Appendix H

Noise Calculation Worksheets

Sunset & Western Project

Noise Calculations Worksheets

Provided by Acoustical Engineering Services

Ambient Noise Measurements

AES
ACOUSTICAL ENGINEERING SERVICES

Location: R1 -
Date: 1/11/2018

Time	Overload	Leq	Lmax	L10	L90
10:20:25 AM	No	56.5	65.4	58.1	54.6
10:21:25 AM	No	61.2	65.7	64.6	56.3
10:22:25 AM	No	54.3	60.6	57.3	49.5
10:23:25 AM	No	57.3	66.8	62.1	50.5
10:24:25 AM	No	57.7	66.5	62.1	51.9
10:26:25 AM	No	55.1	61.7	57.8	51.3
10:27:25 AM	No	57.4	69.7	60.3	48.4
10:28:25 AM	No	54.5	62	58.5	49.1
10:29:25 AM	No	54.1	66	56.7	47.6
10:30:25 AM	No	56.2	64.5	61	49.3
10:31:25 AM	No	55.9	64.8	60	50.7
10:32:25 AM	No	68.6	80.9	73.4	50.7
10:33:25 AM	No	54.6	66.1	55.9	47.9
10:34:25 AM	No	57.1	63.1	60.5	52.9
		59.6			

Time	Overload	Leq	Lmax	L10	L90
10:03:57 PM	No	56.3	65.7	57.6	54.1
10:04:57 PM	No	57.5	64.7	60.1	54.2
10:05:57 PM	No	56	59.5	57.4	54.5
10:06:57 PM	No	55.5	57.8	56.4	54.4
10:07:57 PM	No	56.8	62.1	58.4	55.1
10:08:57 PM	No	57.6	61.7	60.1	55.7
10:09:57 PM	No	61	70.2	66.5	54.3
10:10:57 PM	No	55.4	58.4	56.8	54.2
10:11:57 PM	No	55.6	59.7	56.2	54.9
10:12:57 PM	No	57.1	61	59.1	55.2
10:13:57 PM	No	56.4	59.6	57.2	55.4
10:14:57 PM	No	62.1	68.8	66.5	54.2
10:15:57 PM	No	55.4	57	56.2	54.5
10:16:57 PM	No	57	61.8	58	55.6
10:17:57 PM	No	57	62.6	58.5	55.5
		57.6			

AES
ACOUSTICAL ENGINEERING SERVICES

Location: R2 -
Date: 1/11/2018

Time	Overload	Leq	Lmax	L10	L90
10:39:41 AM	No	53.5	63.6	56.9	48.3
10:40:41 AM	No	56.7	64.5	61.4	49.3
10:41:41 AM	No	52.2	59.8	53.7	48.1
10:42:41 AM	No	62.7	76.6	64.9	52.1
10:43:41 AM	No	51.8	56.4	54	48.4
10:45:41 AM	No	53.7	60.6	57.6	48
10:46:41 AM	No	54.2	62.4	55	51.9
10:47:41 AM	No	52.4	59.5	54.6	47.9
10:48:41 AM	No	52.8	58	55.8	48.3
10:49:41 AM	No	53.2	58.4	55.4	47.9
10:50:41 AM	No	54.2	59.1	57.9	48.6
10:51:41 AM	No	59	69.2	61.5	50.9
10:52:41 AM	No	58.1	72.8	59.4	50.6
10:53:41 AM	No	52.2	58.4	54.8	46.8
		56.1			

Time	Overload	Leq	Lmax	L10	L90
10:21:36 PM	No	54.9	57.9	56.6	52.9
10:22:36 PM	No	63.2	69.2	66.3	58.6
10:23:36 PM	No	63.3	69.6	68.6	57.1
10:24:36 PM	No	61.6	66.4	63.4	58.9
10:25:36 PM	No	56	63	58.3	50.7
10:26:36 PM	No	53	56.3	54.8	50.3
10:27:36 PM	No	54.5	60.2	57.1	51.2
10:28:36 PM	No	56.3	62	58.5	52.2
10:29:36 PM	No	54.6	62.3	56.3	50.7
10:30:36 PM	No	52.6	57	55.6	50.1
10:31:36 PM	No	57.8	67.6	61.8	50.3
10:32:36 PM	No	59	66.8	62	51.5
10:33:36 PM	No	56.1	62.8	59.7	52.5
10:34:36 PM	No	55.7	61.9	58.8	52
10:35:36 PM	No	54.8	60.7	56.2	52.8
		58.4			

AES
ACOUSTICAL ENGINEERING SERVICES

Location: R3
Date: 1/11/2018

Time	Overload	Leq	Lmax	L10	L90
10:59:09 AM	No	68.9	75.8	72.6	61.7
11:00:09 AM	No	66.7	72.2	68.8	62.8
11:01:09 AM	No	69.3	76.1	73.6	59.5
11:02:09 AM	No	65.2	70.7	69.1	58.7
11:03:09 AM	No	66.3	71.5	69.8	59.8
11:05:09 AM	No	65.1	71.6	68.4	58.3
11:06:09 AM	No	64.6	69.4	67	61.5
11:07:09 AM	No	71.9	79.1	76.5	59.7
11:08:09 AM	No	66.3	70.3	69.5	59.2
11:09:09 AM	No	66.4	73.6	69.7	61
11:10:09 AM	No	68.4	75.3	72.6	60.4
11:11:09 AM	No	65.4	74.7	68.5	58.8
11:12:09 AM	No	68.1	75.4	69.9	63.7
11:13:09 AM	No	68.8	73.8	71.9	63
		67.8			

Time	Overload	Leq	Lmax	L10	L90
10:39:25 PM	No	62.8	66.9	65.6	56.5
10:40:25 PM	No	65.3	72.3	69.5	57.1
10:41:25 PM	No	67.5	72.3	70.5	55.7
10:42:25 PM	No	65.4	72	69.5	59.6
10:43:25 PM	No	65.6	70.7	69.5	59.9
10:44:25 PM	No	66.8	72	70.3	56.1
10:45:25 PM	No	65.7	70.7	69.1	57.5
10:46:25 PM	No	67	72.6	70.3	59.6
10:47:25 PM	No	66.5	72	69.9	56.3
10:48:25 PM	No	63.1	70.1	67.7	56.4
10:49:25 PM	No	65.5	73.8	69.5	56.6
10:50:25 PM	No	65.4	69.3	68.7	59.4
10:51:25 PM	No	67.4	79.4	70.2	57.3
10:52:25 PM	No	65.5	71.5	69.9	58.8
10:53:25 PM	No	67.2	72.7	70.4	60
		66.0			

AES
ACOUSTICAL ENGINEERING SERVICES

Location: R4
Date: 1/11/2018

Time	Overload	Leq	Lmax	L10	L90
12:10:24 PM	No	72.4	85.6	74.2	60.2
12:11:24 PM	No	65.9	71.1	69.3	58.6
12:12:24 PM	No	61.3	66.4	64.8	57
12:13:24 PM	No	58	63.1	61.5	53.2
12:14:24 PM	No	58	66.4	62.8	51.5
12:16:24 PM	No	60.9	68.6	66.2	52.4
12:17:24 PM	No	57.5	64.9	61.9	51.4
12:18:24 PM	No	59.1	70.7	61.5	50.3
12:19:24 PM	No	59.7	70	64.4	52.3
12:20:24 PM	No	60.6	67.2	65	52.4
12:21:24 PM	No	60.5	71.1	62.8	52.2
12:22:24 PM	No	53.6	59.2	55.1	51.3
12:23:24 PM	No	57	65.8	58.8	52.8
12:24:24 PM	No	55	61.1	56.7	52.2
		63.2			

Time	Overload	Leq	Lmax	L10	L90
11:20:24 PM	No	61.3	73.6	62.6	51.5
11:21:24 PM	No	51.8	55	53.3	50.8
11:22:24 PM	No	54.2	59.9	58	50.9
11:23:24 PM	No	63.4	69.4	67.8	54.1
11:24:24 PM	No	53.9	58.5	54.5	52.7
11:25:24 PM	No	54	56.6	55.4	52.3
11:26:24 PM	No	54.5	59.7	56.4	52.7
11:27:24 PM	No	53	57.3	54.7	51.3
11:28:24 PM	No	53.9	59.3	54.8	52.5
11:29:24 PM	No	56.3	63.6	60.1	52.7
11:30:24 PM	No	53.4	56.1	55	52.5
11:31:24 PM	No	55.7	65.1	57.8	53
11:32:24 PM	No	52.8	55.9	54.1	51.4
11:33:24 PM	No	53.2	55.4	54.5	52.2
11:34:24 PM	No	52.8	55	53.7	52.1
		56.6			

AES
ACOUSTICAL ENGINEERING SERVICES

Location: R5
Date: 1/11/2018

Time	Overload	Leq	Lmax	L10	L90
11:46:56 AM	No	69.5	80.5	72.6	51.4
11:47:56 AM	No	53.8	59	57	50.7
11:48:56 AM	No	51.5	60.3	52.3	49.7
11:49:56 AM	No	69	81.1	71.7	50.7
11:50:56 AM	No	51.8	59.2	54.7	48.6
11:51:56 AM	No	57.9	64.3	62.1	53.2
11:52:56 AM	No	60.3	69.9	63.3	50.7
11:53:56 AM	No	58.2	70.2	59	50.7
11:54:56 AM	No	53.3	58.6	56.8	50
11:55:56 AM	No	56.6	65.5	58.8	50.9
11:56:56 AM	No	61	66.4	65	54.3
11:57:56 AM	No	57.1	64.5	60.8	52
11:58:56 AM	No	59.4	67.9	62.8	51.2
11:59:56 AM	No	54	60.3	57.1	49.3
12:00:56 PM	No	51.7	56.1	53.2	50.1
		61.9			

Time	Overload	Leq	Lmax	L10	L90
11:02:06 PM	No	55.8	63.4	58.1	52.5
11:03:06 PM	No	54.8	63.4	57.4	51.7
11:04:06 PM	No	57.1	62.7	60.5	52.7
11:05:06 PM	No	55.9	61.9	59	53.4
11:06:06 PM	No	55.6	63.5	59.7	51.6
11:07:06 PM	No	55.9	61.2	59.5	51.9
11:08:06 PM	No	56.9	63	60.1	53.9
11:09:06 PM	No	63	70.8	68.5	52.9
11:10:06 PM	No	53	57.3	54.5	51.7
11:11:06 PM	No	52.5	54.6	53.6	51.5
11:12:06 PM	No	53.3	63.5	54.4	51.8
11:13:06 PM	No	58	71.1	56.6	51.5
11:14:06 PM	No	52.1	54.9	53.3	51.1
11:15:06 PM	No	55.1	65	56	51.5
11:16:06 PM	No	53.6	59	55.3	52.3
		56.5			

Construction Noise & Vibration Calculations

Project: Sunset & Western Project

Construction Phase: ***Demolition***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Concrete Saw	1	90	20%	60	0
Excavator	1	81	40%	80	0
Rubber Tired Loader	1	79	40%	80	0
Skid Steer Loader	1	79	40%	100	0
Excavator	1	81	40%	100	0
Generator	1	81	50%	125	0
Water Truck	1	82	10%	125	0

7

Receptor: ***R1***

Results:

1-hour Leq: 83.1

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Shoring/Excavation***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Bore/Drill Rig	1	84	20%	60	0
Excavator	1	81	40%	80	0
Rubber Tired Loader	1	79	40%	80	0
Crane	1	81	16%	100	0
Welders	1	74	40%	100	0
Bore/Drill Rig	1	84	20%	125	0
Excavator	1	81	40%	125	0
Concrete Pump	1	81	20%	150	0
Generator	1	81	50%	150	0
Water Truck	1	82	10%	150	0

10

Receptor: ***R1***

Results:

1-hour Leq: 80.1

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Matt Foundation***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactor	1	83	20%	60	0
Crane	1	81	16%	80	0
Concrete Pump	1	81	20%	80	0
Concrete Pump	1	81	20%	100	0
Fork Lift	1	75	20%	100	0
Plate Compactor	1	83	20%	125	0
Fork Lift	1	75	20%	125	0
Plate Compactor	1	83	20%	150	0
Fork Lift	1	75	20%	150	0
Plate Compactor	1	83	20%	150	0
Generator	1	81	50%	150	0
	11				

Receptor: ***R1***

Results:

1-hour Leq: 78.9

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Building Construction***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Concrete Saw	1	90	20%	60	0
Crane	1	81	16%	80	0
Cement and Mortar Mixer	1	80	50%	80	0
Air Compressor	1	78	40%	100	0
Aerial Lift	1	75	20%	100	0
Fork Lift	1	75	20%	125	0
Air Compressor	1	78	40%	125	0
Tractor/Loader/Backhoe	1	79	40%	150	0
Welders	2	74	40%	150	0
Crane	1	81	16%	150	0
Aerial Lift	1	75	20%	150	0
Fork Lift	1	75	20%	150	0
Air Compressor	1	78	40%	150	0
Aerial Lift	1	75	20%	150	0
Fork Lift	1	75	20%	150	0
	16				

Receptor: ***R1***

Results:

1-hour Leq: 82.9

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: Building Finishing

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Air Compressor	1	78	40%	60	0
Aerial Lift	1	75	20%	80	0
Air Compressor	1	78	40%	80	0
Aerial Lift	1	75	20%	100	0
Air Compressor	1	78	40%	100	0
Aerial Lift	1	75	20%	125	0
Air Compressor	1	78	40%	125	0
Aerial Lift	1	75	20%	150	0

8

Receptor: ***R1***

Results:

1-hour Leq: 76.4

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
Acoustical Engineering Services

Project: Sunset & Western Project

Construction Phase: Paving

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactor	1	83	20%	60	0
Paving Equipment	1	77	50%	80	0

2

Receptor: ***R1***

Results:

1-hour Leq: 75.7

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

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%	270	0
Excavator	1	81	40%	270	0
Rubber Tired Loader	1	79	40%	290	0
Skid Steer Loader	1	79	40%	290	0
Excavator	1	81	40%	315	0
Generator	1	81	50%	315	0
Water Truck	1	82	10%	340	0

7

Receptor: ***R2***

Results:

1-hour Leq: 71.4

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Shoring/Excavation***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Bore/Drill Rig	1	84	20%	270	0
Excavator	1	81	40%	270	0
Rubber Tired Loader	1	79	40%	290	0
Crane	1	81	16%	290	0
Welders	1	74	40%	315	0
Bore/Drill Rig	1	84	20%	315	0
Excavator	1	81	40%	340	0
Concrete Pump	1	81	20%	340	0
Generator	1	81	50%	365	0
Water Truck	1	82	10%	365	0

10

Receptor: ***R2***

Results:

1-hour Leq: 69.8

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Matt Foundation***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactor	1	83	20%	270	0
Crane	1	81	16%	270	0
Concrete Pump	1	81	20%	290	0
Concrete Pump	1	81	20%	290	0
Fork Lift	1	75	20%	315	0
Plate Compactor	1	83	20%	315	0
Fork Lift	1	75	20%	340	0
Plate Compactor	1	83	20%	340	0
Fork Lift	1	75	20%	365	0
Plate Compactor	1	83	20%	365	0
Generator	1	81	50%	390	0
	11				

Receptor: ***R2***

Results:

1-hour Leq: **68.8**

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Building Construction***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Concrete Saw	1	90	20%	270	0
Crane	1	81	16%	270	0
Cement and Mortar Mixer	1	80	50%	290	0
Air Compressor	1	78	40%	290	0
Aerial Lift	1	75	20%	315	0
Fork Lift	1	75	20%	315	0
Air Compressor	1	78	40%	340	0
Tractor/Loader/Backhoe	1	79	40%	340	0
Welders	2	74	40%	365	0
Crane	1	81	16%	365	0
Aerial Lift	1	75	20%	390	0
Fork Lift	1	75	20%	390	0
Air Compressor	1	78	40%	390	0
Aerial Lift	1	75	20%	390	0
Fork Lift	1	75	20%	390	0
	16				

Receptor: ***R2***

Results:

1-hour Leq: 71.1

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: Building Finishing

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Air Compressor	1	78	40%	270	0
Aerial Lift	1	75	20%	270	0
Air Compressor	1	78	40%	290	0
Aerial Lift	1	75	20%	290	0
Air Compressor	1	78	40%	315	0
Aerial Lift	1	75	20%	315	0
Air Compressor	1	78	40%	340	0
Aerial Lift	1	75	20%	340	0

8

Receptor: ***R2***

Results:

1-hour Leq: 65.4

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: Paving

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactor	1	83	20%	270	0
Paving Equipment	1	77	50%	270	0

2

Receptor: ***R2***

Results:

1-hour Leq: 63.5

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

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%	100	0
Excavator	1	81	40%	100	0
Rubber Tired Loader	1	79	40%	120	0
Skid Steer Loader	1	79	40%	120	0
Excavator	1	81	40%	140	0
Generator	1	81	50%	140	0
Water Truck	1	82	10%	160	0

7

Receptor: ***R3***

Results:

1-hour Leq: 79.5

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Shoring/Excavation***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Bore/Drill Rig	1	84	20%	100	0
Excavator	1	81	40%	100	0
Rubber Tired Loader	1	79	40%	120	0
Crane	1	81	16%	120	0
Welders	1	74	40%	140	0
Bore/Drill Rig	1	84	20%	140	0
Excavator	1	81	40%	160	0
Concrete Pump	1	81	20%	160	0
Generator	1	81	50%	180	0
Water Truck	1	82	10%	180	0

10

Receptor: ***R3***

Results:

1-hour Leq: 77.4

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Matt Foundation***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactor	1	83	20%	100	0
Crane	1	81	16%	100	0
Concrete Pump	1	81	20%	120	0
Concrete Pump	1	81	20%	120	0
Fork Lift	1	75	20%	140	0
Plate Compactor	1	83	20%	140	0
Fork Lift	1	75	20%	160	0
Plate Compactor	1	83	20%	160	0
Fork Lift	1	75	20%	180	0
Plate Compactor	1	83	20%	180	0
Generator	1	81	50%	200	0
	11				

Receptor: ***R3***

Results:

1-hour Leq: 76.2

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Building Construction***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Concrete Saw	1	90	20%	100	0
Crane	1	81	16%	100	0
Cement and Mortar Mixer	1	80	50%	120	0
Air Compressor	1	78	40%	120	0
Aerial Lift	1	75	20%	140	0
Fork Lift	1	75	20%	140	0
Air Compressor	1	78	40%	160	0
Tractor/Loader/Backhoe	1	79	40%	160	0
Welders	2	74	40%	180	0
Crane	1	81	16%	180	0
Aerial Lift	1	75	20%	200	0
Fork Lift	1	75	20%	200	0
Air Compressor	1	78	40%	200	0
Aerial Lift	1	75	20%	200	0
Fork Lift	1	75	20%	200	0
	16				

Receptor: ***R3***

Results:

1-hour Leq: 79.1

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: Building Finishing

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Air Compressor	1	78	40%	100	0
Aerial Lift	1	75	20%	100	0
Air Compressor	1	78	40%	120	0
Aerial Lift	1	75	20%	120	0
Air Compressor	1	78	40%	140	0
Aerial Lift	1	75	20%	140	0
Air Compressor	1	78	40%	160	0
Aerial Lift	1	75	20%	160	0

8

Receptor: ***R3***

Results:

1-hour Leq: 73.1

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: Paving

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactor	1	83	20%	100	0
Paving Equipment	1	77	50%	100	0

2

Receptor: ***R3***

Results:

1-hour Leq: 72.1

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

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%	395	0
Excavator	1	81	40%	395	0
Rubber Tired Loader	1	79	40%	415	0
Skid Steer Loader	1	79	40%	415	0
Excavator	1	81	40%	435	0
Generator	1	81	50%	435	0
Water Truck	1	82	10%	455	0

7

Receptor: ***R4***

Results:

1-hour Leq: 68.2

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Shoring/Excavation***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Bore/Drill Rig	1	84	20%	395	0
Excavator	1	81	40%	395	0
Rubber Tired Loader	1	79	40%	415	0
Crane	1	81	16%	415	0
Welders	1	74	40%	435	0
Bore/Drill Rig	1	84	20%	435	0
Excavator	1	81	40%	455	0
Concrete Pump	1	81	20%	455	0
Generator	1	81	50%	475	0
Water Truck	1	82	10%	475	0

10

Receptor: ***R4***

Results:

1-hour Leq: 66.9

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Matt Foundation***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactor	1	83	20%	395	0
Crane	1	81	16%	395	0
Concrete Pump	1	81	20%	415	0
Concrete Pump	1	81	20%	415	0
Fork Lift	1	75	20%	435	0
Plate Compactor	1	83	20%	435	0
Fork Lift	1	75	20%	455	0
Plate Compactor	1	83	20%	455	0
Fork Lift	1	75	20%	475	0
Plate Compactor	1	83	20%	475	0
Generator	1	81	50%	495	0
	11				

Receptor: ***R4***

Results:

1-hour Leq: 66.0

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Building Construction***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Concrete Saw	1	90	20%	395	0
Crane	1	81	16%	395	0
Cement and Mortar Mixer	1	80	50%	415	0
Air Compressor	1	78	40%	415	0
Aerial Lift	1	75	20%	435	0
Fork Lift	1	75	20%	435	0
Air Compressor	1	78	40%	455	0
Tractor/Loader/Backhoe	1	79	40%	455	0
Welders	2	74	40%	475	0
Crane	1	81	16%	475	0
Aerial Lift	1	75	20%	495	0
Fork Lift	1	75	20%	495	0
Air Compressor	1	78	40%	515	0
Aerial Lift	1	75	20%	515	0
Fork Lift	1	75	20%	515	0
	16				

Receptor: ***R4***

Results:

1-hour Leq: 68.1

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: Building Finishing

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Air Compressor	1	78	40%	395	0
Aerial Lift	1	75	20%	395	0
Air Compressor	1	78	40%	415	0
Aerial Lift	1	75	20%	415	0
Air Compressor	1	78	40%	435	0
Aerial Lift	1	75	20%	435	0
Air Compressor	1	78	40%	455	0
Aerial Lift	1	75	20%	455	0
	8				

Receptor: ***R4***

Results:

1-hour Leq: 62.5

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: Paving

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactor	1	83	20%	395	0
Paving Equipment	1	77	50%	395	0

2

Receptor: ***R4***

Results:

1-hour Leq: 60.2

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

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%	145	5
Excavator	1	81	40%	145	5
Rubber Tired Loader	1	79	40%	165	5
Skid Steer Loader	1	79	40%	165	5
Excavator	1	81	40%	185	5
Generator	1	81	50%	185	5
Water Truck	1	82	10%	205	5
	7				

Receptor: ***R5***

Results:

1-hour Leq: 71.5

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Shoring/Excavation***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Bore/Drill Rig	1	84	20%	145	5
Excavator	1	81	40%	145	5
Rubber Tired Loader	1	79	40%	165	5
Crane	1	81	16%	165	5
Welders	1	74	40%	185	5
Bore/Drill Rig	1	84	20%	185	5
Excavator	1	81	40%	205	5
Concrete Pump	1	81	20%	205	5
Generator	1	81	50%	225	5
Water Truck	1	82	10%	225	5

10

Receptor: ***R5***

Results:

1-hour Leq: 69.7

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Matt Foundation***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactor	1	83	20%	145	5
Crane	1	81	16%	145	5
Concrete Pump	1	81	20%	165	5
Concrete Pump	1	81	20%	165	5
Fork Lift	1	75	20%	185	5
Plate Compactor	1	83	20%	185	5
Fork Lift	1	75	20%	205	5
Plate Compactor	1	83	20%	205	5
Fork Lift	1	75	20%	225	5
Plate Compactor	1	83	20%	225	5
Generator	1	81	50%	245	5
	11				

Receptor: ***R5***

Results:

1-hour Leq: 68.6

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: ***Building Construction***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Concrete Saw	1	90	20%	145	5
Crane	1	81	16%	145	5
Cement and Mortar Mixer	1	80	50%	165	5
Air Compressor	1	78	40%	165	5
Aerial Lift	1	75	20%	185	5
Fork Lift	1	75	20%	185	5
Air Compressor	1	78	40%	205	5
Tractor/Loader/Backhoe	1	79	40%	205	5
Welders	2	74	40%	225	5
Crane	1	81	16%	225	5
Aerial Lift	1	75	20%	245	5
Fork Lift	1	75	20%	245	5
Air Compressor	1	78	40%	265	5
Aerial Lift	1	75	20%	265	5
Fork Lift	1	75	20%	265	5
	16				

Receptor: ***R5***

Results:

1-hour Leq: 71.2

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: Building Finishing

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Air Compressor	1	78	40%	145	5
Aerial Lift	1	75	20%	145	5
Air Compressor	1	78	40%	165	5
Aerial Lift	1	75	20%	165	5
Air Compressor	1	78	40%	185	5
Aerial Lift	1	75	20%	185	5
Air Compressor	1	78	40%	205	5
Aerial Lift	1	75	20%	205	5

8

Receptor: ***R5***

Results:

1-hour Leq: 65.3

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

Construction Phase: Paving

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Plate Compactor	1	83	20%	145	5
Paving Equipment	1	77	50%	145	5

2

Receptor: ***R5***

Results:

1-hour Leq: 63.9

Source for Ref. Noise Levels: FHWA RCNM, 2006

Project: Sunset & Western Project

AES
ACOUSTICAL ENGINEERING SERVICES

Off-Site Haul Trucks

	Maximum Number of Truck One Way Trips (delivery/haul)		Worker Trips		Estimated Noise Levels, dBA Leq	
Phase	Per Day	Per Hour (8-hr day)	Trips Per Day	Trips during Pk Hr.	Western Ave.	Sunset Blvd.
1. Demolition	10	2	100	40	56.6	56.6
2. Grading/Excavation	228	29	62.5	25	65.2	65.2
3. Matt Foundation (continuous concrete pour)	400	50	100	40	67.5	67.5
4. Foundation to Grade	110	14	100	40	62.5	62.5
5. Building Construction (structure, shell and exterior)	110	14	100	40	62.5	62.5
6. Building Construction (finishing)	40	5	1000	400	64.7	64.7
7. Paving	4	1	20	8	52.0	52.0
				Ambient, dBA	67.8	67.8
				Significance Criteria, dBA	72.8	72.8

	Project + Ambient		Increase over Ambient	
	Western Ave.	Sunset Blvd.	Western Ave.	Sunset Blvd.
1. Demolition	68.1	68.1	0.3	0.3
2. Grading/Excavation	69.7	69.7	1.9	1.9
3. Matt Foundation (continuous concrete pour)	70.7	70.7	2.9	2.9
4. Foundation to Grade	68.9	68.9	1.1	1.1
5. Building Construction (structure, shell and exterior)	68.9	68.9	1.1	1.1
6. Building Construction (finishing)	69.5	69.5	1.7	1.7
7. Paving	67.9	67.9	0.1	0.1
		Max	2.9	2.9

Eyestone Environmental 21 April 2020
Sean Bui TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Sunset & Western
RUN: Construction Trucks - Demo Phase

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	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					

Eyestone Environmental **21 April 2020**
Sean Bui **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Sunset & Western**
RUN: **Construction Trucks - Demo Phase**

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Haul Route	point1	1	40	35	0	0	2	35	0	0	0	0
	point2	2										

Eyestone Environmental **21 April 2020**
Sean Bui **TNM 2.5**

INPUT: RECEIVERS
PROJECT/CONTRACT: **Sunset & Western**
RUN: **Construction Trucks - Demo Phase**

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in 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

Eyestone Environmental
Sean Bui

21 April 2020
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Sunset & Western
RUN: Construction Trucks - Demo Phase
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	8	1	0.0	56.6	66	56.6	10	----	56.6	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Eyestone Environmental 21 April 2020
Sean Bui TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Sunset & Western
RUN: Construction Trucks - Grading Phase

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	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					

Eyestone Environmental **21 April 2020**
Sean Bui **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Sunset & Western**
RUN: **Construction Trucks - Grading Phase**

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			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	25	35	0	0	29	35	0	0	0	0
	point2	2										

Eyestone Environmental **21 April 2020**
Sean Bui **TNM 2.5**

INPUT: RECEIVERS
PROJECT/CONTRACT: **Sunset & Western**
RUN: **Construction Trucks - Grading Phase**

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in 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

Eyestone Environmental
Sean Bui

21 April 2020
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Sunset & Western
RUN: Construction Trucks - Grading Phase
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	8	1	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Eyestone Environmental	**21 April 2020**
Sean Bui	**TNM 2.5**

INPUT: ROADWAYS	**Average pavement type shall be used unless**
PROJECT/CONTRACT:	**Sunset & Western** **a State highway agency substantiates the use**
RUN:	**Construction Trucks - Mat Foundation** **of a different type with the approval of FHWA**

Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**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					

Eyestone Environmental **21 April 2020**
Sean Bui **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Sunset & Western**
RUN: **Construction Trucks - Mat Foundation**

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Haul Route	point1	1	40	35	0	0	50	35	0	0	0	0
	point2	2										

Eyestone Environmental 21 April 2020
Sean Bui TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Sunset & Western
RUN: Construction Trucks - Mat Foundation

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in 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

Eyestone Environmental
Sean Bui

21 April 2020
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Sunset & Western
RUN: Construction Trucks - Mat Foundation
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	8	1	0.0	67.5	66	67.5	10	Snd Lvl	67.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Eyestone Environmental 21 April 2020
Sean Bui TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Sunset & Western
RUN: Foundation Phase

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	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					

Eyestone Environmental **21 April 2020**
Sean Bui **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Sunset & Western**
RUN: **Foundation Phase**

Roadway Name	Points Name	No.	Segment Autos V	Autos S	MTrucks V	MTrucks S	HTrucks V	HTrucks S	Buses V	Buses S	Motorcycles V	Motorcycles S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Haul Route	point1	1	40	35	0	0	14	35	0	0	0	0
	point2	2										

Eyestone Environmental 21 April 2020
Sean Bui TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Sunset & Western
RUN: Foundation Phase

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in 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

Eyestone Environmental
Sean Bui

21 April 2020
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Sunset & Western
RUN: Foundation Phase
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	8	1	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Eyestone Environmental 21 April 2020
Sean Bui TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Sunset & Western
RUN: Building Construction Phase

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	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					

Eyestone Environmental **21 April 2020**
Sean Bui **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Sunset & Western**
RUN: **Building Construction Phase**

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Haul Route	point1	1	40	35	0	0	14	35	0	0	0	0
	point2	2										

Eyestone Environmental 21 April 2020
Sean Bui TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Sunset & Western
RUN: Building Construction Phase

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in 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

Eyestone Environmental
Sean Bui

21 April 2020
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Sunset & Western
RUN: Building Construction Phase
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	8	1	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Eyestone Environmental 21 April 2020
Sean Bui TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Sunset & Western
RUN: Building Construction (Finishing) Phase

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	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					

Eyestone Environmental **21 April 2020**
Sean Bui **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Sunset & Western**
RUN: **Building Construction (Finishing) Phase**

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			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	400	35	0	0	5	35	0	0	0	0
	point2	2										

Eyestone Environmental 21 April 2020
Sean Bui TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Sunset & Western
RUN: Building Construction (Finishing) Phase

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in 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

Eyestone Environmental
Sean Bui

21 April 2020
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Sunset & Western
RUN: Building Construction (Finishing) Phase
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	8	1	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Eyestone Environmental 21 April 2020
Sean Bui TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Sunset & Western
RUN: Construction Trucks - Paving Phase

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	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					

Eyestone Environmental **21 April 2020**
Sean Bui **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Sunset & Western**
RUN: **Construction Trucks - Paving Phase**

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			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	8	35	0	0	1	35	0	0	0	0
	point2	2										

Eyestone Environmental 21 April 2020
Sean Bui TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Sunset & Western
RUN: Construction Trucks - Paving Phase

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in 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

Eyestone Environmental
Sean Bui

21 April 2020
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Sunset & Western
RUN: Construction Trucks - Paving Phase
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	With Barrier Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor at 45 feet	8	1	0.0	52.0	66	52.0	10	----	52.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

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Project: Sunset & Western 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

Equipment	Reference Vibration Levels at 25 ft., PPV	Estimated Vibration Levels at nearest off-site building structures (distance in feet), PPV						
		Hotel/ Commercial building to the North	Commercial building to the South	Commercial building to the west	Residential buildings to the east			
		100	5	90	60			
Large Bulldozer	0.089	0.011	0.523	0.013	0.024			
Caisson Drilling	0.089	0.011	0.523	0.013	0.024			
Loaded Trucks	0.076	0.010	0.446	0.011	0.020			
Jackhammer	0.035	0.004	0.206	0.005	0.009			
Small bulldozer	0.003	0.000	0.018	0.000	0.001			
Significance Threshold, PPV		0.3	0.5	0.3	0.2			

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

Equipment	Reference Vibration Levels at 25 ft., VdB	Estimated Vibration Levels at Off-Site Receptors (at noted distance in feet), VdB						
		R1	R2	R3	R4	R5		
		60	270	100	390	145		
Large Bulldozer	87	76	56	69	51	64		
Caisson Drilling	87	76	56	69	51	64		
Loaded Trucks	86	75	55	68	50	63		
Jackhammer	79	68	48	61	43	56		
Small bulldozer	58	47	27	40	22	35		
Significance Threshold, VdB		72	72	72	72	72		

OFF-SITE CONSTRUCTION HAUL TRUCKS

Table 3: Off-Site Haul Trucks - Building Damage

Equipment	Reference Vibration Levels at 50 ft., PPV	Estimated Vibration Levels at noted distance in feet, PPV						
		20	25	30				
Typical road surface	0.00565	0.022	0.016	0.012				
Significance Threshold, PPV		0.12	0.12	0.12				

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

Table 4: Off-Site Haul Trucks - Human Annoyance

Equipment	Reference Vibration Levels at 50 ft., VdB	Estimated Vibration Levels at noted distance in feet, VdB						
		20	25	30				
Typical road surface	63	75	72	70				
Significance Threshold, VdB		72	72	72				

Ref. Levels based on FTA Figure 7-3

Operation Noise Calculations

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Project Composite Noise Calculations (CNEL)

Project: Sunset & Western

Composite noise calculations

Receptor	Ambient	Traffic[a]	Mechanical	Parking	Loading/ Trash Compactor	Outdoor		Project Composite	Ambient + Project	Increase
R1	62.7	41.5	44.0	54.2	50.6	52.7		57.8	63.9	1.2
R2	62.7	43.0	41.1	37.2	47.6	48.4		52.2	63.1	0.4
R3	71.1	51.8	42.6	48.0	50.8	62.9		63.6	71.8	0.7
R4	63.5	40.9	41.5	47.2	48.5	49.1		53.6	63.9	0.4
R5	62.9	39.7	42.4	41.0	37.4	54.3		55.0	63.5	0.6

[a] - Project traffic noise levels at each receptor is based on the traffic noise analysis for the roadway segment in front of the receptor. Project traffic noise level is equal to "Existing+Project" minus "Existing" traffic noise levels, as provided in the table below.

Project Only traffic noise calculations

		Traffic Noise Levels, CNEL								
Receptor	Roadway Segment	Existing (A)	Existing + Project (B)	Project Only (B - A)	distance to roadway, ft	Existing	Existing + Project	barrier	distance to Center Line	adj. for distance
R1	Western Ave.	57.5	57.6	41.5	270	71.7	71.8	5	35	-9.3
R2	Western Ave.	59.0	59.1	43.0	185	71.7	71.8	5	35	-7.8
R3	Sunset Blvd.	73.2	73.2	51.8	10	73.2	73.2	0	45	0.0
R4	Western Ave.	56.9	57.0	40.9	310	71.7	71.8	5	35	-9.8
R5	Western Ave.	55.6	55.8	39.7	425	71.7	71.8	5	35	-11.1

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Outdoor Mechanical Equipment Noise Calculations

Project: Sunset & Western

	Estimated Noise Levels, Leq from SOUNDPLAN		Hours of Operations: Ld (7am to 7pm)	Le (7pm to 10pm)	Ln (10pm to 7am)
Receptor	Leq	CNEL	12	3	9
R1	37.3	44.0	37.3	37.3	37.3
R2	34.4	41.1	34.4	34.4	34.4
R3	35.9	42.6	35.9	35.9	35.9
R4	34.8	41.5	34.8	34.8	34.8
R5	35.7	42.4	35.7	35.7	35.7

Receptor	Ambient CNEL	Ambient + Project (CNEL)	Increase (CNEL)	Ambient (Leq)	Ambient + Project (Leq)
R1	62.7	62.8	0.1	57.6	57.6
R2	62.7	62.7	0.0	56.1	56.1
R3	71.1	71.1	0.0	66.0	66.0
R4	63.5	63.5	0.0	56.6	56.6
R5	62.9	62.9	0.0	56.5	56.5

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Outdoor Noise Calculations

Project: Sunset & Western

ALL LEVEL

	Estimated noise levels, Leq (FROM SOUNDPLAN)				Hours of Operations: Ld (7am to 7pm)	Le (7pm to 10pm)	Ln (10pm to 7am)
Receptor	Sound System	Occupants	Total, Leq	CNEL	11	**3**	**0**
R1	52.9	44.1	53.4	52.7	53.0	53.4	0.0
R2	48.4	41.0	49.1	48.4	48.7	49.1	0.0
R3	62.7	56.4	63.6	62.9	63.2	63.6	0.0
R4	49.3	40.1	49.8	49.1	49.4	49.8	0.0
R5	54.6	44.2	55.0	54.3	54.6	55.0	0.0

TOTAL COMBINED

Receptor	Project (CNEL)	Ambient (CNEL)	Ambient + Project (CNEL)	Increase (CNEL)	Project Noise, (Leq)	Ambient (Leq)	Ambient + Project (Leq)
R1	52.7	62.7	63.1	0.4	53.4	57.6	59.0
R2	48.4	62.7	62.9	0.2	49.1	56.1	56.9
R3	62.9	71.1	71.7	0.6	63.6	66.0	68.0
R4	49.1	63.5	63.7	0.2	49.8	56.6	57.4
R5	54.3	62.9	63.5	0.6	55.0	56.5	58.8

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Parking Structure Noise Calculations

Project: Sunset & Western

	Estimated Noise Levels, Leq from SOUNDPLAN		Hours of Operations: Ld (7am to 7pm)	Le (7pm to 10pm)	Ln (10pm to 7am)
Receptor	Leq	CNEL	12	3	9
R1	47.5	54.2	47.5	47.5	47.5
R2	30.5	37.2	30.5	30.5	30.5
R3	41.3	48.0	41.3	41.3	41.3
R4	40.5	47.2	40.5	40.5	40.5
R5	34.3	41.0	34.3	34.3	34.3

Receptor	Ambient CNEL	Ambient + Project (CNEL)	Increase (CNEL)	Ambient (Leq)	Ambient + Project (Leq)	Increase (Leq)
R1	62.7	63.3	0.6	57.6	58.0	0.4
R2	62.7	62.7	0.0	56.1	56.1	0.0
R3	71.1	71.1	0.0	66.0	66.0	0.0
R4	63.5	63.6	0.1	56.6	56.7	0.1
R5	62.9	62.9	0.0	56.5	56.5	0.0

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Loading and Trash Compactor Noise Calculations

Project: Sunset & Western

	Estimated Noise Levels, Leq from SOUNDPLAN		Hours of Operations Ld (7am to 7pm)	Le (7pm to 10pm)	Ln (10pm to 7am)
Receptor	Leq	CNEL	3	3	0
R1	53.4	50.6	47.4	53.4	0.0
R2	50.4	47.6	44.4	50.4	0.0
R3	53.6	50.8	47.6	53.6	0.0
R4	51.3	48.5	45.3	51.3	0.0
R5	40.2	37.4	34.2	40.2	0.0

Receptor	Project CNEL	Ambient CNEL	Ambient + Project (CNEL)	Increase (CNEL)	Project Noise, (Leq)	Ambient (Leq)	Ambient + Project (Leq)
R1	50.6	62.7	63.0	0.3	53.4	59.6	60.5
R2	47.6	62.7	62.8	0.1	50.4	56.1	57.1
R3	50.8	71.1	71.1	0.0	53.6	67.8	68.0
R4	48.5	63.5	63.6	0.1	51.3	63.2	63.5
R5	37.4	62.9	62.9	0.0	40.2	61.9	61.9

Sunset & Western
Source Levels in dB(A) - Speakers

Name	Source type	Lw dB(A)	
Speakers Level 1	Point	99.6	
Speakers Level 1	Point	99.6	
Speakers Level 1	Point	99.6	
Speakers Level 1	Point	99.6	
Speakers Level 1	Point	99.6	
Speakers Level 1	Point	99.6	
Speakers Level 1	Point	99.6	
Speakers Level 1	Point	99.6	
Speakers Level 2	Point	113.6	
Speakers Level 2	Point	113.6	
Speakers Level 2	Point	113.6	
Speakers Level 2	Point	113.6	
Speakers Level 2	Point	113.6	
Speakers Level 2	Point	113.6	
Speakers Level 2	Point	113.6	
Speakers Level 2	Point	113.6	
Speakers Level 2	Point	113.6	
Speakers Level 2	Point	113.6	
Speakers Level 3 Bldg 1	Point	113.6	
Speakers Level 3 Bldg 1	Point	113.6	
Speakers Level 3 Bldg 1	Point	113.6	
Speakers Level 3 Bldg 2	Point	113.6	
Speakers Level 3 Bldg 2	Point	113.6	
Speakers Level 3 Bldg 2	Point	113.6	
Speakers Level 3 Pool 1	Point	113.6	
Speakers Level 3 Pool 2	Point	113.6	
Speakers Level 3 Pool 3	Point	113.6	
Speakers Level 3 Pool 4	Point	113.6	
Speakers Level 3 Pool 5	Point	113.6	
Speakers Level 3 Pool 6	Point	113.6	
Speakers Roof	Point	113.6	
Speakers Roof	Point	113.6	
Speakers Roof	Point	113.6	
Speakers Roof	Point	113.6	
Speakers Roof	Point	113.6	
Speakers Roof	Point	113.6	
Speakers Roof	Point	113.6	
Speakers Roof	Point	113.6	

Sunset & Western
Assessed contribution level - Speakers

Source	Ld dB(A)	
Receiver R1 Ld 52.9 dB(A)		
Speakers Level 1	8.9	
Speakers Level 1	6.2	
Speakers Level 1	13.2	
Speakers Level 1	15.0	
Speakers Level 1	25.5	
Speakers Level 1	27.0	
Speakers Level 1	25.0	
Speakers Level 1	46.8	
Speakers Level 2	34.5	
Speakers Level 2	35.0	
Speakers Level 2	34.2	
Speakers Level 2	36.0	
Speakers Level 2	29.8	
Speakers Level 2	34.4	
Speakers Level 2	35.3	
Speakers Level 2	33.8	
Speakers Level 2	33.5	
Speakers Level 2	26.3	
Speakers Level 3 Bldg 2	30.2	
Speakers Level 3 Bldg 2	35.6	
Speakers Level 3 Bldg 2	24.0	
Speakers Level 3 Bldg 1	31.5	
Speakers Level 3 Bldg 1	30.8	
Speakers Level 3 Pool 2	24.5	
Speakers Level 3 Pool 1	25.5	
Speakers Level 3 Pool 5	31.5	
Speakers Level 3 Pool 4	30.5	
Speakers Level 3 Pool 6	27.2	
Speakers Level 3 Pool 3	34.5	
Speakers Level 3 Bldg 1	38.5	
Speakers Roof	34.1	
Speakers Roof	45.5	
Speakers Roof	39.8	
Speakers Roof	31.9	
Speakers Roof	45.1	
Speakers Roof	31.8	
Speakers Roof	37.0	
Speakers Roof	40.9	

Sunset & Western
Assessed contribution level - Speakers

Source	Ld dB(A)	
Receiver R2 Ld 48.4 dB(A)		
Speakers Level 1	14.3	
Speakers Level 1	4.9	
Speakers Level 1	21.2	
Speakers Level 1	21.9	
Speakers Level 1	20.8	
Speakers Level 1	20.8	
Speakers Level 1	18.6	
Speakers Level 1	16.7	
Speakers Level 2	20.9	
Speakers Level 2	17.1	
Speakers Level 2	29.6	
Speakers Level 2	31.4	
Speakers Level 2	14.5	
Speakers Level 2	21.9	
Speakers Level 2	22.3	
Speakers Level 2	13.5	
Speakers Level 2	12.5	
Speakers Level 2	2.4	
Speakers Level 3 Bldg 2	27.5	
Speakers Level 3 Bldg 2	34.4	
Speakers Level 3 Bldg 2	35.3	
Speakers Level 3 Bldg 1	25.3	
Speakers Level 3 Bldg 1	34.4	
Speakers Level 3 Pool 2	37.8	
Speakers Level 3 Pool 1	33.6	
Speakers Level 3 Pool 5	36.5	
Speakers Level 3 Pool 4	34.8	
Speakers Level 3 Pool 6	19.4	
Speakers Level 3 Pool 3	38.9	
Speakers Level 3 Bldg 1	31.3	
Speakers Roof	35.7	
Speakers Roof	39.5	
Speakers Roof	36.5	
Speakers Roof	28.5	
Speakers Roof	36.1	
Speakers Roof	28.9	
Speakers Roof	32.1	
Speakers Roof	37.8	

Sunset & Western
Assessed contribution level - Speakers

Source	Ld dB(A)	
Receiver R3 Ld 62.7 dB(A)		
Speakers Level 1	30.3	
Speakers Level 1	22.1	
Speakers Level 1	58.3	
Speakers Level 1	56.7	
Speakers Level 1	45.1	
Speakers Level 1	40.6	
Speakers Level 1	37.2	
Speakers Level 1	32.6	
Speakers Level 2	18.5	
Speakers Level 2	24.6	
Speakers Level 2	24.5	
Speakers Level 2	30.0	
Speakers Level 2	29.5	
Speakers Level 2	27.8	
Speakers Level 2	26.7	
Speakers Level 2	22.1	
Speakers Level 2	21.1	
Speakers Level 2	7.7	
Speakers Level 3 Bldg 2	41.4	
Speakers Level 3 Bldg 2	41.2	
Speakers Level 3 Bldg 2	42.5	
Speakers Level 3 Bldg 1	37.5	
Speakers Level 3 Bldg 1	40.8	
Speakers Level 3 Pool 2	44.6	
Speakers Level 3 Pool 1	48.7	
Speakers Level 3 Pool 5	48.1	
Speakers Level 3 Pool 4	51.3	
Speakers Level 3 Pool 6	48.5	
Speakers Level 3 Pool 3	38.8	
Speakers Level 3 Bldg 1	32.1	
Speakers Roof	42.3	
Speakers Roof	40.6	
Speakers Roof	43.7	
Speakers Roof	42.2	
Speakers Roof	44.0	
Speakers Roof	43.5	
Speakers Roof	45.1	
Speakers Roof	47.2	

Sunset & Western
Assessed contribution level - Speakers

Source	Ld dB(A)	
Receiver R4 Ld 49.3 dB(A)		
Speakers Level 1	11.9	
Speakers Level 1	26.3	
Speakers Level 1	14.6	
Speakers Level 1	11.3	
Speakers Level 1	22.2	
Speakers Level 1	24.3	
Speakers Level 1	29.7	
Speakers Level 1	16.4	
Speakers Level 2	29.6	
Speakers Level 2	31.9	
Speakers Level 2	35.2	
Speakers Level 2	23.5	
Speakers Level 2	32.4	
Speakers Level 2	34.0	
Speakers Level 2	32.0	
Speakers Level 2	33.5	
Speakers Level 2	35.4	
Speakers Level 2	21.0	
Speakers Level 3 Bldg 2	25.0	
Speakers Level 3 Bldg 2	15.7	
Speakers Level 3 Bldg 2	17.8	
Speakers Level 3 Bldg 1	28.2	
Speakers Level 3 Bldg 1	15.4	
Speakers Level 3 Pool 2	24.2	
Speakers Level 3 Pool 1	15.9	
Speakers Level 3 Pool 5	39.6	
Speakers Level 3 Pool 4	30.2	
Speakers Level 3 Pool 6	38.0	
Speakers Level 3 Pool 3	13.7	
Speakers Level 3 Bldg 1	23.1	
Speakers Roof	35.6	
Speakers Roof	31.9	
Speakers Roof	36.2	
Speakers Roof	39.0	
Speakers Roof	30.7	
Speakers Roof	43.6	
Speakers Roof	34.9	
Speakers Roof	34.5	

Sunset & Western
Assessed contribution level - Speakers

Source	Ld dB(A)	
Receiver R5 Ld 54.6 dB(A)		
Speakers Level 1	1.2	
Speakers Level 1	3.0	
Speakers Level 1	1.5	
Speakers Level 1	12.9	
Speakers Level 1	15.0	
Speakers Level 1	21.2	
Speakers Level 1	30.1	
Speakers Level 1	20.5	
Speakers Level 2	45.8	
Speakers Level 2	44.2	
Speakers Level 2	37.7	
Speakers Level 2	33.9	
Speakers Level 2	38.3	
Speakers Level 2	37.4	
Speakers Level 2	46.8	
Speakers Level 2	45.1	
Speakers Level 2	29.2	
Speakers Level 2	17.6	
Speakers Level 3 Bldg 2	27.3	
Speakers Level 3 Bldg 2	24.8	
Speakers Level 3 Bldg 2	26.1	
Speakers Level 3 Bldg 1	22.7	
Speakers Level 3 Bldg 1	31.2	
Speakers Level 3 Pool 2	13.2	
Speakers Level 3 Pool 1	17.0	
Speakers Level 3 Pool 5	41.3	
Speakers Level 3 Pool 4	28.3	
Speakers Level 3 Pool 6	25.0	
Speakers Level 3 Pool 3	19.2	
Speakers Level 3 Bldg 1	29.4	
Speakers Roof	43.0	
Speakers Roof	32.2	
Speakers Roof	32.5	
Speakers Roof	38.7	
Speakers Roof	34.7	
Speakers Roof	38.1	
Speakers Roof	47.8	
Speakers Roof	33.7	

Sunset & Western
Source Levels in dB(A) - People

Name	Source type	Lw dB(A)	
People Level 1 Paseo	Area	99.7	
People Level 1 Plaza	Area	93.7	
People Level 1 Plaza	Area	93.2	
People Level 2 Bldg 3 Paseo	Area	98.3	
People Level 2 Bldg 4 Paseo	Area	97.4	
People Level 3 Bldg 1	Area	94.8	
People Level 3 Bldg 2	Area	96.9	
People Level 3 Pool Area	Area	101.2	
People Roof Rec 1	Area	96.1	
People Roof Rec 2	Area	93.5	

Sunset & Western
Source Levels in dB(A) - Loading

Name	Source type	Lw dB(A)	
Loading East 1	Point	101.9	
Loading East 2	Point	101.9	
Loading West 1	Point	101.9	
Loading West 2	Point	101.9	
Loading West 3	Point	101.9	

Sunset & Western
Assessed contribution level - Loading

Source	Ld dB(A)	
Receiver R1 Ld 53.4 dB(A)		
Loading West 1	39.4	
Loading West 2	39.3	
Loading West 3	38.9	
Loading East 1	46.1	
Loading East 2	51.9	
Receiver R2 Ld 50.4 dB(A)		
Loading West 1	30.9	
Loading West 2	30.6	
Loading West 3	30.8	
Loading East 1	49.0	
Loading East 2	44.2	
Receiver R3 Ld 53.6 dB(A)		
Loading West 1	45.4	
Loading West 2	43.8	
Loading West 3	52.3	
Loading East 1	32.0	
Loading East 2	30.8	
Receiver R4 Ld 51.3 dB(A)		
Loading West 1	32.4	
Loading West 2	48.4	
Loading West 3	47.9	
Loading East 1	18.8	
Loading East 2	22.7	
Receiver R5 Ld 40.2 dB(A)		
Loading West 1	32.8	
Loading West 2	34.9	
Loading West 3	34.2	
Loading East 1	28.1	
Loading East 2	33.4	

Sunset & Western
Input data parking lots - Parking

Parking lot	Parking Spaces	
Level 1 Parking S	172	
Level 1 Parking N	27	

Sunset & Western
Source Levels in dB(A) - Parking

Name	Source type	Lw dB(A)	
Level 1 Parking N	PLot	85.0	
Level 1 Parking S	PLot	95.4	

Sunset & Western
Assessed contribution level - Parking

Source	Ld dB(A)	
Receiver R1 Ld 47.5 dB(A)		
Level 1 Parking S	47.4	
Level 1 Parking N	20.4	
Receiver R2 Ld 30.5 dB(A)		
Level 1 Parking S	30.3	
Level 1 Parking N	17.1	
Receiver R3 Ld 41.3 dB(A)		
Level 1 Parking S	39.9	
Level 1 Parking N	35.7	
Receiver R4 Ld 40.5 dB(A)		
Level 1 Parking S	40.3	
Level 1 Parking N	26.7	
Receiver R5 Ld 34.3 dB(A)		
Level 1 Parking S	34.0	
Level 1 Parking N	22.4	

Sunset & Western
Source Levels in dB(A) - Mechanical

Name	Source type	Lw dB(A)	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 1	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	

Sunset & Western
Source Levels in dB(A) - Mechanical

Name	Source type	Lw dB(A)	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 2	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 3	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	

Sunset & Western
Source Levels in dB(A) - Mechanical

Name	Source type	Lw dB(A)	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Bldg 4	Point	80.0	
Mechanical Roof Market	Point	80.0	
Mechanical Roof Market	Point	90.0	
Mechanical Roof Market	Point	90.0	

Sunset & Western
Assessed contribution level - Mechanical

Source	Ld dB(A)	
Receiver R1 Ld 37.3 dB(A)		
Mechanical Roof Bldg 1	16.9	
Mechanical Roof Bldg 1	17.4	
Mechanical Roof Bldg 1	10.0	
Mechanical Roof Bldg 1	10.4	
Mechanical Roof Bldg 1	16.3	
Mechanical Roof Bldg 1	19.8	
Mechanical Roof Bldg 1	20.0	
Mechanical Roof Bldg 1	20.1	
Mechanical Roof Bldg 1	20.4	
Mechanical Roof Bldg 1	10.8	
Mechanical Roof Bldg 1	19.4	
Mechanical Roof Bldg 1	9.1	
Mechanical Roof Bldg 1	8.9	
Mechanical Roof Bldg 1	9.3	
Mechanical Roof Bldg 1	18.8	
Mechanical Roof Bldg 1	15.3	
Mechanical Roof Bldg 1	16.7	
Mechanical Roof Bldg 1	17.1	
Mechanical Roof Bldg 1	18.0	
Mechanical Roof Bldg 2	5.2	
Mechanical Roof Bldg 2	5.1	
Mechanical Roof Bldg 2	5.0	
Mechanical Roof Bldg 2	5.3	
Mechanical Roof Bldg 2	9.5	
Mechanical Roof Bldg 2	7.7	
Mechanical Roof Bldg 2	7.4	
Mechanical Roof Bldg 2	6.4	
Mechanical Roof Bldg 2	5.9	
Mechanical Roof Bldg 2	6.6	
Mechanical Roof Bldg 2	6.8	
Mechanical Roof Bldg 2	7.1	
Mechanical Roof Bldg 2	5.5	
Mechanical Roof Bldg 2	5.6	
Mechanical Roof Bldg 2	5.7	
Mechanical Roof Bldg 2	5.8	
Mechanical Roof Bldg 2	10.6	
Mechanical Roof Bldg 2	10.6	
Mechanical Roof Bldg 2	10.5	
Mechanical Roof Bldg 2	12.3	
Mechanical Roof Bldg 2	10.4	

Sunset & Western
Assessed contribution level - Mechanical

Source	Ld dB(A)	
Mechanical Roof Bldg 2	10.4	
Mechanical Roof Bldg 2	12.9	
Mechanical Roof Bldg 2	12.7	
Mechanical Roof Bldg 2	12.5	
Mechanical Roof Bldg 2	10.4	
Mechanical Roof Bldg 3	5.6	
Mechanical Roof Bldg 3	5.6	
Mechanical Roof Bldg 3	10.2	
Mechanical Roof Bldg 3	13.0	
Mechanical Roof Bldg 3	13.3	
Mechanical Roof Bldg 3	5.3	
Mechanical Roof Bldg 3	9.6	
Mechanical Roof Bldg 3	10.3	
Mechanical Roof Bldg 3	7.2	
Mechanical Roof Bldg 3	6.9	
Mechanical Roof Bldg 3	6.7	
Mechanical Roof Bldg 3	8.5	
Mechanical Roof Bldg 3	9.4	
Mechanical Roof Bldg 3	9.0	
Mechanical Roof Bldg 3	7.6	
Mechanical Roof Bldg 3	7.9	
Mechanical Roof Bldg 3	7.2	
Mechanical Roof Bldg 3	8.5	
Mechanical Roof Bldg 3	6.6	
Mechanical Roof Bldg 3	6.0	
Mechanical Roof Bldg 3	6.3	
Mechanical Roof Bldg 3	6.8	
Mechanical Roof Bldg 3	12.8	
Mechanical Roof Bldg 3	13.7	
Mechanical Roof Bldg 3	13.6	
Mechanical Roof Bldg 3	6.8	
Mechanical Roof Bldg 3	13.5	
Mechanical Roof Bldg 4	20.3	
Mechanical Roof Bldg 4	20.0	
Mechanical Roof Bldg 4	19.3	
Mechanical Roof Bldg 4	19.0	
Mechanical Roof Bldg 4	18.6	
Mechanical Roof Bldg 4	19.4	
Mechanical Roof Bldg 4	19.7	
Mechanical Roof Bldg 4	19.6	
Mechanical Roof Bldg 4	18.8	

Sunset & Western
Assessed contribution level - Mechanical

Source	Ld dB(A)	
Mechanical Roof Bldg 4	16.5	
Mechanical Roof Bldg 4	19.0	
Mechanical Roof Bldg 4	18.9	
Mechanical Roof Bldg 4	19.0	
Mechanical Roof Bldg 4	19.2	
Mechanical Roof Bldg 4	19.3	
Mechanical Roof Bldg 4	19.5	
Mechanical Roof Bldg 4	8.0	
Mechanical Roof Bldg 4	13.2	
Mechanical Roof Bldg 4	7.3	
Mechanical Roof Bldg 4	7.1	
Mechanical Roof Bldg 4	6.8	
Mechanical Roof Bldg 4	7.6	
Mechanical Roof Bldg 4	16.7	
Mechanical Roof Bldg 4	17.0	
Mechanical Roof Bldg 4	15.1	
Mechanical Roof Bldg 4	14.7	
Mechanical Roof Bldg 4	9.8	
Mechanical Roof Market	20.7	
Mechanical Roof Market	29.9	
Mechanical Roof Market	31.1	
Receiver R2 Ld 34.4 dB(A)		
Mechanical Roof Bldg 1	9.4	
Mechanical Roof Bldg 1	9.4	
Mechanical Roof Bldg 1	20.7	
Mechanical Roof Bldg 1	20.8	
Mechanical Roof Bldg 1	9.3	
Mechanical Roof Bldg 1	9.0	
Mechanical Roof Bldg 1	9.5	
Mechanical Roof Bldg 1	9.5	
Mechanical Roof Bldg 1	9.3	
Mechanical Roof Bldg 1	21.0	
Mechanical Roof Bldg 1	13.9	
Mechanical Roof Bldg 1	17.6	
Mechanical Roof Bldg 1	18.1	
Mechanical Roof Bldg 1	16.7	
Mechanical Roof Bldg 1	9.1	
Mechanical Roof Bldg 1	20.9	
Mechanical Roof Bldg 1	21.1	
Mechanical Roof Bldg 1	21.2	
Mechanical Roof Bldg 1	8.9	

Sunset & Western
Assessed contribution level - Mechanical

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Source	Ld dB(A)	
Mechanical Roof Bldg 2	14.7	
Mechanical Roof Bldg 2	14.5	
Mechanical Roof Bldg 2	12.2	
Mechanical Roof Bldg 2	14.9	
Mechanical Roof Bldg 2	8.1	
Mechanical Roof Bldg 2	8.3	
Mechanical Roof Bldg 2	8.4	
Mechanical Roof Bldg 2	12.9	
Mechanical Roof Bldg 2	15.1	
Mechanical Roof Bldg 2	12.6	
Mechanical Roof Bldg 2	9.6	
Mechanical Roof Bldg 2	8.8	
Mechanical Roof Bldg 2	15.1	
Mechanical Roof Bldg 2	15.3	
Mechanical Roof Bldg 2	15.1	
Mechanical Roof Bldg 2	15.3	
Mechanical Roof Bldg 2	12.1	
Mechanical Roof Bldg 2	12.0	
Mechanical Roof Bldg 2	12.2	
Mechanical Roof Bldg 2	11.8	
Mechanical Roof Bldg 2	11.7	
Mechanical Roof Bldg 2	12.6	
Mechanical Roof Bldg 2	12.1	
Mechanical Roof Bldg 2	12.1	
Mechanical Roof Bldg 2	12.0	
Mechanical Roof Bldg 2	12.4	
Mechanical Roof Bldg 3	3.9	
Mechanical Roof Bldg 3	4.3	
Mechanical Roof Bldg 3	4.9	
Mechanical Roof Bldg 3	5.2	
Mechanical Roof Bldg 3	5.2	
Mechanical Roof Bldg 3	3.8	
Mechanical Roof Bldg 3	4.7	
Mechanical Roof Bldg 3	4.7	
Mechanical Roof Bldg 3	3.8	
Mechanical Roof Bldg 3	3.5	
Mechanical Roof Bldg 3	3.4	
Mechanical Roof Bldg 3	4.6	
Mechanical Roof Bldg 3	4.7	
Mechanical Roof Bldg 3	4.5	
Mechanical Roof Bldg 3	4.4	

Sunset & Western
Assessed contribution level - Mechanical

Source	Ld dB(A)	
Mechanical Roof Bldg 3	4.5	
Mechanical Roof Bldg 3	7.2	
Mechanical Roof Bldg 3	7.3	
Mechanical Roof Bldg 3	6.1	
Mechanical Roof Bldg 3	5.9	
Mechanical Roof Bldg 3	5.7	
Mechanical Roof Bldg 3	7.1	
Mechanical Roof Bldg 3	5.2	
Mechanical Roof Bldg 3	8.3	
Mechanical Roof Bldg 3	8.2	
Mechanical Roof Bldg 3	7.0	
Mechanical Roof Bldg 3	8.1	
Mechanical Roof Bldg 4	8.4	
Mechanical Roof Bldg 4	8.5	
Mechanical Roof Bldg 4	8.4	
Mechanical Roof Bldg 4	8.4	
Mechanical Roof Bldg 4	8.4	
Mechanical Roof Bldg 4	6.6	
Mechanical Roof Bldg 4	8.5	
Mechanical Roof Bldg 4	8.3	
Mechanical Roof Bldg 4	6.5	
Mechanical Roof Bldg 4	6.3	
Mechanical Roof Bldg 4	6.6	
Mechanical Roof Bldg 4	6.1	
Mechanical Roof Bldg 4	6.2	
Mechanical Roof Bldg 4	6.2	
Mechanical Roof Bldg 4	6.2	
Mechanical Roof Bldg 4	6.6	
Mechanical Roof Bldg 4	5.5	
Mechanical Roof Bldg 4	5.6	
Mechanical Roof Bldg 4	5.3	
Mechanical Roof Bldg 4	5.2	
Mechanical Roof Bldg 4	4.4	
Mechanical Roof Bldg 4	5.4	
Mechanical Roof Bldg 4	6.3	
Mechanical Roof Bldg 4	6.4	
Mechanical Roof Bldg 4	3.7	
Mechanical Roof Bldg 4	3.7	
Mechanical Roof Bldg 4	3.7	
Mechanical Roof Market	16.7	
Mechanical Roof Market	27.6	

Sunset & Western
Assessed contribution level - Mechanical

Source	Ld dB(A)	
Mechanical Roof Market	25.9	
Receiver R3 Ld 35.9 dB(A)		
Mechanical Roof Bldg 1	13.3	
Mechanical Roof Bldg 1	15.9	
Mechanical Roof Bldg 1	18.7	
Mechanical Roof Bldg 1	18.5	
Mechanical Roof Bldg 1	14.2	
Mechanical Roof Bldg 1	16.2	
Mechanical Roof Bldg 1	16.6	
Mechanical Roof Bldg 1	20.2	
Mechanical Roof Bldg 1	16.7	
Mechanical Roof Bldg 1	18.4	
Mechanical Roof Bldg 1	10.9	
Mechanical Roof Bldg 1	20.3	
Mechanical Roof Bldg 1	20.4	
Mechanical Roof Bldg 1	20.7	
Mechanical Roof Bldg 1	11.2	
Mechanical Roof Bldg 1	18.3	
Mechanical Roof Bldg 1	18.9	
Mechanical Roof Bldg 1	18.8	
Mechanical Roof Bldg 1	15.4	
Mechanical Roof Bldg 2	21.9	
Mechanical Roof Bldg 2	21.7	
Mechanical Roof Bldg 2	21.6	
Mechanical Roof Bldg 2	22.0	
Mechanical Roof Bldg 2	14.9	
Mechanical Roof Bldg 2	15.2	
Mechanical Roof Bldg 2	15.5	
Mechanical Roof Bldg 2	15.0	
Mechanical Roof Bldg 2	22.4	
Mechanical Roof Bldg 2	18.4	
Mechanical Roof Bldg 2	18.0	
Mechanical Roof Bldg 2	17.6	
Mechanical Roof Bldg 2	22.1	
Mechanical Roof Bldg 2	22.5	
Mechanical Roof Bldg 2	22.2	
Mechanical Roof Bldg 2	22.3	
Mechanical Roof Bldg 2	14.5	
Mechanical Roof Bldg 2	14.5	
Mechanical Roof Bldg 2	13.0	
Mechanical Roof Bldg 2	13.3	

Sunset & Western
Assessed contribution level - Mechanical

Source	Ld dB(A)	
Mechanical Roof Bldg 2	13.2	
Mechanical Roof Bldg 2	13.1	
Mechanical Roof Bldg 2	13.6	
Mechanical Roof Bldg 2	13.2	
Mechanical Roof Bldg 2	13.3	
Mechanical Roof Bldg 2	13.1	
Mechanical Roof Bldg 3	3.4	
Mechanical Roof Bldg 3	3.6	
Mechanical Roof Bldg 3	12.4	
Mechanical Roof Bldg 3	9.5	
Mechanical Roof Bldg 3	12.4	
Mechanical Roof Bldg 3	9.6	
Mechanical Roof Bldg 3	12.1	
Mechanical Roof Bldg 3	10.0	
Mechanical Roof Bldg 3	7.2	
Mechanical Roof Bldg 3	7.0	
Mechanical Roof Bldg 3	7.0	
Mechanical Roof Bldg 3	9.8	
Mechanical Roof Bldg 3	11.9	
Mechanical Roof Bldg 3	11.7	
Mechanical Roof Bldg 3	7.3	
Mechanical Roof Bldg 3	7.7	
Mechanical Roof Bldg 3	7.4	
Mechanical Roof Bldg 3	7.6	
Mechanical Roof Bldg 3	5.0	
Mechanical Roof Bldg 3	4.9	
Mechanical Roof Bldg 3	5.4	
Mechanical Roof Bldg 3	7.3	
Mechanical Roof Bldg 3	11.2	
Mechanical Roof Bldg 3	9.0	
Mechanical Roof Bldg 3	8.8	
Mechanical Roof Bldg 3	5.2	
Mechanical Roof Bldg 3	8.6	
Mechanical Roof Bldg 4	9.6	
Mechanical Roof Bldg 4	9.2	
Mechanical Roof Bldg 4	8.7	
Mechanical Roof Bldg 4	7.4	
Mechanical Roof Bldg 4	6.2	
Mechanical Roof Bldg 4	9.3	
Mechanical Roof Bldg 4	9.1	
Mechanical Roof Bldg 4	8.9	

Source	Ld dB(A)	
Mechanical Roof Bldg 4	9.3	
Mechanical Roof Bldg 4	10.4	
Mechanical Roof Bldg 4	11.0	
Mechanical Roof Bldg 4	9.2	
Mechanical Roof Bldg 4	11.3	
Mechanical Roof Bldg 4	11.5	
Mechanical Roof Bldg 4	11.3	
Mechanical Roof Bldg 4	11.2	
Mechanical Roof Bldg 4	12.3	
Mechanical Roof Bldg 4	12.5	
Mechanical Roof Bldg 4	7.8	
Mechanical Roof Bldg 4	7.6	
Mechanical Roof Bldg 4	7.2	
Mechanical Roof Bldg 4	12.1	
Mechanical Roof Bldg 4	9.7	
Mechanical Roof Bldg 4	9.4	
Mechanical Roof Bldg 4	5.7	
Mechanical Roof Bldg 4	5.8	
Mechanical Roof Bldg 4	6.2	
Mechanical Roof Market	10.5	
Mechanical Roof Market	20.5	
Mechanical Roof Market	20.3	
Receiver R4 Ld 34.8 dB(A)		
Mechanical Roof Bldg 1	10.6	
Mechanical Roof Bldg 1	4.7	
Mechanical Roof Bldg 1	5.0	
Mechanical Roof Bldg 1	5.1	
Mechanical Roof Bldg 1	10.3	
Mechanical Roof Bldg 1	9.8	
Mechanical Roof Bldg 1	9.7	
Mechanical Roof Bldg 1	9.8	
Mechanical Roof Bldg 1	10.1	
Mechanical Roof Bldg 1	5.2	
Mechanical Roof Bldg 1	4.5	
Mechanical Roof Bldg 1	6.2	
Mechanical Roof Bldg 1	5.8	
Mechanical Roof Bldg 1	6.6	
Mechanical Roof Bldg 1	4.5	
Mechanical Roof Bldg 1	5.3	
Mechanical Roof Bldg 1	5.3	
Mechanical Roof Bldg 1	5.4	

Sunset & Western
Assessed contribution level - Mechanical

Source	Ld dB(A)	
Mechanical Roof Bldg 1	4.5	
Mechanical Roof Bldg 2	16.1	
Mechanical Roof Bldg 2	16.4	
Mechanical Roof Bldg 2	16.7	
Mechanical Roof Bldg 2	11.9	
Mechanical Roof Bldg 2	19.6	
Mechanical Roof Bldg 2	19.5	
Mechanical Roof Bldg 2	19.4	
Mechanical Roof Bldg 2	19.1	
Mechanical Roof Bldg 2	10.0	
Mechanical Roof Bldg 2	19.2	
Mechanical Roof Bldg 2	19.3	
Mechanical Roof Bldg 2	19.4	
Mechanical Roof Bldg 2	11.5	
Mechanical Roof Bldg 2	11.1	
Mechanical Roof Bldg 2	10.7	
Mechanical Roof Bldg 2	10.4	
Mechanical Roof Bldg 2	17.6	
Mechanical Roof Bldg 2	17.6	
Mechanical Roof Bldg 2	17.5	
Mechanical Roof Bldg 2	17.2	
Mechanical Roof Bldg 2	17.3	
Mechanical Roof Bldg 2	17.3	
Mechanical Roof Bldg 2	17.3	
Mechanical Roof Bldg 2	17.2	
Mechanical Roof Bldg 2	17.1	
Mechanical Roof Bldg 2	17.4	
Mechanical Roof Bldg 3	8.2	
Mechanical Roof Bldg 3	8.2	
Mechanical Roof Bldg 3	15.0	
Mechanical Roof Bldg 3	18.1	
Mechanical Roof Bldg 3	17.9	
Mechanical Roof Bldg 3	8.2	
Mechanical Roof Bldg 3	8.4	
Mechanical Roof Bldg 3	11.8	
Mechanical Roof Bldg 3	11.6	
Mechanical Roof Bldg 3	11.5	
Mechanical Roof Bldg 3	11.5	
Mechanical Roof Bldg 3	11.8	
Mechanical Roof Bldg 3	8.3	
Mechanical Roof Bldg 3	8.3	

Sunset & Western
Assessed contribution level - Mechanical

Source	Ld dB(A)	
Mechanical Roof Bldg 3	11.6	
Mechanical Roof Bldg 3	11.6	
Mechanical Roof Bldg 3	20.3	
Mechanical Roof Bldg 3	20.3	
Mechanical Roof Bldg 3	20.4	
Mechanical Roof Bldg 3	20.4	
Mechanical Roof Bldg 3	20.4	
Mechanical Roof Bldg 3	20.4	
Mechanical Roof Bldg 3	18.2	
Mechanical Roof Bldg 3	17.2	
Mechanical Roof Bldg 3	17.6	
Mechanical Roof Bldg 3	20.6	
Mechanical Roof Bldg 3	18.0	
Mechanical Roof Bldg 4	3.7	
Mechanical Roof Bldg 4	7.3	
Mechanical Roof Bldg 4	4.7	
Mechanical Roof Bldg 4	7.6	
Mechanical Roof Bldg 4	6.3	
Mechanical Roof Bldg 4	5.3	
Mechanical Roof Bldg 4	4.3	
Mechanical Roof Bldg 4	4.2	
Mechanical Roof Bldg 4	11.5	
Mechanical Roof Bldg 4	11.7	
Mechanical Roof Bldg 4	5.2	
Mechanical Roof Bldg 4	11.5	
Mechanical Roof Bldg 4	11.4	
Mechanical Roof Bldg 4	5.4	
Mechanical Roof Bldg 4	5.3	
Mechanical Roof Bldg 4	5.3	
Mechanical Roof Bldg 4	8.1	
Mechanical Roof Bldg 4	8.4	
Mechanical Roof Bldg 4	7.8	
Mechanical Roof Bldg 4	7.6	
Mechanical Roof Bldg 4	6.0	
Mechanical Roof Bldg 4	7.9	
Mechanical Roof Bldg 4	11.6	
Mechanical Roof Bldg 4	11.6	
Mechanical Roof Bldg 4	5.9	
Mechanical Roof Bldg 4	5.9	
Mechanical Roof Bldg 4	5.8	
Mechanical Roof Market	5.4	

Sunset & Western
Assessed contribution level - Mechanical

Source	Ld dB(A)	
Mechanical Roof Market	15.1	
Mechanical Roof Market	15.9	
Receiver R5 Ld 35.7 dB(A)		
Mechanical Roof Bldg 1	11.3	
Mechanical Roof Bldg 1	7.4	
Mechanical Roof Bldg 1	8.6	
Mechanical Roof Bldg 1	6.2	
Mechanical Roof Bldg 1	11.5	
Mechanical Roof Bldg 1	11.5	
Mechanical Roof Bldg 1	11.5	
Mechanical Roof Bldg 1	11.5	
Mechanical Roof Bldg 1	11.5	
Mechanical Roof Bldg 1	5.6	
Mechanical Roof Bldg 1	7.5	
Mechanical Roof Bldg 1	9.0	
Mechanical Roof Bldg 1	9.5	
Mechanical Roof Bldg 1	8.6	
Mechanical Roof Bldg 1	7.5	
Mechanical Roof Bldg 1	4.4	
Mechanical Roof Bldg 1	4.4	
Mechanical Roof Bldg 1	4.7	
Mechanical Roof Bldg 1	7.4	
Mechanical Roof Bldg 2	4.3	
Mechanical Roof Bldg 2	4.3	
Mechanical Roof Bldg 2	4.2	
Mechanical Roof Bldg 2	4.4	
Mechanical Roof Bldg 2	8.4	
Mechanical Roof Bldg 2	8.5	
Mechanical Roof Bldg 2	8.5	
Mechanical Roof Bldg 2	6.8	
Mechanical Roof Bldg 2	5.4	
Mechanical Roof Bldg 2	7.3	
Mechanical Roof Bldg 2	7.7	
Mechanical Roof Bldg 2	7.9	
Mechanical Roof Bldg 2	4.5	
Mechanical Roof Bldg 2	4.5	
Mechanical Roof Bldg 2	4.6	
Mechanical Roof Bldg 2	5.0	
Mechanical Roof Bldg 2	7.1	
Mechanical Roof Bldg 2	9.0	
Mechanical Roof Bldg 2	8.9	

Source	Ld dB(A)	
Mechanical Roof Bldg 2	7.1	
Mechanical Roof Bldg 2	7.1	
Mechanical Roof Bldg 2	7.1	
Mechanical Roof Bldg 2	7.2	
Mechanical Roof Bldg 2	7.2	
Mechanical Roof Bldg 2	7.1	
Mechanical Roof Bldg 2	7.0	
Mechanical Roof Bldg 3	18.6	
Mechanical Roof Bldg 3	18.1	
Mechanical Roof Bldg 3	16.8	
Mechanical Roof Bldg 3	16.1	
Mechanical Roof Bldg 3	16.3	
Mechanical Roof Bldg 3	19.1	
Mechanical Roof Bldg 3	16.9	
Mechanical Roof Bldg 3	20.6	
Mechanical Roof Bldg 3	18.6	
Mechanical Roof Bldg 3	18.7	
Mechanical Roof Bldg 3	18.7	
Mechanical Roof Bldg 3	20.6	
Mechanical Roof Bldg 3	17.1	
Mechanical Roof Bldg 3	17.6	
Mechanical Roof Bldg 3	20.8	
Mechanical Roof Bldg 3	20.7	
Mechanical Roof Bldg 3	12.6	
Mechanical Roof Bldg 3	12.1	
Mechanical Roof Bldg 3	18.5	
Mechanical Roof Bldg 3	18.7	
Mechanical Roof Bldg 3	18.7	
Mechanical Roof Bldg 3	13.1	
Mechanical Roof Bldg 3	16.5	
Mechanical Roof Bldg 3	15.6	
Mechanical Roof Bldg 3	11.0	
Mechanical Roof Bldg 3	18.5	
Mechanical Roof Bldg 3	10.7	
Mechanical Roof Bldg 4	16.0	
Mechanical Roof Bldg 4	16.5	
Mechanical Roof Bldg 4	16.4	
Mechanical Roof Bldg 4	16.8	
Mechanical Roof Bldg 4	19.4	
Mechanical Roof Bldg 4	11.1	
Mechanical Roof Bldg 4	17.0	

Sunset & Western
Assessed contribution level - Mechanical

Source	Ld dB(A)	
Mechanical Roof Bldg 4	17.3	
Mechanical Roof Bldg 4	19.8	
Mechanical Roof Bldg 4	19.8	
Mechanical Roof Bldg 4	11.1	
Mechanical Roof Bldg 4	19.8	
Mechanical Roof Bldg 4	17.6	
Mechanical Roof Bldg 4	11.0	
Mechanical Roof Bldg 4	11.0	
Mechanical Roof Bldg 4	11.3	
Mechanical Roof Bldg 4	17.6	
Mechanical Roof Bldg 4	17.3	
Mechanical Roof Bldg 4	18.1	
Mechanical Roof Bldg 4	18.6	
Mechanical Roof Bldg 4	19.1	
Mechanical Roof Bldg 4	18.0	
Mechanical Roof Bldg 4	19.7	
Mechanical Roof Bldg 4	19.7	
Mechanical Roof Bldg 4	20.8	
Mechanical Roof Bldg 4	21.0	
Mechanical Roof Bldg 4	20.7	
Mechanical Roof Market	6.4	
Mechanical Roof Market	16.1	
Mechanical Roof Market	16.6	

Sunset & Western
Assessed contribution level - People

Source	Ld dB(A)	
Receiver R1 Ld 44.1 dB(A)		
People Level 1 Paseo	42.0	
People Roof Rec 1	34.5	
People Roof Rec 2	32.9	
People Level 2 Bldg 4 Paseo	31.1	
People Level 3 Pool Area	29.7	
People Level 2 Bldg 3 Paseo	29.5	
People Level 3 Bldg 1	28.9	
People Level 3 Bldg 2	26.0	
People Level 1 Plaza	25.8	
People Level 1 Plaza	20.0	
Receiver R2 Ld 41.0 dB(A)		
People Level 3 Pool Area	38.3	
People Roof Rec 1	31.2	
People Level 1 Paseo	31.0	
People Level 3 Bldg 2	30.4	
People Roof Rec 2	28.9	
People Level 1 Plaza	27.7	
People Level 3 Bldg 1	25.3	
People Level 1 Plaza	21.1	
People Level 2 Bldg 4 Paseo	20.4	
People Level 2 Bldg 3 Paseo	18.2	
Receiver R3 Ld 56.4 dB(A)		
People Level 1 Plaza	52.6	
People Level 1 Paseo	51.1	
People Level 3 Pool Area	49.5	
People Level 1 Plaza	42.6	
People Roof Rec 1	37.8	
People Roof Rec 2	37.7	
People Level 3 Bldg 2	37.0	
People Level 3 Bldg 1	30.7	
People Level 2 Bldg 3 Paseo	23.3	
People Level 2 Bldg 4 Paseo	22.5	
Receiver R4 Ld 40.1 dB(A)		
People Level 1 Paseo	34.1	
People Level 1 Plaza	33.5	
People Roof Rec 1	32.8	
People Roof Rec 2	30.4	
People Level 3 Pool Area	29.9	
People Level 2 Bldg 3 Paseo	27.8	

Sunset & Western
Assessed contribution level - People

Source	Ld dB(A)	
People Level 2 Bldg 4 Paseo	25.2	
People Level 1 Plaza	24.3	
People Level 3 Bldg 2	21.0	
People Level 3 Bldg 1	18.3	
Receiver R5 Ld 44.2 dB(A)		
People Level 2 Bldg 4 Paseo	40.9	
People Level 2 Bldg 3 Paseo	37.9	
People Roof Rec 2	33.6	
People Level 1 Paseo	33.5	
People Roof Rec 1	33.3	
People Level 3 Pool Area	29.1	
People Level 3 Bldg 2	20.9	
People Level 1 Plaza	20.3	
People Level 1 Plaza	19.6	
People Level 3 Bldg 1	19.1	

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Off-Site Traffic Noise Calculations

Project: Sunset & Western

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%

PHV to ADT factor 10%

EXISTING CONDITIONS

Roadway Segment	Roadway Width*, ft	Distance to Edge of Roadway, ft	Distance to Centerline, feet	Speed mph	Traffic Volume PHV	Traffic Volume ADT	PHV to ADT factor	Barrier Atten.	Site Adjust., dBA	24-Hour CNEL
Wilton Place										
- Between Hollywood Blvd. and Sunset Blvd.	40	10	30	25	1,153	11,530	10%	0	0	70.9
- Between Sunset Blvd. and Fountain Ave.	40	10	30	25	1,328	13,280	10%	0	0	71.5
- Between Fountain Ave. and Santa Monica Blvd.	40	10	30	25	1,674	16,740	10%	0	0	72.5
Western Avenue										
- Between Franklin Ave. and Hollywood Blvd.	60	10	40	35	2,177	21,770	10%	0	0	72.2
- Between Hollywood Blvd. and Sunset Blvd.	60	10	40	35	2,136	21,360	10%	0	0	72.2
- Between Sunset Blvd. and Fountain Ave.	60	10	40	35	1,940	19,400	10%	0	0	71.7
- Between Fountain Ave. and Santa Monica Blvd.	60	10	40	35	2,257	22,570	10%	0	0	72.4
Normandie Avenue										
- Between Hollywood Blvd. and Sunset Blvd.	40	10	30	25	955	9,550	10%	0	0	70.1
- Between Sunset Blvd. and Santa Monica Blvd.	40	10	30	25	1,622	16,220	10%	0	0	72.4
Serrano Avenue										
- Between Hollywood Blvd. and Sunset Blvd.	40	10	30	25	424	4,240	10%	0	0	66.5
- Between Sunset Blvd. and Fountain Ave.	40	10	30	25	379	3,790	10%	0	0	66.0
Franklin Avenue										
- Between Wilton Ave. and Western Ave.	60	10	40	30	2,891	28,910	10%	0	0	73.4
-Between Western Ave. and Normandie Ave.	60	10	40	30	1,874	18,740	10%	0	0	71.5
Hollywood Boulevard										
- Between Bronson Ave. and Wilton Pl.	60	10	40	35	2,521	25,210	10%	0	0	72.9
- Between Wilton Pl. and Western Ave.	60	10	40	35	2,265	22,650	10%	0	0	72.4
- Between Western Ave. and Normandie Ave.	60	10	40	35	2,164	21,640	10%	0	0	72.2
- Between Normandie Ave. and Vermont Ave.	60	10	40	35	2,181	21,810	10%	0	0	72.2
Sunset Boulevard										
- Between Bronson Ave. and Wilton Pl.	70	10	45	35	3,296	32,960	10%	0	0	73.5
- Between Wilton Pl. and Western Ave.	70	10	45	35	3,212	32,120	10%	0	0	73.4
- Between Western Ave. and Serrano Ave.	70	10	45	35	3,027	30,270	10%	0	0	73.2
- Between Serrano Ave. and Normandie Ave.	70	10	45	35	2,820	28,200	10%	0	0	72.9

EXISTING CONDITIONS

Roadway Segment	Roadway Width*, ft	Distance to Edge of Roadway, ft	Distance to Centerline, feet	Speed mph	Traffic Volume PHV	Traffic Volume ADT	PHV to ADT factor	Barrier Atten.	Site Adjust., dBA	24-Hour CNEL
Fountain Avenue										
- Between Van Ness Ave. and Wilton Pl.	40	10	30	25	1,023	10,230	10%	0	0	70.4
- Between Wilton Pl. and Western Ave.	40	10	30	25	1,360	13,600	10%	0	0	71.6
- Between Western Ave. and Serrano Ave.	40	10	30	25	1,320	13,200	10%	0	0	71.5
- Between Serrano Ave. and Normandie Ave.	40	10	30	25	1,342	13,420	10%	0	0	71.5
Santa Monica Boulevard										
- Between Van Ness Ave. and Wilton Pl.	60	10	40	35	2,246	22,460	10%	0	0	72.4
- Between Wilton Pl. and Western Ave.	60	10	40	35	2,291	22,910	10%	0	0	72.5
- Between Western Ave. and Normandie Ave.	60	10	40	35	2,328	23,280	10%	0	0	72.5
- Between Normandie Ave. and Vermont Ave.	60	10	40	35	2,240	22,400	10%	0	0	72.4

* Estimated based on Google Earth map.

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

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Off-Site Traffic Noise Calculations
Project: Sunset & Western

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%

PHV to ADT factor 10%

EXISTING + PROJECT CONDITIONS

Roadway Segment	Roadway Width*, ft	Distance to Edge of Roadway, ft	Distance to Centerline, feet	Speed mph	Traffic Volume PHV	Traffic Volume ADT	PHV to ADT factor	Barrier Atten.	Site Adjust., dBA	24-Hour CNEL
Wilton Place										
- Between Hollywood Blvd. and Sunset Blvd.	40	10	30	25	1,161	11,610	10%	0	0	70.9
- Between Sunset Blvd. and Fountain Ave.	40	10	30	25	1,328	13,280	10%	0	0	71.5
- Between Fountain Ave. and Santa Monica Blvd.	40	10	30	25	1,674	16,740	10%	0	0	72.5
Western Avenue										
- Between Franklin Ave. and Hollywood Blvd.	60	10	40	35	2,185	21,850	10%	0	0	72.3
- Between Hollywood Blvd. and Sunset Blvd.	60	10	40	35	2,158	21,580	10%	0	0	72.2
- Between Sunset Blvd. and Fountain Ave.	60	10	40	35	1,989	19,890	10%	0	0	71.8
- Between Fountain Ave. and Santa Monica Blvd.	60	10	40	35	2,293	22,930	10%	0	0	72.5
Normandie Avenue										
- Between Hollywood Blvd. and Sunset Blvd.	40	10	30	25	955	9,550	10%	0	0	70.1
- Between Sunset Blvd. and Santa Monica Blvd.	40	10	30	25	1,625	16,250	10%	0	0	72.4
Serrano Avenue										
- Between Hollywood Blvd. and Sunset Blvd.	40	10	30	25	416	4,160	10%	0	0	66.4
- Between Sunset Blvd. and Fountain Ave.	40	10	30	25	374	3,740	10%	0	0	66.0
Franklin Avenue										
- Between Wilton Ave. and Western Ave.	60	10	40	30	2,891	28,910	10%	0	0	73.4
-Between Western Ave. and Normandie Ave.	60	10	40	30	1,874	18,740	10%	0	0	71.5
Hollywood Boulevard										
- Between Bronson Ave. and Wilton Pl.	60	10	40	35	2,538	25,380	10%	0	0	72.9
- Between Wilton Pl. and Western Ave.	60	10	40	35	2,276	22,760	10%	0	0	72.4
- Between Western Ave. and Normandie Ave.	60	10	40	35	2,161	21,610	10%	0	0	72.2
- Between Normandie Ave. and Vermont Ave.	60	10	40	35	2,177	21,770	10%	0	0	72.2
Sunset Boulevard										
- Between Bronson Ave. and Wilton Pl.	70	10	45	35	3,333	33,330	10%	0	0	73.6
- Between Wilton Pl. and Western Ave.	70	10	45	35	3,287	32,870	10%	0	0	73.5
- Between Western Ave. and Serrano Ave.	70	10	45	35	3,049	30,490	10%	0	0	73.2
- Between Serrano Ave. and Normandie Ave.	70	10	45	35	2,835	28,350	10%	0	0	72.9

EXISTING + PROJECT CONDITIONS

Roadway Segment	Roadway Width*, ft	Distance to Edge of Roadway, ft	Distance to Centerline, feet	Speed mph	Traffic Volume PHV	Traffic Volume ADT	PHV to ADT factor	Barrier Atten.	Site Adjust., dBA	24-Hour CNEL
Fountain Avenue										
- Between Van Ness Ave. and Wilton Pl.	40	10	30	25	1,019	10,190	10%	0	0	70.3
- Between Wilton Pl. and Western Ave.	40	10	30	25	1,356	13,560	10%	0	0	71.6
- Between Western Ave. and Serrano Ave.	40	10	30	25	1,320	13,200	10%	0	0	71.5
- Between Serrano Ave. and Normandie Ave.	40	10	30	25	1,338	13,380	10%	0	0	71.5
Santa Monica Boulevard										
- Between Van Ness Ave. and Wilton Pl.	60	10	40	35	2,249	22,490	10%	0	0	72.4
- Between Wilton Pl. and Western Ave.	60	10	40	35	2,294	22,940	10%	0	0	72.5
- Between Western Ave. and Normandie Ave.	60	10	40	35	2,336	23,360	10%	0	0	72.5
- Between Normandie Ave. and Vermont Ave.	60	10	40	35	2,248	22,480	10%	0	0	72.4

* Estimated based on Google Earth map.

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

Date Printed: 4/17/2020

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Off-Site Traffic Noise Calculations
Project: Sunset & Western

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%

PHV to ADT factor 10%

FUTURE NO PROJECT CONDITIONS

Roadway Segment	Roadway Width*, ft	Distance to Edge of Roadway, ft	Distance to Centerline, feet	Speed mph	Traffic Volume PHV	Traffic Volume ADT	PHV to ADT factor	Barrier Atten.	Site Adjust., dBA	24-Hour CNEL
Wilton Place										
- Between Hollywood Blvd. and Sunset Blvd.	40	10	30	25	1,322	13,220	10%	0	0	71.5
- Between Sunset Blvd. and Fountain Ave.	40	10	30	25	1,466	14,660	10%	0	0	71.9
- Between Fountain Ave. and Santa Monica Blvd.	40	10	30	25	1,856	18,560	10%	0	0	72.9
Western Avenue										
- Between Franklin Ave. and Hollywood Blvd.	60	10	40	35	2,431	24,310	10%	0	0	72.7
- Between Hollywood Blvd. and Sunset Blvd.	60	10	40	35	2,393	23,930	10%	0	0	72.6
- Between Sunset Blvd. and Fountain Ave.	60	10	40	35	2,257	22,570	10%	0	0	72.4
- Between Fountain Ave. and Santa Monica Blvd.	60	10	40	35	2,670	26,700	10%	0	0	73.1
Normandie Avenue										
- Between Hollywood Blvd. and Sunset Blvd.	40	10	30	25	1,060	10,600	10%	0	0	70.5
- Between Sunset Blvd. and Santa Monica Blvd.	40	10	30	25	1,784	17,840	10%	0	0	72.8
Serrano Avenue										
- Between Hollywood Blvd. and Sunset Blvd.	40	10	30	25	463	4,630	10%	0	0	66.9
- Between Sunset Blvd. and Fountain Ave.	40	10	30	25	415	4,150	10%	0	0	66.4
Franklin Avenue										
- Between Wilton Ave. and Western Ave.	60	10	40	30	3,240	32,400	10%	0	0	73.9
-Between Western Ave. and Normandie Ave.	60	10	40	30	2,150	21,500	10%	0	0	72.1
Hollywood Boulevard										
- Between Bronson Ave. and Wilton Pl.	60	10	40	35	3,203	32,030	10%	0	0	73.9
- Between Wilton Pl. and Western Ave.	60	10	40	35	2,879	28,790	10%	0	0	73.4
- Between Western Ave. and Normandie Ave.	60	10	40	35	2,733	27,330	10%	0	0	73.2
- Between Normandie Ave. and Vermont Ave.	60	10	40	35	2,757	27,570	10%	0	0	73.3
Sunset Boulevard										
- Between Bronson Ave. and Wilton Pl.	70	10	45	35	4,340	43,400	10%	0	0	74.7
- Between Wilton Pl. and Western Ave.	70	10	45	35	4,000	40,000	10%	0	0	74.4
- Between Western Ave. and Serrano Ave.	70	10	45	35	3,684	36,840	10%	0	0	74.0
- Between Serrano Ave. and Normandie Ave.	70	10	45	35	3,456	34,560	10%	0	0	73.7

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FUTURE NO PROJECT CONDITIONS

Roadway Segment	Roadway Width*, ft	Distance to Edge of Roadway, ft	Distance to Centerline, feet	Speed mph	Traffic Volume PHV	Traffic Volume ADT	PHV to ADT factor	Barrier Atten.	Site Adjust., dBA	24-Hour CNEL
Fountain Avenue										
- Between Van Ness Ave. and Wilton Pl.	40	10	30	25	1,149	11,490	10%	0	0	70.9
- Between Wilton Pl. and Western Ave.	40	10	30	25	1,530	15,300	10%	0	0	72.1
- Between Western Ave. and Serrano Ave.	40	10	30	25	1,468	14,680	10%	0	0	71.9
- Between Serrano Ave. and Normandie Ave.	40	10	30	25	1,493	14,930	10%	0	0	72.0
Santa Monica Boulevard										
- Between Van Ness Ave. and Wilton Pl.	60	10	40	35	3,122	31,220	10%	0	0	73.8
- Between Wilton Pl. and Western Ave.	60	10	40	35	3,276	32,760	10%	0	0	74.0
- Between Western Ave. and Normandie Ave.	60	10	40	35	3,072	30,720	10%	0	0	73.7
- Between Normandie Ave. and Vermont Ave.	60	10	40	35	2,669	26,690	10%	0	0	73.1

* Estimated based on Google Earth map.

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

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Off-Site Traffic Noise Calculations
Project: Sunset & Western

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%

PHV to ADT factor 10%

FUTURE + PROJECT CONDITIONS

Roadway Segment	Roadway Width*, ft	Distance to Edge of Roadway, ft	Distance to Centerline, feet	Speed mph	Traffic Volume PHV	Traffic Volume ADT	PHV to ADT factor	Barrier Atten.	Site Adjust., dBA	24-Hour CNEL
Wilton Place										
- Between Hollywood Blvd. and Sunset Blvd.	40	10	30	25	1,330	13,300	10%	0	0	71.5
- Between Sunset Blvd. and Fountain Ave.	40	10	30	25	1,466	14,660	10%	0	0	71.9
- Between Fountain Ave. and Santa Monica Blvd.	40	10	30	25	1,856	18,560	10%	0	0	72.9
Western Avenue										
- Between Franklin Ave. and Hollywood Blvd.	60	10	40	35	2,439	24,390	10%	0	0	72.7
- Between Hollywood Blvd. and Sunset Blvd.	60	10	40	35	2,415	24,150	10%	0	0	72.7
- Between Sunset Blvd. and Fountain Ave.	60	10	40	35	2,306	23,060	10%	0	0	72.5
- Between Fountain Ave. and Santa Monica Blvd.	60	10	40	35	2,706	27,060	10%	0	0	73.2
Normandie Avenue										
- Between Hollywood Blvd. and Sunset Blvd.	40	10	30	25	1,060	10,600	10%	0	0	70.5
- Between Sunset Blvd. and Santa Monica Blvd.	40	10	30	25	1,788	17,880	10%	0	0	72.8
Serrano Avenue										
- Between Hollywood Blvd. and Sunset Blvd.	40	10	30	25	455	4,550	10%	0	0	66.8
- Between Sunset Blvd. and Fountain Ave.	40	10	30	25	410	4,100	10%	0	0	66.4
Franklin Avenue										
- Between Wilton Ave. and Western Ave.	60	10	40	30	3,240	32,400	10%	0	0	73.9
-Between Western Ave. and Normandie Ave.	60	10	40	30	2,150	21,500	10%	0	0	72.1
Hollywood Boulevard										
- Between Bronson Ave. and Wilton Pl.	60	10	40	35	3,214	32,140	10%	0	0	73.9
- Between Wilton Pl. and Western Ave.	60	10	40	35	2,891	28,910	10%	0	0	73.5
- Between Western Ave. and Normandie Ave.	60	10	40	35	2,730	27,300	10%	0	0	73.2
- Between Normandie Ave. and Vermont Ave.	60	10	40	35	2,753	27,530	10%	0	0	73.3
Sunset Boulevard										
- Between Bronson Ave. and Wilton Pl.	70	10	45	35	4,378	43,780	10%	0	0	74.8
- Between Wilton Pl. and Western Ave.	70	10	45	35	4,075	40,750	10%	0	0	74.5
- Between Western Ave. and Serrano Ave.	70	10	45	35	3,706	37,060	10%	0	0	74.0
- Between Serrano Ave. and Normandie Ave.	70	10	45	35	3,472	34,720	10%	0	0	73.8

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Acoustical Engineering Services

FUTURE + PROJECT CONDITIONS

Roadway Segment	Roadway Width*, ft	Distance to Edge of Roadway, ft	Distance to Centerline, feet	Speed mph	Traffic Volume PHV	Traffic Volume ADT	PHV to ADT factor	Barrier Atten.	Site Adjust., dBA	24-Hour CNEL
Fountain Avenue										
- Between Van Ness Ave. and Wilton Pl.	40	10	30	25	1,145	11,450	10%	0	0	70.8
- Between Wilton Pl. and Western Ave.	40	10	30	25	1,526	15,260	10%	0	0	72.1
- Between Western Ave. and Serrano Ave.	40	10	30	25	1,468	14,680	10%	0	0	71.9
- Between Serrano Ave. and Normandie Ave.	40	10	30	25	1,489	14,890	10%	0	0	72.0
Santa Monica Boulevard										
- Between Van Ness Ave. and Wilton Pl.	60	10	40	35	3,125	31,250	10%	0	0	73.8
- Between Wilton Pl. and Western Ave.	60	10	40	35	3,279	32,790	10%	0	0	74.0
- Between Western Ave. and Normandie Ave.	60	10	40	35	3,080	30,800	10%	0	0	73.7
- Between Normandie Ave. and Vermont Ave.	60	10	40	35	2,677	26,770	10%	0	0	73.1

* Estimated based on Google Earth map.

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

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