	45	35	2,389	23,890	10%	0	0	72.1
Sunset Boulevard										
- Between Ivar Ave. and Vine St.	70	10	45	35	2,620	26,200	10%	0	0	72.5
- Between Vine St. and El Centro Ave.	70	10	45	35	2,776	27,760	10%	0	0	72.8
De Longpre										
- Between Ivar Ave. and Vine St.	40	10	30	30	483	4,830	10%	0	0	66.9
- Between Vine St. and El Centro Ave.	40	10	30	30	472	4,720	10%	0	0	66.8
Fountain Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	30	1,058	10,580	10%	0	0	70.3
- Between Vine St. and El Centro Ave.	40	10	30	30	974	9,740	10%	0	0	69.9
Homewood Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	25	46	460	10%	0	0	56.9
Afton Place										
- Between Vine St. and El Centro Ave.	40	10	30	25	135	1,350	10%	0	0	61.6

^{*} Estimated based on Google Earth map.

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



Project: 1360 Vine Project - OFFICE OPTION

Traffic Distribution as % of ADT				
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 (SCENARIO 3)	Roadway	Distance to Edge of	Distance to Centerline,	Speed	Troffic	Volume	PHV to	Barrier	Site	24-Hour
Roadway Segment	Width*, ft	Roadway, ft	feet	mph	PHV	ADT	ADT factor	Atten.	Adjust., dBA	CNEL
Vine Street										
 Between Hollywood Blvd. and Sunset Blvd. 	70	10	45	35	2,188	21,880	10%	0	0	71.8
- Between Sunset Blvd. and De Longpre Ave.	70	10	45	35	2,505	25,050	10%	0	0	72.3
- Between De Longpre Ave. and Fountain Ave.	70	10	45	35	2,454	24,540	10%	0	0	72.3
- Between Fountain Ave. and Santa Monica	70	10	45	35	2,430	24,300	10%	0	0	72.2
Sunset Boulevard										
- Between Ivar Ave. and Vine St.	70	10	45	35	2,620	26,200	10%	0	0	72.5
- Between Vine St. and El Centro Ave.	70	10	45	35	2,776	27,760	10%	0	0	72.8
De Longpre										
- Between Ivar Ave. and Vine St.	40	10	30	30	483	4,830	10%	0	0	66.9
- Between Vine St. and El Centro Ave.	40	10	30	30	472	4,720	10%	0	0	66.8
Fountain Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	30	1,058	10,580	10%	0	0	70.3
- Between Vine St. and El Centro Ave.	40	10	30	30	992	9,920	10%	0	0	70.0
Homewood Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	25	46	460	10%	0	0	56.9
Afton Place										
- Between Vine St. and El Centro Ave.	40	10	30	25	177	1,770	10%	0	0	62.7

^{*} Estimated based on Google Earth map.

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



Project: 1360 Vine Project - OFFICE OPTION

Traffic Distribution as % of ADT				
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 NO PROJECT 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
Vine Street										
 Between Hollywood Blvd. and Sunset Blvd. 	70	10	45	35	2,592	25,920	10%	0	0	72.5
 Between Sunset Blvd. and De Longpre Ave. 	70	10	45	35	2,938	29,380	10%	0	0	73.0
- Between De Longpre Ave. and Fountain Ave.	70	10	45	35	2,910	29,100	10%	0	0	73.0
- Between Fountain Ave. and Santa Monica	70	10	45	35	2,909	29,090	10%	0	0	73.0
Sunset Boulevard										
- Between Ivar Ave. and Vine St.	70	10	45	35	3,851	38,510	10%	0	0	74.2
- Between Vine St. and El Centro Ave.	70	10	45	35	4,182	41,820	10%	0	0	74.6
De Longpre										
- Between Ivar Ave. and Vine St.	40	10	30	30	708	7,080	10%	0	0	68.6
- Between Vine St. and El Centro Ave.	40	10	30	30	257	2,570	10%	0	0	64.2
Fountain Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	30	1,157	11,570	10%	0	0	70.7
- Between Vine St. and El Centro Ave.	40	10	30	30	1,110	11,100	10%	0	0	70.5
Homewood Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	25	132	1,320	10%	0	0	61.5
Afton Place										
- Between Vine St. and El Centro Ave.	40	10	30	25	54	540	10%	0	0	57.6

^{*} Estimated based on Google Earth map.

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



Project: 1360 Vine Project - OFFICE OPTION

Traffic Distribution as % of ADT				
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 (SCENARIO 1)	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
Vine Street										
 Between Hollywood Blvd. and Sunset Blvd. 	70	10	45	35	2,613	26,130	10%	0	0	72.5
 Between Sunset Blvd. and De Longpre Ave. 	70	10	45	35	3,079	30,790	10%	0	0	73.2
- Between De Longpre Ave. and Fountain Ave.	70	10	45	35	3,025	30,250	10%	0	0	73.2
- Between Fountain Ave. and Santa Monica	70	10	45	35	2,975	29,750	10%	0	0	73.1
Sunset Boulevard										
- Between Ivar Ave. and Vine St.	70	10	45	35	3,910	39,100	10%	0	0	74.3
- Between Vine St. and El Centro Ave.	70	10	45	35	4,243	42,430	10%	0	0	74.6
De Longpre										
- Between Ivar Ave. and Vine St.	40	10	30	30	737	7,370	10%	0	0	68.7
- Between Vine St. and El Centro Ave.	40	10	30	30	459	4,590	10%	0	0	66.7
Fountain Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	30	1,231	12,310	10%	0	0	71.0
- Between Vine St. and El Centro Ave.	40	10	30	30	1,121	11,210	10%	0	0	70.6
Homewood Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	25	133	1,330	10%	0	0	61.5
Afton Place										
- Between Vine St. and El Centro Ave.	40	10	30	25	60	600	10%	0	0	58.0

^{*} Estimated based on Google Earth map.

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



Project: 1360 Vine Project - OFFICE OPTION

Traffic Distribution as % of ADT				
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 (SCENARIO 2)	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
Vine Street										
 Between Hollywood Blvd. and Sunset Blvd. 	70	10	45	35	2,616	26,160	10%	0	0	72.5
 Between Sunset Blvd. and De Longpre Ave. 	70	10	45	35	3,088	30,880	10%	0	0	73.3
 Between De Longpre Ave. and Fountain Ave. 	70	10	45	35	3,012	30,120	10%	0	0	73.1
- Between Fountain Ave. and Santa Monica	70	10	45	35	2,973	29,730	10%	0	0	73.1
Sunset Boulevard										
- Between Ivar Ave. and Vine St.	70	10	45	35	3,913	39,130	10%	0	0	74.3
 Between Vine St. and El Centro Ave. 	70	10	45	35	4,246	42,460	10%	0	0	74.6
De Longpre										
- Between Ivar Ave. and Vine St.	40	10	30	30	735	7,350	10%	0	0	68.7
 Between Vine St. and El Centro Ave. 	40	10	30	30	491	4,910	10%	0	0	67.0
Fountain Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	30	1,232	12,320	10%	0	0	71.0
 Between Vine St. and El Centro Ave. 	40	10	30	30	1,111	11,110	10%	0	0	70.5
Homewood Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	25	132	1,320	10%	0	0	61.5
Afton Place										
- Between Vine St. and El Centro Ave.	40	10	30	25	137	1,370	10%	0	0	61.6

^{*} Estimated based on Google Earth map.

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



Project: 1360 Vine Project - OFFICE OPTION

Traffic Distribution as % of ADT				
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 (SCENARIO 3)	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
Vine Street										
 Between Hollywood Blvd. and Sunset Blvd. 	70	10	45	35	2,616	26,160	10%	0	0	72.5
 Between Sunset Blvd. and De Longpre Ave. 	70	10	45	35	3,088	30,880	10%	0	0	73.3
- Between De Longpre Ave. and Fountain Ave.	70	10	45	35	3,032	30,320	10%	0	0	73.2
- Between Fountain Ave. and Santa Monica	70	10	45	35	3,014	30,140	10%	0	0	73.1
Sunset Boulevard										
- Between Ivar Ave. and Vine St.	70	10	45	35	3,913	39,130	10%	0	0	74.3
- Between Vine St. and El Centro Ave.	70	10	45	35	4,246	42,460	10%	0	0	74.6
De Longpre										
- Between Ivar Ave. and Vine St.	40	10	30	30	735	7,350	10%	0	0	68.7
- Between Vine St. and El Centro Ave.	40	10	30	30	491	4,910	10%	0	0	67.0
Fountain Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	30	1,232	12,320	10%	0	0	71.0
- Between Vine St. and El Centro Ave.	40	10	30	30	1,130	11,300	10%	0	0	70.6
Homewood Avenue										
- Between Ivar Ave. and Vine St.	40	10	30	25	132	1,320	10%	0	0	61.5
Afton Place										
- Between Vine St. and El Centro Ave.	40	10	30	25	179	1,790	10%	0	0	62.8

^{*} Estimated based on Google Earth map.

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