Appendix G

Noise Calculation Worksheets

Paseo Marina Project

Noise Calculations Worksheets

Provided by Acoustical Engineering Services

Ambient Noise Measurements

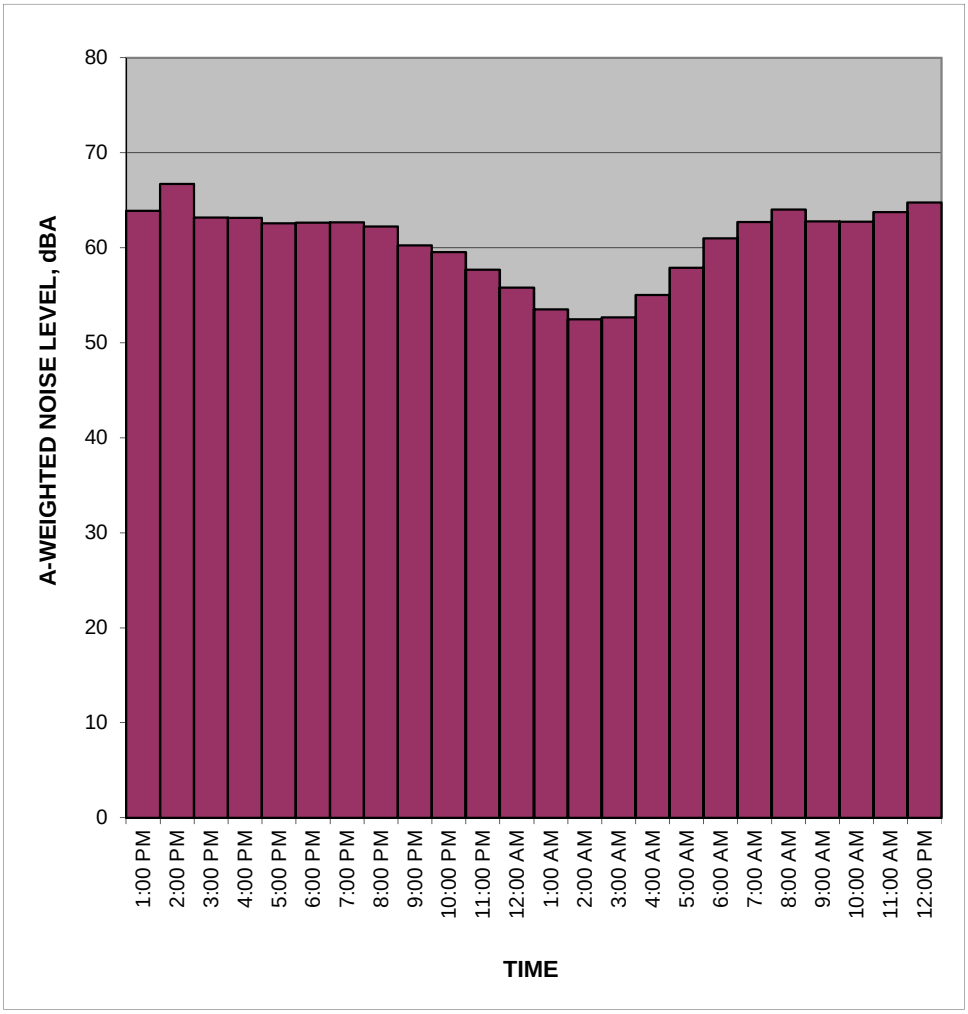
Measured Ambient Noise Levels

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina
Location: R1
Sources: Ambient

Date: 5/22 to 5/23/2017

TIME	HNL, dB(A)
1:00 PM	63.9
2:00 PM	66.7
3:00 PM	63.2
4:00 PM	63.1
5:00 PM	62.6
6:00 PM	62.6
7:00 PM	62.7
8:00 PM	62.2
9:00 PM	60.2
10:00 PM	59.6
11:00 PM	57.7
12:00 AM	55.8
1:00 AM	53.5
2:00 AM	52.5
3:00 AM	52.7
4:00 AM	55.0
5:00 AM	57.9
6:00 AM	61.0
7:00 AM	62.7
8:00 AM	64.0
9:00 AM	62.8
10:00 AM	62.8
11:00 AM	63.8
12:00 PM	64.8
CNEL, dB(A):	**65.7**



NOTES:

AES
ACOUSTICAL ENGINEERING SERVICES

Location: R2 -
Date: 5/22/2017

Time	Overload	Leq	Lmax	L10	L90
12:48:49 PM	No	58.9	70.4	61.5	54.5
12:49:49 PM	No	53.8	59.7	55.1	52.6
12:50:49 PM	No	56.5	61.3	59	54
12:51:49 PM	No	57.4	64.9	59.6	54.8
12:52:49 PM	No	58.5	65	61.2	55
12:53:49 PM	No	55.8	64.8	56.3	54.6
12:54:49 PM	No	55.2	58.8	55.9	54.6
12:55:49 PM	No	55.6	61	56.3	54.5
12:56:49 PM	No	56	60.4	57.9	54
12:57:49 PM	No	55.5	66.4	57.1	52.4
12:58:49 PM	No	54.2	57.1	55.7	52.4
12:59:49 PM	No	53.5	59.6	54	52.2
1:00:49 PM	No	55.9	60.5	58.2	53
1:01:49 PM	No	56.2	61.9	58.8	53.6
1:02:49 PM	No	52.8	55	53.8	52
		56.1			

Time	Overload	Leq	Lmax	L10	L90
10:02:08 PM	No	54	59.9	56.1	52.4
10:03:08 PM	No	55.8	62.1	60.3	52.8
10:04:08 PM	No	52.4	54.8	53.2	51.7
10:05:08 PM	No	52.4	54.1	53.1	51.5
10:06:08 PM	No	55.2	60.4	57.8	52.5
10:07:08 PM	No	53.2	55.3	53.6	52.5
10:08:08 PM	No	53.3	56.6	55.3	51.7
10:09:08 PM	No	52.4	54	53.3	51.8
10:10:08 PM	No	52.5	55	53.5	51.7
10:11:08 PM	No	52.4	55.4	53.7	51.3
10:12:08 PM	No	52.5	54.8	53.3	51.3
10:13:08 PM	No	53.5	55.6	54.7	51.8
10:14:08 PM	No	62.1	71.1	67.5	53.3
10:15:08 PM	No	53	57.4	53.8	52.2
10:16:08 PM	No	52.4	55.4	53.4	51.3
		54.9			

AES
ACOUSTICAL ENGINEERING SERVICES

Location: R3
Date: 5/22/2017

Time	Overload	Leq	Lmax	L10	L90
1:10:18 PM	No	66.2	71.3	69.3	61.3
1:11:18 PM	No	67.3	73.1	70	61.2
1:12:18 PM	No	66.2	71.8	69.7	58.7
1:13:18 PM	No	65.2	71.7	69	57.5
1:14:18 PM	No	66	70.8	69.4	56.4
1:15:18 PM	No	65.5	71.6	69.7	54.2
1:16:18 PM	No	65.5	70.3	68.9	60
1:17:18 PM	No	67.6	72.7	69.8	62.5
1:18:18 PM	No	68.3	73.6	70.8	61.7
1:19:18 PM	No	67.1	71.9	70.7	55.4
1:20:18 PM	No	66	70.9	69.7	60
1:21:18 PM	No	65.6	70.8	68.7	59.3
1:22:18 PM	No	64.2	68.8	66.4	59.5
1:23:18 PM	No	66.3	71	69	57.1
1:24:18 PM	No	67	72.9	70.6	59.6
		66.4			

Time	Overload	Leq	Lmax	L10	L90
10:28:48 PM	No	66.3	71.8	69.2	60.7
10:29:48 PM	No	61.5	68.7	66.4	50.7
10:30:48 PM	No	64.3	71.1	68.4	51.1
10:31:48 PM	No	63.2	68.1	66.6	55.2
10:32:48 PM	No	59.7	69.3	64.5	50.1
10:33:48 PM	No	63.1	69.8	68.6	52.3
10:34:48 PM	No	63.7	70.2	67.6	52.6
10:35:48 PM	No	66.7	72.4	70.1	58.9
10:36:48 PM	No	63.5	70.9	67.8	52.9
10:37:48 PM	No	61.6	67.9	65.5	54.2
10:38:48 PM	No	57.8	65.8	62.1	50.1
10:39:48 PM	No	66.2	71.7	69	56.9
10:40:48 PM	No	59.5	69.3	65.1	48.1
10:41:48 PM	No	60.7	68.7	66.8	48.5
10:42:48 PM	No	64.9	71.3	69.2	53.5
		63.6			

AES
ACOUSTICAL ENGINEERING SERVICES

Location: R4
Date: 5/22/2017

Time	Overload	Leq	Lmax	L10	L90
1:29:45 PM	No	68.9	75.7	71.4	63.3
1:30:45 PM	No	68.9	79.6	71.9	62
1:31:45 PM	No	67.1	71	70.1	63.3
1:32:45 PM	No	67.2	71.8	70.6	61.4
1:33:45 PM	No	65.9	70.7	68.8	62.7
1:34:45 PM	No	65.6	72.5	68.1	56.9
1:35:45 PM	No	65.8	70.3	69	58.7
1:36:45 PM	No	66.7	71	69.7	59
1:37:45 PM	No	71.7	83.7	73	58.1
1:38:45 PM	No	67.6	73.2	70.6	64
1:39:45 PM	No	65.2	69.3	68.5	60.3
1:40:45 PM	No	67.1	77.6	70.9	59.3
1:41:45 PM	No	67.8	74.3	70	62.5
1:42:45 PM	No	72.2	79.4	77.7	67.4
1:43:45 PM	No	71.7	80.8	75.1	59.8
		68.6			

Time	Overload	Leq	Lmax	L10	L90
10:47:32 PM	No	57.2	64.3	62.5	51.2
10:48:32 PM	No	60.3	68.3	64.3	53.4
10:49:32 PM	No	63.6	73.2	66.8	53.1
10:50:32 PM	No	63.1	71.6	67.5	52
10:51:32 PM	No	60.3	67.6	64.4	53.7
10:52:32 PM	No	62.5	69.1	67.2	52.8
10:53:32 PM	No	64.6	74.1	68.7	53.4
10:54:32 PM	No	60.7	68.2	65.6	52.6
10:55:32 PM	No	59.3	69.4	63	50.9
10:56:32 PM	No	59.6	66.3	63.5	54.4
10:57:32 PM	No	59.5	69.2	64.1	50.2
10:58:32 PM	No	61.2	70.4	64.4	53
10:59:32 PM	No	61.2	70.6	65.3	54.2
11:00:32 PM	No	60.7	69	66.6	49.3
11:01:32 PM	No	65.9	78.1	70.8	50.7
		61.9			

AES
ACOUSTICAL ENGINEERING SERVICES

Location: R5
Date: 5/22/2017

Time	Overload	Leq	Lmax	L10	L90
1:49:54 PM	No	64.7	70	69.3	58.8
1:50:54 PM	No	63.7	72.8	65.6	59.5
1:51:54 PM	No	63	69.3	67.4	57.6
1:52:54 PM	No	62.9	67.2	65.8	60.2
1:53:54 PM	No	64.9	72.8	69.5	57.8
1:54:54 PM	No	66.8	74.5	70.9	60.1
1:55:54 PM	No	63.2	69.3	65.6	59.6
1:56:54 PM	No	63.1	69.9	66.4	59.2
1:57:54 PM	No	62.5	68.1	65.5	58.9
1:58:54 PM	No	62.6	67.8	65.5	59.4
1:59:54 PM	No	64.9	68.5	67.3	60.9
2:00:54 PM	No	77.1	90.8	78.6	61.1
2:02:54 PM	No	63.8	68.3	66.5	59.6
2:03:54 PM	No	63.4	68.8	66.9	59.7
		67.7			

Time	Overload	Leq	Lmax	L10	L90
11:07:30 PM	No	62.9	71.1	67.9	54.4
11:08:30 PM	No	61.5	73.7	64	53
11:09:30 PM	No	62.4	68.6	66.6	53.4
11:10:30 PM	No	55.8	61.4	58.5	52.9
11:11:30 PM	No	56.7	67.3	56.8	51.7
11:12:30 PM	No	59.5	70.9	61.2	52.8
11:13:30 PM	No	57.2	64.5	60.3	52.3
11:14:30 PM	No	60.3	69.7	63.7	52.1
11:15:30 PM	No	57.8	65.2	60.5	53.3
11:16:30 PM	No	59.4	65.5	62.5	54.5
11:17:30 PM	No	56.5	64	61.3	52
11:18:30 PM	No	58.7	70.1	61.3	51.5
11:19:30 PM	No	64.2	73.6	69.6	51.1
11:20:30 PM	No	62	69.5	67	52.9
11:21:30 PM	No	59.2	71	61.2	53.9
		60.3			

Construction Noise & Vibration Calculations

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

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%	50	0
Rubber Tired Loader	1	79	40%	50	0
Air Compressor	1	78	40%	75	0
Tractor/Loader/Backhoe	1	79	40%	75	0
Skid Steer Loader	1	79	40%	100	0
Water Truck/Sweeper	1	81	10%	100	0
Terrain Forklift	1	83	40%	125	0
Welder	1	74	40%	125	0
Concrete Saw	1	90	20%	150	0
Tractor/Loader/Backhoe	1	79	40%	150	0
Signal Boards	2	73	50%	175	0
Crusing/Proc. Equipment	1	76	50%	175	0
	13				

Receptor: ***R1***

Results:

1-hour Leq: 84.9

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: *Grading / Excavation*

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Bore/Drill Rig	1	84	20%	50	0
Excavator	1	81	40%	50	0
Crane	1	81	16%	75	0
Cement and Mortar Mixers	1	80	50%	75	0
Terrain Forklift	1	83	40%	100	0
Water Truck/Sweeper	1	81	10%	100	0
Tractor/Loader/Backhoe	1	79	40%	125	0
Rubber Tired Loader	1	79	40%	125	0
Welders	2	74	40%	150	0
Skid Steer Loader	1	79	40%	150	0
Bore/Drill Rig	1	84	20%	175	0
Signal Boards	2	73	50%	175	0
Excavator	1	81	40%	200	0
Tractor/Loader/Backhoe	1	79	40%	200	0
Rubber Tired Loader	1	79	40%	200	0
	17				

Receptor: ***R1***

Results:

1-hour Leq: 82.6

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: *Foundation*

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (mobile)	1	84	20%	50	0
Concrete Saw	1	90	20%	50	0
Crane (tower)	1	81	16%	75	0
Cement and Mortar Mixers	3	80	50%	75	0
Plate Compactors	2	83	20%	100	0
Air Compressor	1	78	40%	100	0
Forklift	2	75	20%	125	0
Water Truck/Sweeper	1	81	10%	125	0
Tractor/Loader/Backhoe	3	79	40%	150	0
Signal Boards	2	73	50%	150	0
Terrain Forklift	1	83	40%	175	0
Skid Steer Loader	1	79	40%	175	0
Welders	2	74	40%	200	0
Concrete Saw	2	90	20%	200	0
	23				

Receptor: ***R1***

Results:

1-hour Leq: 86.1

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: ***Building Construction***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (mobile)	1	84	20%	50	0
Concrete Saw	1	90	20%	50	0
Crane (tower)	1	81	16%	75	0
Rubber Tired Loader	1	79	40%	75	0
Air Compressor	1	78	40%	100	0
Forklift	1	75	20%	100	0
Water Truck/Sweeper	1	81	10%	125	0
Tractor/Loader/Backhoe	1	79	40%	125	0
Signal Boards	2	73	50%	150	0
Terrain Forklift	1	83	40%	150	0
Skid Steer Loader	1	79	40%	175	0
Welders	2	74	40%	175	0
Air Compressor	2	78	40%	200	0
Forklift	2	75	20%	200	0
	18				

Receptor: ***R1***

Results:

1-hour Leq: 84.9

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: Paving/Concrete/Landscape

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Rubber Tired Loader	1	79	40%	50	0
Concrete Saw	1	90	20%	50	0
Paver	1	77	50%	75	0
Cement and Mortar Mixers	2	80	50%	75	0
Plate Compactors	2	83	20%	100	0
Air Compressor	2	78	40%	100	0
Forklift	2	75	20%	125	0
Water Truck/Sweeper	1	81	10%	125	0
Paving Equipment	1	77	50%	150	0
Signal Boards	2	73	50%	150	0
Terrain Forklift	1	83	40%	175	0
Skid Steer Loader	1	79	40%	175	0
Roller	1	80	20%	200	0
Trencher	1	80	50%	200	0
Welders	1	74	40%	200	0
	20				

Receptor: ***R1***

Results:

1-hour Leq: 85.4

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

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%	140	0
Rubber Tired Loader	1	79	40%	140	0
Air Compressor	1	78	40%	150	0
Tractor/Loader/Backhoe	1	79	40%	150	0
Skid Steer Loader	1	79	40%	175	0
Water Truck/Sweeper	1	81	10%	175	0
Terrain Forklift	1	83	40%	200	0
Welder	1	74	40%	200	0
Concrete Saw	1	90	20%	200	0
Tractor/Loader/Backhoe	1	79	40%	200	0
Signal Boards	2	73	50%	200	0
Crusing/Proc. Equipment	1	76	50%	200	0
	13				

Receptor: ***R2***

Results:

1-hour Leq: 77.9

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: *Grading / Excavation*

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Bore/Drill Rig	1	84	20%	140	0
Excavator	1	81	40%	140	0
Crane	1	81	16%	150	0
Cement and Mortar Mixers	1	80	50%	150	0
Terrain Forklift	1	83	40%	175	0
Water Truck/Sweeper	1	81	10%	175	0
Tractor/Loader/Backhoe	1	79	40%	200	0
Rubber Tired Loader	1	79	40%	200	0
Welders	2	74	40%	200	0
Skid Steer Loader	1	79	40%	200	0
Bore/Drill Rig	1	84	20%	200	0
Signal Boards	2	73	50%	200	0
Excavator	1	81	40%	200	0
Tractor/Loader/Backhoe	1	79	40%	200	0
Rubber Tired Loader	1	79	40%	200	0
	17				

Receptor: ***R2***

Results:

1-hour Leq: 76.7

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: *Foundation*

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (mobile)	1	84	20%	140	0
Concrete Saw	1	90	20%	140	0
Crane (tower)	1	81	16%	150	0
Cement and Mortar Mixers	3	80	50%	150	0
Plate Compactors	2	83	20%	175	0
Air Compressor	1	78	40%	175	0
Forklift	2	75	20%	200	0
Water Truck/Sweeper	1	81	10%	200	0
Tractor/Loader/Backhoe	3	79	40%	200	0
Signal Boards	2	73	50%	200	0
Terrain Forklift	1	83	40%	200	0
Skid Steer Loader	1	79	40%	200	0
Welders	2	74	40%	200	0
Concrete Saw	2	90	20%	200	0
	23				

Receptor: ***R2***

Results:

1-hour Leq: 80.1

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: ***Building Construction***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (mobile)	1	84	20%	140	0
Concrete Saw	1	90	20%	140	0
Crane (tower)	1	81	16%	150	0
Rubber Tired Loader	1	79	40%	150	0
Air Compressor	1	78	40%	175	0
Forklift	1	75	20%	175	0
Water Truck/Sweeper	1	81	10%	200	0
Tractor/Loader/Backhoe	1	79	40%	200	0
Signal Boards	2	73	50%	200	0
Terrain Forklift	1	83	40%	200	0
Skid Steer Loader	1	79	40%	200	0
Welders	2	74	40%	200	0
Air Compressor	2	78	40%	200	0
Forklift	2	75	20%	200	0
	18				

Receptor: ***R2***

Results:

1-hour Leq: 77.5

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: Paving/Concrete/Landscape

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Rubber Tired Loader	1	79	40%	140	0
Concrete Saw	1	90	20%	140	0
Paver	1	77	50%	150	0
Cement and Mortar Mixers	2	80	50%	150	0
Plate Compactors	2	83	20%	175	0
Air Compressor	2	78	40%	175	0
Forklift	2	75	20%	200	0
Water Truck/Sweeper	1	81	10%	200	0
Paving Equipment	1	77	50%	200	0
Signal Boards	2	73	50%	200	0
Terrain Forklift	1	83	40%	200	0
Skid Steer Loader	1	79	40%	200	0
Roller	1	80	20%	200	0
Trencher	1	80	50%	200	0
Welders	1	74	40%	200	0
	20				

Receptor: ***R2***

Results:

1-hour Leq: 78.5

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

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%	90	0
Rubber Tired Loader	1	79	40%	90	0
Air Compressor	1	78	40%	115	0
Tractor/Loader/Backhoe	1	79	40%	115	0
Skid Steer Loader	1	79	40%	140	0
Water Truck/Sweeper	1	81	10%	140	0
Terrain Forklift	1	83	40%	165	0
Welder	1	74	40%	165	0
Concrete Saw	1	90	20%	190	0
Tractor/Loader/Backhoe	1	79	40%	190	0
Signal Boards	2	73	50%	190	0
Crusing/Proc. Equipment	1	76	50%	190	0
	13				

Receptor: ***R3***

Results:

1-hour Leq: 80.6

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: *Grading / Excavation*

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Bore/Drill Rig	1	84	20%	90	0
Excavator	1	81	40%	90	0
Crane	1	81	16%	115	0
Cement and Mortar Mixers	1	80	50%	115	0
Terrain Forklift	1	83	40%	140	0
Water Truck/Sweeper	1	81	10%	140	0
Tractor/Loader/Backhoe	1	79	40%	165	0
Rubber Tired Loader	1	79	40%	165	0
Welders	2	74	40%	190	0
Skid Steer Loader	1	79	40%	190	0
Bore/Drill Rig	1	84	20%	190	0
Signal Boards	2	73	50%	190	0
Excavator	1	81	40%	190	0
Tractor/Loader/Backhoe	1	79	40%	190	0
Rubber Tired Loader	1	79	40%	190	0
	17				

Receptor: ***R3***

Results:

1-hour Leq: 78.9

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: *Foundation*

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (mobile)	1	84	20%	90	0
Concrete Saw	1	90	20%	90	0
Crane (tower)	1	81	16%	115	0
Cement and Mortar Mixers	3	80	50%	115	0
Plate Compactors	2	83	20%	140	0
Air Compressor	1	78	40%	140	0
Forklift	2	75	20%	165	0
Water Truck/Sweeper	1	81	10%	165	0
Tractor/Loader/Backhoe	3	79	40%	190	0
Signal Boards	2	73	50%	190	0
Terrain Forklift	1	83	40%	190	0
Skid Steer Loader	1	79	40%	190	0
Welders	2	74	40%	190	0
Concrete Saw	2	90	20%	190	0
	23				

Receptor: ***R3***

Results:

1-hour Leq: 82.3

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: ***Building Construction***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (mobile)	1	84	20%	90	0
Concrete Saw	1	90	20%	90	0
Crane (tower)	1	81	16%	115	0
Rubber Tired Loader	1	79	40%	115	0
Air Compressor	1	78	40%	140	0
Forklift	1	75	20%	140	0
Water Truck/Sweeper	1	81	10%	165	0
Tractor/Loader/Backhoe	1	79	40%	165	0
Signal Boards	2	73	50%	190	0
Terrain Forklift	1	83	40%	190	0
Skid Steer Loader	1	79	40%	190	0
Welders	2	74	40%	190	0
Air Compressor	2	78	40%	190	0
Forklift	2	75	20%	190	0
	18				

Receptor: ***R3***

Results:

1-hour Leq: 80.4

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: Paving/Concrete/Landscape

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Rubber Tired Loader	1	79	40%	90	0
Concrete Saw	1	90	20%	90	0
Paver	1	77	50%	115	0
Cement and Mortar Mixers	2	80	50%	115	0
Plate Compactors	2	83	20%	140	0
Air Compressor	2	78	40%	140	0
Forklift	2	75	20%	165	0
Water Truck/Sweeper	1	81	10%	165	0
Paving Equipment	1	77	50%	190	0
Signal Boards	2	73	50%	190	0
Terrain Forklift	1	83	40%	190	0
Skid Steer Loader	1	79	40%	190	0
Roller	1	80	20%	190	0
Trencher	1	80	50%	190	0
Welders	1	74	40%	190	0
	20				

Receptor: ***R3***

Results:

1-hour Leq: 81.2

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

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%	135	0
Rubber Tired Loader	1	79	40%	135	0
Air Compressor	1	78	40%	160	0
Tractor/Loader/Backhoe	1	79	40%	160	0
Skid Steer Loader	1	79	40%	185	0
Water Truck/Sweeper	1	81	10%	185	0
Terrain Forklift	1	83	40%	210	0
Welder	1	74	40%	210	0
Concrete Saw	1	90	20%	210	0
Tractor/Loader/Backhoe	1	79	40%	210	0
Signal Boards	2	73	50%	210	0
Crusing/Proc. Equipment	1	76	50%	210	0
	13				

Receptor: ***R4***

Results:

1-hour Leq: 77.9

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: *Grading / Excavation*

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Bore/Drill Rig	1	84	20%	135	0
Excavator	1	81	40%	135	0
Crane	1	81	16%	160	0
Cement and Mortar Mixers	1	80	50%	160	0
Terrain Forklift	1	83	40%	185	0
Water Truck/Sweeper	1	81	10%	185	0
Tractor/Loader/Backhoe	1	79	40%	210	0
Rubber Tired Loader	1	79	40%	210	0
Welders	2	74	40%	210	0
Skid Steer Loader	1	79	40%	210	0
Bore/Drill Rig	1	84	20%	210	0
Signal Boards	2	73	50%	210	0
Excavator	1	81	40%	210	0
Tractor/Loader/Backhoe	1	79	40%	210	0
Rubber Tired Loader	1	79	40%	210	0
	17				

Receptor: ***R4***

Results:

1-hour Leq: 76.5

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: *Foundation*

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (mobile)	1	84	20%	135	0
Concrete Saw	1	90	20%	135	0
Crane (tower)	1	81	16%	160	0
Cement and Mortar Mixers	3	80	50%	160	0
Plate Compactors	2	83	20%	185	0
Air Compressor	1	78	40%	185	0
Forklift	2	75	20%	210	0
Water Truck/Sweeper	1	81	10%	210	0
Tractor/Loader/Backhoe	3	79	40%	210	0
Signal Boards	2	73	50%	210	0
Terrain Forklift	1	83	40%	210	0
Skid Steer Loader	1	79	40%	210	0
Welders	2	74	40%	210	0
Concrete Saw	2	90	20%	210	0
	23				

Receptor: ***R4***

Results:

1-hour Leq: 79.9

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: ***Building Construction***

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Crane (mobile)	1	84	20%	135	0
Concrete Saw	1	90	20%	135	0
Crane (tower)	1	81	16%	160	0
Rubber Tired Loader	1	79	40%	160	0
Air Compressor	1	78	40%	185	0
Forklift	1	75	20%	185	0
Water Truck/Sweeper	1	81	10%	210	0
Tractor/Loader/Backhoe	1	79	40%	210	0
Signal Boards	2	73	50%	210	0
Terrain Forklift	1	83	40%	210	0
Skid Steer Loader	1	79	40%	210	0
Welders	2	74	40%	210	0
Air Compressor	2	78	40%	210	0
Forklift	2	75	20%	210	0
	18				

Receptor: ***R4***

Results:

1-hour Leq: 77.5

Source for Ref. Noise Levels: FHWA RCNM, 2006

AES
ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina Project EIR

Construction Phase: Paving/Concrete/Landscape

Equipment

Description	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance to Receptor, ft	Estimated Noise Shielding, dBA
Rubber Tired Loader	1	79	40%	135	0
Concrete Saw	1	90	20%	135	0
Paver	1	77	50%	160	0
Cement and Mortar Mixers	2	80	50%	160	0
Plate Compactors	2	83	20%	185	0
Air Compressor	2	78	40%	185	0
Forklift	2	75	20%	210	0
Water Truck/Sweeper	1	81	10%	210	0
Paving Equipment	1	77	50%	210	0
Signal Boards	2	73	50%	210	0
Terrain Forklift	1	83	40%	210	0
Skid Steer Loader	1	79	40%	210	0
Roller	1	80	20%	210	0
Trencher	1	80	50%	210	0
Welders	1	74	40%	210	0
	20				

Receptor: ***R4***

Results:

1-hour Leq: 78.3

Source for Ref. Noise Levels: FHWA RCNM, 2006

Eyestone Environmental 15 February 2019
SKB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Paseo Marina
RUN: Construction - Demolition

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 **15 February 2019**
SKB **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Paseo Marina**
RUN: **Construction - Demolition**

Roadway	Points		Segment									
Name	Name	No.	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	16	35	0	0	4	35	0	0	0	0
	point2	2										

Eyestone Environmental 15 February 2019
SKB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Paseo Marina
RUN: Construction - Demolition

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 along Maxella	1	1	250.0	-20.0	0.00	4.92	0.00	71	5.0	0.0	Y
Receptor along Lincoln	10	1	250.0	-30.0	0.00	4.92	0.00	66	10.0	8.0	Y
Receptor along Glencoe	11	1	250.0	60.0	0.00	4.92	0.00	66	10.0	8.0	Y

Eyestone Environmental
15 February 2019
SKB
TNM 2.5
Calculated with TNM 2.5
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Paseo Marina
RUN: Construction - Demolition
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	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor along Maxella	1	1	0.0	61.6	71	61.6	5	----	61.6	0.0	0	0.0
Receptor along Lincoln	10	1	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0
Receptor along Glencoe	11	1	0.0	56.7	66	56.7	10	----	56.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Eyestone Environmental 15 February 2019
SKB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Paseo Marina
RUN: Construction - Grading

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		Percent	Segment	
				X	Y	Z	Control Device	Speed Constraint	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 **15 February 2019**
SKB **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Paseo Marina**
RUN: **Construction - Grading**

Roadway	Points		Segment									
Name	Name	No.	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	24	35	0	0	8	35	0	0	0	0
	point2	2										

Eyestone Environmental 15 February 2019
SKB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Paseo Marina
RUN: Construction - Grading

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 along Maxella	1	1	250.0	-20.0	0.00	4.92	0.00	71	5.0	0.0	Y
Receptor along Lincoln	10	1	250.0	-30.0	0.00	4.92	0.00	66	10.0	8.0	Y
Receptor along Glencoe	11	1	250.0	60.0	0.00	4.92	0.00	66	10.0	8.0	Y

Eyestone Environmental
15 February 2019
SKB
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Paseo Marina
RUN: Construction - Grading
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	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor along Maxella	1	1	0.0	64.4	71	64.4	5	----	64.4	0.0	0	0.0
Receptor along Lincoln	10	1	0.0	62.8	66	62.8	10	----	62.8	0.0	8	-8.0
Receptor along Glencoe	11	1	0.0	59.6	66	59.6	10	----	59.6	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Eyestone Environmental 15 February 2019
SKB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Paseo Marina
RUN: Garage/Podium Construction

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 **15 February 2019**
SKB **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Paseo Marina**
RUN: **Garage/Podium Construction**

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	60	35	0	0	5	35	0	0	0	0
	point2	2										

Eyestone Environmental 15 February 2019
SKB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Paseo Marina
RUN: Garage/Podium Construction

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 along Maxella	1	1	250.0	-20.0	0.00	4.92	0.00	71	5.0	0.0	Y
Receptor along Lincoln	10	1	250.0	-30.0	0.00	4.92	0.00	66	10.0	8.0	Y
Receptor along Glencoe	11	1	250.0	60.0	0.00	4.92	0.00	66	10.0	8.0	Y

Eyestone Environmental
15 February 2019
SKB
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Paseo Marina
RUN: Garage/Podium Construction
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 along Maxella	1	1	0.0	63.7	71	63.7	5	----	63.7	0.0	0	0.0
Receptor along Lincoln	10	1	0.0	62.1	66	62.1	10	----	62.1	0.0	8	-8.0
Receptor along Glencoe	11	1	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Eyestone Environmental 15 February 2019
SKB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Paseo Marina
RUN: Construction - Building Construction

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 **15 February 2019**
SKB **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Paseo Marina**
RUN: **Construction - Building Construction**

Roadway	Points		Segment									
Name	Name	No.	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	180	35	0	0	5	35	0	0	0	0
	point2	2										

Eyestone Environmental **15 February 2019**
SKB **TNM 2.5**

INPUT: RECEIVERS
PROJECT/CONTRACT: **Paseo Marina**
RUN: **Construction - Building Construction**

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 along Maxella	1	1	500.0	-20.0	0.00	4.92	0.00	71	5.0	0.0	Y
Receptor along Lincoln	10	1	500.0	-30.0	0.00	4.92	0.00	66	10.0	8.0	Y
Receptor along Glencoe	11	1	500.0	60.0	0.00	4.92	0.00	66	10.0	8.0	Y

Eyestone Environmental
15 February 2019
SKB
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Paseo Marina
RUN: Construction - Building Construction
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 along Maxella	1	1	0.0	65.8	71	65.8	5	----	65.8	0.0	0	0.0
Receptor along Lincoln	10	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
Receptor along Glencoe	11	1	0.0	60.8	66	60.8	10	----	60.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	3	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Eyestone Environmental 15 February 2019
SKB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Paseo Marina
RUN: Construction - Landscape

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				
Name	Width	Name	No.	Coordinates (pavement)						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 **15 February 2019**
SKB **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Paseo Marina**
RUN: **Construction - Landscape**

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	28	35	0	0	2	35	0	0	0	0
	point2	2										

Eyestone Environmental 15 February 2019
SKB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Paseo Marina
RUN: Construction - Landscape

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 along Maxella	1	1	500.0	-20.0	0.00	4.92	0.00	71	5.0	0.0	Y
Receptor along Lincoln	10	1	500.0	-30.0	0.00	4.92	0.00	66	10.0	8.0	Y
Receptor along Glencoe	11	1	500.0	60.0	0.00	4.92	0.00	66	10.0	8.0	Y

Eyestone Environmental
15 February 2019
SKB
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Paseo Marina
RUN: Construction - Landscape
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	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receptor along Maxella	1	1	0.0	59.5	71	59.5	5	----	59.5	0.0	0	0.0
Receptor along Lincoln	10	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
Receptor along Glencoe	11	1	0.0	54.6	66	54.6	10	----	54.6	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

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ACOUSTICAL ENGINEERING SERVICES

Project: Paseo Marina 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**

ON-SITE CONSTRUCTION ACTIVITIES

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

		Estimated Vibration Levels at nearest off-site building structures (distance in feet), PPV						
Equipment	**Reference Vibration Levels at 25 ft., PPV**	**Commercial building to the North**	**Supermarket building to the south**	**Residential building to the east**	**Residential building to the west**			
		80	**25**	**90**	**50**			
Large Bulldozer	0.089	0.016	0.089	0.013	0.032			
Caisson Drilling	0.089	0.016	0.089	0.013	0.032			
Loaded Trucks	0.076	0.013	0.076	0.011	0.027			
Jackhammer	0.035	0.006	0.035	0.005	0.012			
Small bulldozer	0.003	0.001	0.003	0.0004	0.001			
Significance Threshold, PPV		0.2	0.2	0.2	0.2			

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

		Estimated Vibration Levels at Off-Site Receptors (at note distance in feet), VdB						
Equipment	**Reference Vibration Levels at 25 ft., VdB**	**R1**	**R2**	**R3**	**R4**			
		50	**140**	**90**	**135**			
Large Bulldozer	87	78	65	70	65			
Caisson Drilling	87	78	65	70	65			
Loaded Trucks	86	77	64	69	64			
Jackhammer	79	70	57	62	57			
Small bulldozer	58	49	36	41	36			
Significance Threshold, VdB		72	72	72	72			

OFF-SITE CONSTRUCTION HAUL TRUCKS

Table 3: Off-Site Haul Trucks - Building Damage

		Estimated Vibration Levels at noted distance in feet, PPV						
Equipment	**Reference Vibration 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

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

Ref. Levels based on FTA Figure 7-3

Operation Noise Calculations

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Project Composite Noise Calculations (CNEL)

Project: PASEO MARINA PROJECT EIR

Receptor	Ambient	Traffic[a]	Mechanical	Parking	Trash Compactor	Outdoor		Project Composite	Ambient + Project	Increase
R1	65.7	41.0	48.0	33.0	12.4	55.0		55.9	66.1	0.4
R2	59.8	39.7	52.7	18.3	11.4	61.9		62.4	64.3	4.5
R3	69.0	52.5	52.5	31.3	19.8	65.0		65.4	70.6	1.6
R4	68.9	52.5	51.1	28.0	18.8	64.1		64.6	70.3	1.4

[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								
Receptor	Roadway Segment	Existing	Existing + Project	Project Only	distance to roadway, ft	Existing	Existing + Project	barrier	distance to Center Line	adj. for distance
R1	Maxella Ave.	60.4	60.5	41.0	175	67.5	67.6	0	40	-7.1
R2	Glencoe Ave.	56.0	56.1	39.7	550	68.8	68.9	0	30	-12.8
R3	Glencoe Ave.	68.8	68.9	52.5	10	68.8	68.9	0	30	0.0
R4	Glencoe Ave.	68.8	68.9	52.5	10	68.8	68.9	0	30	0.0

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Outdoor Mechanical Equipment Noise Calculations

Project: PASEO MARINA PROJECT EIR

	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	41.3	48.0	41.3	41.3	41.3
R2	46.0	52.7	46.0	46.0	46.0
R3	45.8	52.5	45.8	45.8	45.8
R4	44.4	51.1	44.4	44.4	44.4

Receptor	Ambient CNEL	Ambient + Project (CNEL)	Increase (CNEL)	Ambient (Leq)	Ambient + Project (Leq)
R1	65.7	65.8	0.1	57.1	57.2
R2	59.8	60.6	0.8	54.9	55.4
R3	69.0	69.1	0.1	63.6	63.7
R4	68.9	69.0	0.1	61.9	62.0

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Parking Structure Noise Calculations

Project: PASEO MARINA PROJECT EIR

	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	4
R1	28.9	33.0	28.9	28.9	25.4
R2	14.2	18.3	14.2	14.2	10.7
R3	27.2	31.3	27.2	27.2	23.7
R4	23.9	28.0	23.9	23.9	20.4

Receptor	Ambient CNEL	Ambient + Project (CNEL)	Increase (CNEL)	Ambient (Leq)	Ambient + Project (Leq)	Increase (Leq)
R1	65.7	65.7	0.0	57.1	57.1	0.0
R2	59.8	59.8	0.0	54.9	54.9	0.0
R3	69.0	69.0	0.0	63.6	63.6	0.0
R4	68.9	68.9	0.0	61.9	61.9	0.0

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ACOUSTICAL ENGINEERING SERVICES

Outdoor Noise Calculations

Project: PASEO MARINA PROJECT EIR

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	Occupants	Total, Leq	CNEL	9	**3**	**4**
R1	50.9	38.1	51.1	55.0	49.9	51.1	47.6
R2	54.7	48.8	55.7	59.6	54.5	55.7	52.2
R3	60.8	48.9	61.1	65.0	59.9	61.1	57.6
R4	60.1	44.6	60.2	64.1	59.0	60.2	56.7

COMMUNITY PARK

	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	9	**3**	**4**
R1	25.0	21.1	26.5	30.4	25.3	26.5	23.0
R2	52.5	49.2	54.2	58.1	53.0	54.2	50.7
R3	22.3	33.5	33.8	37.7	32.6	33.8	30.3
R4	20.8	16.5	22.2	26.1	21.0	22.2	18.7

TOTAL COMBINED

Receptor	Project (CNEL)	Ambient (CNEL)	Ambient + Project (CNEL)	Increase (CNEL)	Project Noise, (Leq)	Ambient (Leq)	Ambient + Project (Leq)
R1	55.0	65.7	66.1	0.4	51.1	57.1	58.1
R2	61.9	59.8	64.0	4.2	58.0	54.9	59.7
R3	65.0	69.0	70.4	1.4	61.1	63.6	65.5
R4	64.1	68.9	70.1	1.2	60.2	61.9	64.1
r							

AES
Acoustical Engineering Services

Loading and Trash Compactor Noise Calculations

Project: PASEO MARINA PROJECT EIR

LOADING

	Estimated Noise Levels, Leq from SOUNDPLAN		Ld (7am to 7pm)	Le (7pm to 10pm)	Ln (10pm to 7am)
Receptor	Leq	CNEL	3	3	0
R1	8.3	8.6	2.3	8.3	0.0
R2	10.4	9.8	4.4	10.4	0.0
R3	20.8	18.2	14.8	20.8	0.0
R4	20.5	17.9	14.5	20.5	0.0

TRASH COMPACTOR

	Estimated Noise Levels, Leq from SOUNDPLAN		Ld (7am to 7pm)	Le (7pm to 10pm)	Ln (10pm to 7am)
Receptor	Leq	CNEL	3	3	0
R1	10.9	10.1	4.9	10.9	0.0
R2	0.0	6.3	-6.0	0.0	0.0
R3	16.9	14.7	10.9	16.9	0.0
R4	12.9	11.4	6.9	12.9	0.0

TOTAL COMBINED

Receptor	Project CNEL	Ambient CNEL	Ambient + Project (CNEL)	Increase (CNEL)	Project Noise, (Leq)	daytime ambient (Leq)	Ambient + Project (Leq)
R1	12.4	65.7	65.7	0.0	12.8	63.4	63.4
R2	11.4	59.8	59.8	0.0	10.8	56.1	56.1
R3	19.8	69.0	69.0	0.0	22.3	66.4	66.4
R4	18.8	68.9	68.9	0.0	21.2	68.6	68.6

Paseo Marina
Source Levels in dB(A) - Mechanical

Name	Source type	Lw dB(A)	
Building 2 - AC 39	Point	85.0	
Building 1 - AC 1	Point	85.0	
Building 1 - AC 2	Point	85.0	
Building 1 - AC 3	Point	85.0	
Building 1 - AC 4	Point	85.0	
Building 1 - AC 5	Point	85.0	
Building 1 - AC 6	Point	85.0	
Building 1 - AC 7	Point	85.0	
Building 1 - AC 8	Point	85.0	
Building 1 - AC 9	Point	85.0	
Building 1 - AC 10	Point	85.0	
Building 1 - AC 11	Point	85.0	
Building 1 - AC 12	Point	85.0	
Building 1 - AC 13	Point	85.0	
Building 1 - AC 14	Point	85.0	
Building 1 - AC 15	Point	85.0	
Building 1 - AC 16	Point	85.0	
Building 1 - AC 17	Point	85.0	
Building 1 - AC 18	Point	85.0	
Building 1 - AC 19	Point	85.0	
Building 1 - AC 20	Point	85.0	
Building 1 - AC 21	Point	85.0	
Building 1 - AC 22	Point	85.0	
Building 1 - AC 23	Point	85.0	
Building 1 - AC 24	Point	85.0	
Building 1 - AC 25	Point	85.0	
Building 1 - AC 26	Point	85.0	
Building 1 - AC 27	Point	85.0	
Building 1 - AC 28	Point	85.0	
Building 1 - AC 29	Point	85.0	
Building 1 - AC 30	Point	85.0	
Building 1 - AC 31	Point	85.0	
Building 1 - AC 32	Point	85.0	
Building 1 - AC 33	Point	85.0	
Building 1 - AC 34	Point	85.0	
Building 1 - AC 35	Point	85.0	
Building 1 - AC 36	Point	85.0	
Building 1 - AC 37	Point	85.0	
Building 1 - AC 38	Point	85.0	

Paseo Marina
Source Levels in dB(A) - Mechanical

Name	Source type	Lw dB(A)	
Building 1 - AC 39	Point	85.0	
Building 1 - AC 40	Point	85.0	
Building 1 - AC 41	Point	85.0	
Building 1 - AC 42	Point	85.0	
Building 1 - AC 43	Point	85.0	
Building 1 - AC 44	Point	85.0	
Building 1 - AC 45	Point	85.0	
Building 1 - AC 46	Point	85.0	
Building 1 - AC 47	Point	85.0	
Building 1 - AC 48	Point	85.0	
Building 1 - AC 49	Point	85.0	
Building 1 - AC 50	Point	85.0	
Building 1 - AC 51	Point	85.0	
Building 1 - AC 52	Point	85.0	
Building 2 - AC 1	Point	85.0	
Building 2 - AC 2	Point	85.0	
Building 2 - AC 3	Point	85.0	
Building 2 - AC 4	Point	85.0	
Building 2 - AC 5	Point	85.0	
Building 2 - AC 6	Point	85.0	
Building 2 - AC 7	Point	85.0	
Building 2 - AC 8	Point	85.0	
Building 2 - AC 9	Point	85.0	
Building 2 - AC 10	Point	85.0	
Building 2 - AC 11	Point	85.0	
Building 2 - AC 12	Point	85.0	
Building 2 - AC 13	Point	85.0	
Building 2 - AC 14	Point	85.0	
Building 2 - AC 15	Point	85.0	
Building 2 - AC 16	Point	85.0	
Building 2 - AC 17	Point	85.0	
Building 2 - AC 18	Point	85.0	
Building 2 - AC 19	Point	85.0	
Building 2 - AC 20	Point	85.0	
Building 2 - AC 21	Point	85.0	
Building 2 - AC 22	Point	85.0	
Building 2 - AC 23	Point	85.0	
Building 2 - AC 24	Point	85.0	
Building 2 - AC 25	Point	85.0	

Paseo Marina
Source Levels in dB(A) - Mechanical

Name	Source type	Lw dB(A)	
Building 2 - AC 26	Point	85.0	
Building 2 - AC 27	Point	85.0	
Building 2 - AC 28	Point	85.0	
Building 2 - AC 29	Point	85.0	
Building 2 - AC 30	Point	85.0	
Building 2 - AC 31	Point	85.0	
Building 2 - AC 32	Point	85.0	
Building 2 - AC 33	Point	85.0	
Building 2 - AC 34	Point	85.0	
Building 2 - AC 35	Point	85.0	
Building 2 - AC 36	Point	85.0	
Building 2 - AC 37	Point	85.0	
Building 2 - AC 38	Point	85.0	
Building 2 - AC 40	Point	85.0	
Building 2 - AC 41	Point	85.0	
Building 2 - AC 42	Point	85.0	
Building 2 - AC 43	Point	85.0	
Building 2 - AC 44	Point	85.0	
Building 2 - AC 45	Point	85.0	
Building 2 - AC 46	Point	85.0	
Building 2 - AC 47	Point	85.0	
Building 2 - AC 48	Point	85.0	
Building 2 - AC 49	Point	85.0	
Building 2 - AC 50	Point	85.0	
Building 2 - AC 51	Point	85.0	
Building 2 - AC 52	Point	85.0	
Building 2 - AC 53	Point	85.0	
Building 3 - AC 1	Point	85.0	
Building 3 - AC 2	Point	85.0	
Building 3 - AC 3	Point	85.0	
Building 3 - AC 4	Point	85.0	
Building 3 - AC 5	Point	85.0	
Building 3 - AC 6	Point	85.0	
Building 3 - AC 7	Point	85.0	
Building 3 - AC 8	Point	85.0	
Building 3 - AC 9	Point	85.0	
Building 3 - AC 10	Point	85.0	
Building 3 - AC 11	Point	85.0	
Building 3 - AC 12	Point	85.0	

Paseo Marina
Source Levels in dB(A) - Mechanical

Name	Source type	Lw dB(A)	
Building 3 - AC 13	Point	85.0	
Building 3 - AC 14	Point	85.0	
Building 3 - AC 15	Point	85.0	
Building 3 - AC 16	Point	85.0	
Building 3 - AC 17	Point	85.0	
Building 3 - AC 18	Point	85.0	
Building 3 - AC 19	Point	85.0	
Building 3 - AC 20	Point	85.0	
Building 3 - AC 21	Point	85.0	
Building 3 - AC 22	Point	85.0	
Building 3 - AC 23	Point	85.0	
Building 3 - AC 24	Point	85.0	
Building 3 - AC 25	Point	85.0	
Building 3 - AC 26	Point	85.0	
Building 3 - AC 27	Point	85.0	
Building 3 - AC 28	Point	85.0	
Building 3 - AC 29	Point	85.0	
Building 3 - AC 30	Point	85.0	
Building 3 - AC 31	Point	85.0	
Building 3 - AC 32	Point	85.0	
Building 3 - AC 33	Point	85.0	
Building 3 - AC 34	Point	85.0	
Building 3 - AC 35	Point	85.0	
Building 3 - AC 36	Point	85.0	
Building 3 - AC 37	Point	85.0	

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)	

Receiver R1	Leq,d 41.3	dB(A)
Building 3 - AC 1	13.3	
Building 3 - AC 2	11.9	
Building 3 - AC 3	13.2	
Building 3 - AC 4	13.0	
Building 3 - AC 5	12.9	
Building 3 - AC 6	12.8	
Building 3 - AC 7	12.6	
Building 3 - AC 8	12.5	
Building 3 - AC 9	12.4	
Building 3 - AC 10	12.2	
Building 3 - AC 11	12.1	
Building 3 - AC 12	13.0	
Building 3 - AC 13	12.9	
Building 3 - AC 14	12.7	
Building 3 - AC 15	12.6	
Building 3 - AC 16	12.5	
Building 3 - AC 17	12.4	
Building 3 - AC 18	12.3	
Building 3 - AC 19	12.2	
Building 3 - AC 20	12.1	
Building 3 - AC 21	12.0	
Building 3 - AC 22	11.8	
Building 3 - AC 23	11.7	
Building 3 - AC 24	11.6	
Building 3 - AC 25	11.5	
Building 3 - AC 26	11.4	
Building 3 - AC 27	11.3	
Building 3 - AC 28	11.1	
Building 3 - AC 29	11.1	
Building 3 - AC 30	11.0	
Building 3 - AC 31	10.9	
Building 3 - AC 32	10.8	
Building 3 - AC 33	10.7	
Building 3 - AC 34	10.6	
Building 3 - AC 35	10.4	
Building 3 - AC 36	10.3	
Building 3 - AC 37	10.2	
Building 1 - AC 1	25.5	
Building 1 - AC 2	25.9	

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)
Building 1 - AC 3	26.2
Building 1 - AC 4	26.0
Building 1 - AC 5	25.8
Building 1 - AC 6	25.7
Building 1 - AC 7	25.8
Building 1 - AC 8	25.6
Building 1 - AC 9	27.5
Building 1 - AC 10	26.0
Building 1 - AC 11	26.8
Building 1 - AC 12	26.6
Building 1 - AC 13	26.1
Building 1 - AC 14	26.3
Building 1 - AC 15	26.5
Building 1 - AC 16	27.0
Building 1 - AC 17	27.4
Building 1 - AC 18	27.3
Building 1 - AC 19	27.2
Building 1 - AC 20	23.1
Building 1 - AC 21	17.4
Building 1 - AC 22	19.7
Building 1 - AC 23	21.2
Building 1 - AC 24	18.4
Building 1 - AC 25	22.0
Building 1 - AC 26	20.5
Building 1 - AC 27	18.8
Building 1 - AC 28	17.8
Building 1 - AC 29	22.5
Building 1 - AC 30	21.5
Building 1 - AC 31	21.0
Building 1 - AC 32	20.0
Building 1 - AC 33	19.2
Building 1 - AC 34	18.6
Building 1 - AC 35	18.2
Building 1 - AC 36	17.6
Building 1 - AC 37	18.0
Building 1 - AC 38	20.7
Building 1 - AC 39	20.2
Building 1 - AC 40	19.5
Building 1 - AC 41	19.1
Building 1 - AC 42	18.7
Building 1 - AC 43	17.7

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)
Building 1 - AC 44	18.4
Building 1 - AC 45	18.7
Building 1 - AC 46	18.5
Building 1 - AC 47	18.6
Building 1 - AC 48	18.5
Building 1 - AC 49	18.2
Building 1 - AC 50	17.8
Building 1 - AC 51	18.1
Building 1 - AC 52	18.0
Building 2 - AC 53	14.1
Building 2 - AC 52	12.2
Building 2 - AC 51	13.2
Building 2 - AC 50	14.0
Building 2 - AC 49	13.3
Building 2 - AC 48	13.8
Building 2 - AC 47	13.5
Building 2 - AC 46	13.0
Building 2 - AC 45	12.5
Building 2 - AC 44	12.8
Building 2 - AC 43	12.6
Building 2 - AC 42	15.2
Building 2 - AC 41	14.7
Building 2 - AC 40	15.2
Building 2 - AC 39	15.1
Building 2 - AC 38	14.8
Building 2 - AC 37	15.1
Building 2 - AC 36	14.9
Building 2 - AC 35	15.0
Building 2 - AC 34	14.9
Building 2 - AC 33	15.0
Building 2 - AC 32	14.9
Building 2 - AC 31	15.2
Building 2 - AC 30	15.2
Building 2 - AC 29	15.3
Building 2 - AC 28	15.2
Building 2 - AC 27	15.2
Building 2 - AC 26	15.2
Building 2 - AC 25	15.2
Building 2 - AC 24	15.2
Building 2 - AC 23	17.1
Building 2 - AC 22	12.7

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)	
Building 2 - AC 21	14.6	
Building 2 - AC 20	14.5	
Building 2 - AC 19	12.8	
Building 2 - AC 18	14.3	
Building 2 - AC 17	12.9	
Building 2 - AC 16	14.1	
Building 2 - AC 15	13.1	
Building 2 - AC 14	13.9	
Building 2 - AC 13	13.3	
Building 2 - AC 12	13.7	
Building 2 - AC 11	13.5	
Building 2 - AC 10	16.8	
Building 2 - AC 9	14.8	
Building 2 - AC 8	16.6	
Building 2 - AC 7	15.1	
Building 2 - AC 6	16.3	
Building 2 - AC 5	15.3	
Building 2 - AC 4	16.1	
Building 2 - AC 3	15.5	
Building 2 - AC 2	15.9	
Building 2 - AC 1	15.7	
Receiver R2	Leq,d 46.0	dB(A)
Building 3 - AC 1	26.1	
Building 3 - AC 2	20.9	
Building 3 - AC 3	25.5	
Building 3 - AC 4	24.8	
Building 3 - AC 5	24.2	
Building 3 - AC 6	23.6	
Building 3 - AC 7	23.1	
Building 3 - AC 8	22.6	
Building 3 - AC 9	22.2	
Building 3 - AC 10	21.7	
Building 3 - AC 11	21.3	
Building 3 - AC 12	26.3	
Building 3 - AC 13	26.3	
Building 3 - AC 14	26.3	
Building 3 - AC 15	26.3	
Building 3 - AC 16	26.2	
Building 3 - AC 17	26.2	
Building 3 - AC 18	26.2	

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)	
Building 3 - AC 19	26.2	
Building 3 - AC 20	26.1	
Building 3 - AC 21	27.5	
Building 3 - AC 22	27.5	
Building 3 - AC 23	27.0	
Building 3 - AC 24	26.5	
Building 3 - AC 25	24.5	
Building 3 - AC 26	23.9	
Building 3 - AC 27	23.5	
Building 3 - AC 28	23.1	
Building 3 - AC 29	22.8	
Building 3 - AC 30	22.4	
Building 3 - AC 31	22.1	
Building 3 - AC 32	21.7	
Building 3 - AC 33	21.3	
Building 3 - AC 34	21.0	
Building 3 - AC 35	20.7	
Building 3 - AC 36	20.4	
Building 3 - AC 37	20.1	
Building 1 - AC 1	20.0	
Building 1 - AC 2	21.3	
Building 1 - AC 3	21.0	
Building 1 - AC 4	17.8	
Building 1 - AC 5	17.5	
Building 1 - AC 6	21.2	
Building 1 - AC 7	22.8	
Building 1 - AC 8	17.2	
Building 1 - AC 9	22.6	
Building 1 - AC 10	24.6	
Building 1 - AC 11	23.2	
Building 1 - AC 12	22.1	
Building 1 - AC 13	23.8	
Building 1 - AC 14	23.2	
Building 1 - AC 15	22.6	
Building 1 - AC 16	23.0	
Building 1 - AC 17	21.6	
Building 1 - AC 18	22.4	
Building 1 - AC 19	22.7	
Building 1 - AC 20	28.7	
Building 1 - AC 21	27.7	
Building 1 - AC 22	28.5	

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)	
Building 1 - AC 23	28.6	
Building 1 - AC 24	28.1	
Building 1 - AC 25	28.6	
Building 1 - AC 26	28.6	
Building 1 - AC 27	28.2	
Building 1 - AC 28	27.9	
Building 1 - AC 29	28.6	
Building 1 - AC 30	28.6	
Building 1 - AC 31	28.8	
Building 1 - AC 32	28.5	
Building 1 - AC 33	28.3	
Building 1 - AC 34	28.1	
Building 1 - AC 35	28.0	
Building 1 - AC 36	27.8	
Building 1 - AC 37	27.9	
Building 1 - AC 38	28.7	
Building 1 - AC 39	28.6	
Building 1 - AC 40	28.4	
Building 1 - AC 41	28.3	
Building 1 - AC 42	23.8	
Building 1 - AC 43	27.5	
Building 1 - AC 44	27.7	
Building 1 - AC 45	19.2	
Building 1 - AC 46	24.4	
Building 1 - AC 47	19.6	
Building 1 - AC 48	19.9	
Building 1 - AC 49	27.9	
Building 1 - AC 50	27.2	
Building 1 - AC 51	22.3	
Building 1 - AC 52	25.2	
Building 2 - AC 53	27.4	
Building 2 - AC 52	23.4	
Building 2 - AC 51	23.6	
Building 2 - AC 50	26.5	
Building 2 - AC 49	23.9	
Building 2 - AC 48	25.5	
Building 2 - AC 47	24.6	
Building 2 - AC 46	23.5	
Building 2 - AC 45	23.5	
Building 2 - AC 44	23.4	
Building 2 - AC 43	23.3	

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)	
Building 2 - AC 42	16.2	
Building 2 - AC 41	27.4	
Building 2 - AC 40	24.8	
Building 2 - AC 39	24.9	
Building 2 - AC 38	26.3	
Building 2 - AC 37	19.3	
Building 2 - AC 36	26.2	
Building 2 - AC 35	19.7	
Building 2 - AC 34	25.7	
Building 2 - AC 33	25.2	
Building 2 - AC 32	25.3	
Building 2 - AC 31	16.2	
Building 2 - AC 30	24.6	
Building 2 - AC 29	16.5	
Building 2 - AC 28	17.8	
Building 2 - AC 27	16.7	
Building 2 - AC 26	17.5	
Building 2 - AC 25	17.0	
Building 2 - AC 24	17.2	
Building 2 - AC 23	15.4	
Building 2 - AC 22	19.6	
Building 2 - AC 21	15.1	
Building 2 - AC 20	15.0	
Building 2 - AC 19	19.7	
Building 2 - AC 18	14.9	
Building 2 - AC 17	14.7	
Building 2 - AC 16	14.9	
Building 2 - AC 15	14.7	
Building 2 - AC 14	14.8	
Building 2 - AC 13	14.7	
Building 2 - AC 12	14.8	
Building 2 - AC 11	14.8	
Building 2 - AC 10	15.4	
Building 2 - AC 9	15.1	
Building 2 - AC 8	15.4	
Building 2 - AC 7	15.3	
Building 2 - AC 6	15.4	
Building 2 - AC 5	15.3	
Building 2 - AC 4	15.5	
Building 2 - AC 3	15.2	
Building 2 - AC 2	15.4	

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)	
Building 2 - AC 1	15.2	
Receiver R3	Leq,d 45.8	dB(A)
Building 3 - AC 1	26.0	
Building 3 - AC 2	28.0	
Building 3 - AC 3	26.1	
Building 3 - AC 4	26.2	
Building 3 - AC 5	26.4	
Building 3 - AC 6	21.3	
Building 3 - AC 7	21.8	
Building 3 - AC 8	22.4	
Building 3 - AC 9	26.8	
Building 3 - AC 10	27.1	
Building 3 - AC 11	27.5	
Building 3 - AC 12	26.4	
Building 3 - AC 13	26.5	
Building 3 - AC 14	26.5	
Building 3 - AC 15	26.6	
Building 3 - AC 16	26.7	
Building 3 - AC 17	19.6	
Building 3 - AC 18	26.1	
Building 3 - AC 19	30.0	
Building 3 - AC 20	28.5	
Building 3 - AC 21	28.4	
Building 3 - AC 22	26.5	
Building 3 - AC 23	26.1	
Building 3 - AC 24	26.2	
Building 3 - AC 25	26.3	
Building 3 - AC 26	26.4	
Building 3 - AC 27	26.5	
Building 3 - AC 28	26.6	
Building 3 - AC 29	26.7	
Building 3 - AC 30	26.8	
Building 3 - AC 31	28.7	
Building 3 - AC 32	27.1	
Building 3 - AC 33	26.8	
Building 3 - AC 34	26.6	
Building 3 - AC 35	26.7	
Building 3 - AC 36	27.1	
Building 3 - AC 37	28.6	
Building 1 - AC 1	15.7	

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)
Building 1 - AC 2	15.8
Building 1 - AC 3	15.9
Building 1 - AC 4	15.9
Building 1 - AC 5	15.8
Building 1 - AC 6	15.8
Building 1 - AC 7	15.8
Building 1 - AC 8	15.7
Building 1 - AC 9	15.8
Building 1 - AC 10	19.8
Building 1 - AC 11	16.4
Building 1 - AC 12	14.2
Building 1 - AC 13	19.6
Building 1 - AC 14	19.4
Building 1 - AC 15	19.3
Building 1 - AC 16	16.3
Building 1 - AC 17	15.9
Building 1 - AC 18	16.0
Building 1 - AC 19	16.1
Building 1 - AC 20	11.7
Building 1 - AC 21	26.7
Building 1 - AC 22	24.5
Building 1 - AC 23	12.3
Building 1 - AC 24	26.6
Building 1 - AC 25	12.0
Building 1 - AC 26	21.4
Building 1 - AC 27	26.1
Building 1 - AC 28	27.9
Building 1 - AC 29	11.9
Building 1 - AC 30	12.1
Building 1 - AC 31	20.9
Building 1 - AC 32	24.2
Building 1 - AC 33	25.1
Building 1 - AC 34	26.3
Building 1 - AC 35	27.0
Building 1 - AC 36	28.4
Building 1 - AC 37	27.4
Building 1 - AC 38	21.2
Building 1 - AC 39	21.7
Building 1 - AC 40	24.8
Building 1 - AC 41	26.3
Building 1 - AC 42	15.2

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)	
Building 1 - AC 43	20.9	
Building 1 - AC 44	18.9	
Building 1 - AC 45	15.2	
Building 1 - AC 46	18.5	
Building 1 - AC 47	15.2	
Building 1 - AC 48	18.4	
Building 1 - AC 49	19.2	
Building 1 - AC 50	20.5	
Building 1 - AC 51	19.7	
Building 1 - AC 52	20.0	
Building 2 - AC 53	25.4	
Building 2 - AC 52	31.2	
Building 2 - AC 51	23.8	
Building 2 - AC 50	25.4	
Building 2 - AC 49	23.3	
Building 2 - AC 48	25.5	
Building 2 - AC 47	23.1	
Building 2 - AC 46	24.5	
Building 2 - AC 45	28.4	
Building 2 - AC 44	25.6	
Building 2 - AC 43	26.9	
Building 2 - AC 42	24.5	
Building 2 - AC 41	24.7	
Building 2 - AC 40	24.6	
Building 2 - AC 39	19.1	
Building 2 - AC 38	24.4	
Building 2 - AC 37	19.2	
Building 2 - AC 36	24.2	
Building 2 - AC 35	19.3	
Building 2 - AC 34	19.4	
Building 2 - AC 33	19.3	
Building 2 - AC 32	19.4	
Building 2 - AC 31	24.5	
Building 2 - AC 30	18.9	
Building 2 - AC 29	18.8	
Building 2 - AC 28	18.9	
Building 2 - AC 27	18.8	
Building 2 - AC 26	19.0	
Building 2 - AC 25	18.9	
Building 2 - AC 24	18.9	
Building 2 - AC 23	15.9	

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)	
Building 2 - AC 22	29.7	
Building 2 - AC 21	21.9	
Building 2 - AC 20	22.0	
Building 2 - AC 19	28.0	
Building 2 - AC 18	22.0	
Building 2 - AC 17	26.3	
Building 2 - AC 16	22.1	
Building 2 - AC 15	25.2	
Building 2 - AC 14	22.2	
Building 2 - AC 13	26.2	
Building 2 - AC 12	22.4	
Building 2 - AC 11	25.6	
Building 2 - AC 10	16.1	
Building 2 - AC 9	19.0	
Building 2 - AC 8	16.5	
Building 2 - AC 7	18.6	
Building 2 - AC 6	21.6	
Building 2 - AC 5	18.2	
Building 2 - AC 4	22.1	
Building 2 - AC 3	23.3	
Building 2 - AC 2	22.5	
Building 2 - AC 1	22.8	
Receiver R4	Leq,d 44.4	dB(A)
Building 3 - AC 1	18.5	
Building 3 - AC 2	26.5	
Building 3 - AC 3	18.5	
Building 3 - AC 4	18.5	
Building 3 - AC 5	18.9	
Building 3 - AC 6	19.4	
Building 3 - AC 7	19.8	
Building 3 - AC 8	25.1	
Building 3 - AC 9	25.3	
Building 3 - AC 10	27.7	
Building 3 - AC 11	27.9	
Building 3 - AC 12	17.9	
Building 3 - AC 13	17.9	
Building 3 - AC 14	18.0	
Building 3 - AC 15	18.0	
Building 3 - AC 16	17.9	
Building 3 - AC 17	17.9	

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)
Building 3 - AC 18	18.0
Building 3 - AC 19	18.0
Building 3 - AC 20	18.1
Building 3 - AC 21	23.6
Building 3 - AC 22	24.9
Building 3 - AC 23	25.0
Building 3 - AC 24	25.1
Building 3 - AC 25	25.2
Building 3 - AC 26	23.0
Building 3 - AC 27	20.7
Building 3 - AC 28	20.6
Building 3 - AC 29	20.6
Building 3 - AC 30	20.6
Building 3 - AC 31	20.8
Building 3 - AC 32	21.2
Building 3 - AC 33	21.7
Building 3 - AC 34	22.3
Building 3 - AC 35	22.9
Building 3 - AC 36	25.8
Building 3 - AC 37	25.0
Building 1 - AC 1	18.7
Building 1 - AC 2	15.8
Building 1 - AC 3	16.9
Building 1 - AC 4	17.4
Building 1 - AC 5	17.8
Building 1 - AC 6	16.5
Building 1 - AC 7	16.1
Building 1 - AC 8	18.3
Building 1 - AC 9	15.3
Building 1 - AC 10	12.9
Building 1 - AC 11	14.0
Building 1 - AC 12	13.7
Building 1 - AC 13	13.1
Building 1 - AC 14	13.3
Building 1 - AC 15	13.5
Building 1 - AC 16	14.2
Building 1 - AC 17	15.0
Building 1 - AC 18	14.7
Building 1 - AC 19	14.5
Building 1 - AC 20	12.2
Building 1 - AC 21	14.5

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)
Building 1 - AC 22	12.8
Building 1 - AC 23	12.4
Building 1 - AC 24	18.5
Building 1 - AC 25	12.3
Building 1 - AC 26	12.5
Building 1 - AC 27	13.4
Building 1 - AC 28	19.0
Building 1 - AC 29	12.3
Building 1 - AC 30	12.3
Building 1 - AC 31	12.4
Building 1 - AC 32	12.7
Building 1 - AC 33	13.1
Building 1 - AC 34	13.5
Building 1 - AC 35	18.7
Building 1 - AC 36	19.2
Building 1 - AC 37	18.8
Building 1 - AC 38	12.5
Building 1 - AC 39	12.5
Building 1 - AC 40	12.9
Building 1 - AC 41	13.2
Building 1 - AC 42	16.5
Building 1 - AC 43	19.6
Building 1 - AC 44	15.0
Building 1 - AC 45	16.1
Building 1 - AC 46	15.4
Building 1 - AC 47	15.8
Building 1 - AC 48	15.6
Building 1 - AC 49	14.9
Building 1 - AC 50	19.7
Building 1 - AC 51	14.8
Building 1 - AC 52	14.8
Building 2 - AC 53	24.7
Building 2 - AC 52	27.9
Building 2 - AC 51	25.7
Building 2 - AC 50	19.3
Building 2 - AC 49	25.7
Building 2 - AC 48	19.9
Building 2 - AC 47	22.9
Building 2 - AC 46	25.8
Building 2 - AC 45	28.5
Building 2 - AC 44	27.3

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)	
Building 2 - AC 43	28.6	
Building 2 - AC 42	22.7	
Building 2 - AC 41	18.3	
Building 2 - AC 40	18.8	
Building 2 - AC 39	18.8	
Building 2 - AC 38	18.3	
Building 2 - AC 37	18.7	
Building 2 - AC 36	18.4	
Building 2 - AC 35	18.6	
Building 2 - AC 34	18.5	
Building 2 - AC 33	18.6	
Building 2 - AC 32	18.5	
Building 2 - AC 31	22.2	
Building 2 - AC 30	23.5	
Building 2 - AC 29	21.9	
Building 2 - AC 28	25.0	
Building 2 - AC 27	21.7	
Building 2 - AC 26	25.0	
Building 2 - AC 25	21.5	
Building 2 - AC 24	21.5	
Building 2 - AC 23	24.6	
Building 2 - AC 22	32.8	
Building 2 - AC 21	27.9	
Building 2 - AC 20	28.0	
Building 2 - AC 19	30.5	
Building 2 - AC 18	26.6	
Building 2 - AC 17	28.5	
Building 2 - AC 16	26.7	
Building 2 - AC 15	27.1	
Building 2 - AC 14	25.3	
Building 2 - AC 13	25.8	
Building 2 - AC 12	25.4	
Building 2 - AC 11	25.6	
Building 2 - AC 10	23.7	
Building 2 - AC 9	27.8	
Building 2 - AC 8	23.8	
Building 2 - AC 7	28.0	
Building 2 - AC 6	23.9	
Building 2 - AC 5	27.0	
Building 2 - AC 4	24.0	
Building 2 - AC 3	24.3	

Paseo Marina
Assessed contribution level - Mechanical

Source	Leq,d dB(A)	
Building 2 - AC 2	24.1	
Building 2 - AC 1	24.2	

Paseo Marina
Source Levels in dB(A) - Parking

Name	Source type	Lw dB(A)	
Parking 1	Parking lot	92.8	
Parking 2	Parking lot	90.1	
Parking 3	Parking lot	90.4	

Paseo Marina
Assessed contribution level - Parking

Source	Leq,d dB(A)	
Receiver R1	Leq,d 28.9	dB(A)
Parking 1	28.9	
Parking 2	0.3	
Parking 3	4.4	
Receiver R2	Leq,d 14.2	dB(A)
Parking 1	7.9	
Parking 2	12.5	
Parking 3	3.4	
Receiver R3	Leq,d 27.2	dB(A)
Parking 1	4.3	
Parking 2	26.4	
Parking 3	19.1	
Receiver R4	Leq,d 23.9	dB(A)
Parking 1	-5.0	
Parking 2	22.2	
Parking 3	19.0	

Paseo Marina
Source Levels in dB(A) - Trash

Name	Source type	Lw dB(A)	
Trash 1	Point	88.0	
Trash 2	Point	88.0	
Trash 3	Point	88.0	

Paseo Marina
Assessed contribution level - Trash

Source	Leq,d dB(A)	
Receiver R1	Leq,d 10.9	dB(A)
Trash 1	10.3	
Trash 2	1.8	
Trash 3	-9.4	
Receiver R2	Leq,d -2.1	dB(A)
Trash 1		
Trash 2	-6.6	
Trash 3	-3.9	
Receiver R3	Leq,d 16.9	dB(A)
Trash 1		
Trash 2	16.2	
Trash 3	8.3	
Receiver R4	Leq,d 12.9	dB(A)
Trash 1		
Trash 2	12.4	
Trash 3	3.3	

Paseo Marina
Source Levels in dB(A) - Loading

Name	Source type	Lw dB(A)	
Loading	Point	102.0	
Loading	Point	102.0	

Paseo Marina
Assessed contribution level - Loading

Source	Leq,d dB(A)	
Receiver R1	Leq,d 8.3	dB(A)
Loading	2.6	
Loading	6.9	
Receiver R2	Leq,d 10.4	dB(A)
Loading	8.5	
Loading	5.8	
Receiver R3	Leq,d 20.8	dB(A)
Loading	17.4	
Loading	18.2	
Receiver R4	Leq,d 20.5	dB(A)
Loading	19.8	
Loading	12.4	

Paseo Marina
Source Levels in dB(A) - People 42018

Name	Source type	Lw dB(A)	
Patio 3 (Rest. 8)	Area	80.8	
Patio 1 (Rest. 1)	Area	83.3	
Patio 2 (Rest. 3, 4 and 5)	Area	87.2	
Patio 4 (Rest. 9, 10, 11 and 12)	Area	85.8	
Paseo	Area	93.4	
Retail/Pedestrian Plaza (NW)	Area	88.9	
Pedestrian Plaza 3 (East)	Area	87.0	
Pedestrian Plaza 2 (West)	Area	88.6	
Building 2 - Deck 2 - NW	Area	80.8	
Building 2 - Deck 3	Area	83.3	
Building 2 - Deck 4	Area	83.8	
Building 3 - Deck 5	Area	87.8	
Building 3 - Deck 6	Area	87.8	
Building 1 - Deck 1	Area	86.1	
Pool Deck 1	Area	96.7	
Pool Deck 3	Area	96.1	
Pool Deck 2	Area	97.2	

Paseo Marina
Assessed contribution level - People 42018

Source	dB(A)	Leq,d dB(A)	
Receiver R1	**Leq,d 38.1**		**dB(A)**
Retail/Pedestrian Plaza (NW)		33.9	
Pool Deck 1		32.4	
Building 1 - Deck 1		29.6	
Pedestrian Plaza 2 (West)		27.1	
Paseo		24.0	
Pool Deck 2		22.6	
Patio 2 (Rest. 3, 4 and 5)		20.2	
Pool Deck 3		19.2	
Patio 4 (Rest. 9, 10, 11 and 12)		19.2	
Pedestrian Plaza 3 (East)		15.0	
Building 2 - Deck 2 - NW		11.2	
Building 3 - Deck 5		9.9	
Building 3 - Deck 6		7.7	
Building 2 - Deck 4		6.1	
Patio 1 (Rest. 1)		6.0	
Building 2 - Deck 3		5.8	
Patio 3 (Rest. 8)		3.2	
Receiver R2	**Leq,d 48.8**		**dB(A)**
Pedestrian Plaza 2 (West)		46.4	
Paseo		44.0	
Building 1 - Deck 1		35.6	
Pedestrian Plaza 3 (East)		35.3	
Pool Deck 1		27.4	
Pool Deck 2		24.4	
Pool Deck 3		21.4	
Building 3 - Deck 5		21.3	
Patio 1 (Rest. 1)		18.5	
Patio 2 (Rest. 3, 4 and 5)		15.8	
Building 3 - Deck 6		14.6	
Retail/Pedestrian Plaza (NW)		14.4	
Patio 4 (Rest. 9, 10, 11 and 12)		13.7	
Building 2 - Deck 4		13.5	
Building 2 - Deck 3		11.1	
Building 2 - Deck 2 - NW		6.2	
Patio 3 (Rest. 8)		3.8	
Receiver R3	**Leq,d 48.9**		**dB(A)**
Pool Deck 3		45.0	
Pedestrian Plaza 3 (East)		42.5	
Pool Deck 2		39.1	

Paseo Marina
Assessed contribution level - People 42018

Source	dB(A)	Leq,d dB(A)
Building 3 - Deck 6		38.1
Building 3 - Deck 5		37.4
Paseo		36.5
Building 2 - Deck 4		32.0
Building 2 - Deck 3		29.3
Patio 3 (Rest. 8)		24.7
Pool Deck 1		23.8
Pedestrian Plaza 2 (West)		20.3
Patio 2 (Rest. 3, 4 and 5)		14.6
Patio 4 (Rest. 9, 10, 11 and 12)		13.1
Retail/Pedestrian Plaza (NW)		12.0
Patio 1 (Rest. 1)		10.3
Building 1 - Deck 1		6.9
Building 2 - Deck 2 - NW		5.8
Receiver R4	Leq,d 44.6	dB(A)
Patio 3 (Rest. 8)		40.8
Pool Deck 2		38.6
Building 2 - Deck 3		32.9
Building 3 - Deck 5		32.6
Pool Deck 3		31.7
Building 3 - Deck 6		31.7
Retail/Pedestrian Plaza (NW)		31.0
Building 2 - Deck 4		29.6
Paseo		26.2
Pool Deck 1		23.8
Patio 2 (Rest. 3, 4 and 5)		22.2
Building 2 - Deck 2 - NW		17.7
Pedestrian Plaza 3 (East)		17.2
Patio 4 (Rest. 9, 10, 11 and 12)		15.0
Pedestrian Plaza 2 (West)		11.1
Building 1 - Deck 1		7.2
Patio 1 (Rest. 1)		4.0

Paseo Marina
Source Levels in dB(A) - Speaker 42018

Name	Source type	Lw dB(A)	
Speaker Building 2 NE Corner	Point	108.6	
Speaker Building 2 NE Corner	Point	108.6	
Speaker Building 2 SE Corner	Point	108.6	
Speaker Building 2 SE Corner	Point	108.6	
Speaker Building 3 NE Corner	Point	108.6	
Speaker Building 3 NE Corner	Point	108.6	
Speaker Building 3 SE Corner	Point	108.6	
Speaker Building 3 SE Corner	Point	108.6	
Speaker Building 1 SW Corner	Point	108.6	
Speaker Building 2 NW Corner	Point	108.6	
Speaker Pool Deck 3	Point	113.6	
Speaker Pool Deck 3	Point	113.6	
Speaker Pool Deck 3	Point	113.6	
Speaker Pool Deck 3	Point	113.6	
Speaker Pool Deck 3	Point	113.6	
Speaker Pool Deck 3	Point	113.6	
Speaker Pool Deck 3	Point	113.6	
Speaker Pool Deck 2	Point	113.6	
Speaker Pool Deck 2	Point	113.6	
Speaker Pool Deck 2	Point	113.6	
Speaker Pool Deck 2	Point	113.6	
Speaker Pool Deck 2	Point	113.6	
Speaker Pool Deck 2	Point	113.6	
Speaker Pool Deck 2	Point	113.6	
Speaker Pool Deck 1	Point	113.6	
Speaker Pool Deck 1	Point	113.6	
Speaker Pool Deck 1	Point	113.6	
Speaker Pool Deck 1	Point	113.6	
Speaker Pool Deck 1	Point	113.6	
Speaker Pool Deck 1	Point	113.6	
Speaker Patio 1	Point	108.6	
Speaker Patio 4	Point	108.6	
Speaker Patio 2	Point	108.6	
Speaker Patio 2	Point	108.6	
Speaker Patio 2	Point	108.6	
Speaker Patio 3	Point	108.6	
Speaker Patio 3	Point	108.6	
Speaker Patio 3	Point	108.6	
Speaker Retail Plaza	Point	103.6	

Paseo Marina
Source Levels in dB(A) - Speaker 42018

Name	Source type	Lw dB(A)	
Retail Plaza	Point	103.6	
Speaker Pedestrian Plaza 1	Point	98.6	
Speaker Pedestrian Plaza 1	Point	98.6	
Speaker Pedestrian Plaza 1	Point	98.6	
Speaker Pedestrian Plaza 2	Point	103.6	
Speaker Pedestrian Plaza 2	Point	103.6	

Paseo Marina
Assessed contribution level - Speaker 42018

Source	dB(A)	Leq,d dB(A)

Receiver R1	Leq,d 50.9	dB(A)
Speaker Patio 3		43.9
Speaker Pool Deck 1		43.2
Speaker Pool Deck 1		41.0
Speaker Patio 2		39.9
Speaker Patio 3		39.9
Speaker Pool Deck 1		39.5
Speaker Retail Plaza		39.5
Speaker Patio 2		38.4
Speaker Pool Deck 1		38.2
Retail Plaza		38.2
Speaker Pool Deck 1		33.6
Speaker Pool Deck 1		31.2
Speaker Building 2 NW Corner		29.9
Speaker Building 1 SW Corner		29.5
Speaker Patio 2		25.6
Speaker Pool Deck 2		24.2
Speaker Patio 3		23.2
Speaker Pool Deck 3		22.5
Speaker Pool Deck 3		21.8
Speaker Pool Deck 2		21.4
Speaker Pool Deck 3		21.2
Speaker Pool Deck 2		19.2
Speaker Pool Deck 2		18.9
Speaker Pool Deck 3		17.8
Speaker Pool Deck 2		17.7
Speaker Pool Deck 2		15.4
Speaker Pool Deck 2		14.1
Speaker Pedestrian Plaza 2		13.0
Speaker Pool Deck 3		12.9
Speaker Pool Deck 3		12.5
Speaker Pool Deck 3		12.3
Speaker Building 2 SE Corner		12.0
Speaker Building 2 SE Corner		12.0
Speaker Building 2 NE Corner		11.3
Speaker Building 3 NE Corner		11.2
Speaker Building 2 NE Corner		11.2
Speaker Building 3 NE Corner		11.0
Speaker Building 3 SE Corner		10.4
Speaker Building 3 SE Corner		10.2

Paseo Marina
Assessed contribution level - Speaker 42018

Source	dB(A)	Leq,d dB(A)	
Speaker Pedestrian Plaza 1		9.5	
Speaker Pedestrian Plaza 2		7.3	
Speaker Patio 1		7.0	
Speaker Patio 4		6.9	
Speaker Pedestrian Plaza 1		5.9	
Speaker Pedestrian Plaza 1		4.2	
Receiver R2	Leq,d 54.7		dB(A)
Speaker Pedestrian Plaza 1		50.6	
Speaker Pedestrian Plaza 1		48.6	
Speaker Building 1 SW Corner		46.7	
Speaker Pedestrian Plaza 1		42.4	
Speaker Patio 2		42.1	
Speaker Pedestrian Plaza 2		38.4	
Speaker Pedestrian Plaza 2		37.8	
Speaker Pool Deck 1		36.0	
Speaker Pool Deck 1		29.7	
Speaker Pool Deck 1		29.3	
Speaker Patio 2		28.7	
Speaker Pool Deck 2		27.8	
Speaker Building 3 NE Corner		27.2	
Speaker Pool Deck 1		27.1	
Speaker Pool Deck 1		26.9	
Speaker Patio 3		26.3	
Speaker Pool Deck 1		25.7	
Speaker Pool Deck 2		25.6	
Speaker Building 2 SE Corner		25.0	
Speaker Pool Deck 2		24.7	
Speaker Pool Deck 2		24.6	
Speaker Pool Deck 2		22.6	
Speaker Building 2 SE Corner		21.7	
Speaker Pool Deck 3		21.3	
Speaker Pool Deck 3		21.0	
Speaker Building 2 NE Corner		20.9	
Speaker Building 2 NE Corner		20.2	
Speaker Building 3 SE Corner		20.0	
Speaker Building 3 SE Corner		20.0	
Speaker Pool Deck 3		19.7	
Speaker Building 3 NE Corner		19.5	
Speaker Pool Deck 3		19.5	
Speaker Patio 3		19.3	

Paseo Marina
Assessed contribution level - Speaker 42018

Source	dB(A)	Leq,d dB(A)
Speaker Building 2 NW Corner		19.2
Speaker Patio 2		19.0
Speaker Pool Deck 3		19.0
Speaker Pool Deck 3		18.4
Speaker Pool Deck 2		17.9
Speaker Pool Deck 2		16.1
Speaker Patio 3		16.0
Speaker Patio 1		15.9
Speaker Pool Deck 3		15.4
Speaker Patio 4		8.4
Speaker Retail Plaza		5.7
Retail Plaza		4.3
Receiver R3	Leq,d 60.8	dB(A)
Speaker Pool Deck 3		53.9
Speaker Building 3 NE Corner		50.6
Speaker Building 3 SE Corner		50.4
Speaker Building 3 NE Corner		49.9
Speaker Pool Deck 2		49.9
Speaker Building 3 SE Corner		48.8
Speaker Pool Deck 3		48.3
Speaker Pool Deck 3		46.3
Speaker Building 2 NE Corner		46.2
Speaker Pool Deck 3		46.1
Speaker Pool Deck 2		45.7
Speaker Pedestrian Plaza 2		45.5
Speaker Pool Deck 3		45.3
Speaker Building 2 SE Corner		45.0
Speaker Pedestrian Plaza 2		44.4
Speaker Pool Deck 2		43.6
Speaker Pool Deck 2		43.2
Speaker Building 2 SE Corner		43.2
Speaker Pool Deck 2		41.0
Speaker Building 2 NE Corner		39.5
Speaker Pool Deck 2		38.6
Speaker Pool Deck 3		34.4
Speaker Pool Deck 1		31.0
Speaker Pool Deck 2		30.3
Speaker Pool Deck 3		30.1
Speaker Pool Deck 1		30.1
Speaker Pool Deck 1		28.5

Paseo Marina
Assessed contribution level - Speaker 42018

Source	dB(A)	Leq,d dB(A)
Speaker Pool Deck 1		27.6
Speaker Patio 4		26.2
Speaker Patio 3		25.0
Speaker Pool Deck 1		24.7
Speaker Patio 2		20.4
Speaker Pool Deck 1		20.1
Speaker Patio 2		19.0
Speaker Patio 2		18.0
Speaker Patio 3		16.9
Speaker Patio 1		14.1
Speaker Pedestrian Plaza 1		13.7
Speaker Building 2 NW Corner		11.4
Speaker Pedestrian Plaza 1		11.2
Speaker Pedestrian Plaza 1		9.7
Speaker Patio 3		9.6
Speaker Building 1 SW Corner		9.0
Retail Plaza		5.7
Speaker Retail Plaza		3.6
Receiver R4	Leq,d 60.1	dB(A)
Speaker Patio 4		56.7
Speaker Building 2 NE Corner		52.5
Speaker Pool Deck 2		51.0
Speaker Building 2 SE Corner		45.6
Speaker Pool Deck 3		45.5
Speaker Building 2 NE Corner		45.2
Speaker Pool Deck 2		44.9
Speaker Pool Deck 2		44.3
Speaker Pool Deck 3		43.5
Speaker Pool Deck 3		43.4
Speaker Building 3 NE Corner		38.9
Speaker Building 3 SE Corner		38.4
Speaker Building 3 NE Corner		38.2
Speaker Building 2 SE Corner		37.9
Speaker Building 3 SE Corner		37.7
Speaker Pool Deck 3		37.4
Speaker Pool Deck 2		33.5
Speaker Retail Plaza		33.5
Speaker Pool Deck 2		32.9
Speaker Pool Deck 2		32.2
Speaker Pool Deck 3		29.8

Paseo Marina
Assessed contribution level - Speaker 42018

Source	dB(A)	Leq,d dB(A)	
Speaker Pool Deck 2		29.7	
Speaker Pool Deck 1		29.5	
Speaker Pool Deck 3		28.6	
Speaker Patio 3		28.0	
Speaker Pool Deck 1		27.9	
Speaker Pool Deck 1		27.5	
Speaker Pool Deck 1		26.3	
Speaker Building 2 NW Corner		26.3	
Speaker Pool Deck 3		25.5	
Speaker Pool Deck 1		24.0	
Retail Plaza		23.9	
Speaker Pool Deck 1		23.0	
Speaker Patio 3		21.5	
Speaker Pedestrian Plaza 2		20.7	
Speaker Patio 3		20.4	
Speaker Pedestrian Plaza 2		19.2	
Speaker Patio 2		13.4	
Speaker Building 1 SW Corner		13.2	
Speaker Patio 2		11.5	
Speaker Patio 2		11.0	
Speaker Patio 1		7.4	
Speaker Pedestrian Plaza 1		0.5	
Speaker Pedestrian Plaza 1		-1.6	
Speaker Pedestrian Plaza 1		-3.9	

Paseo Marina
Source Levels in dB(A) - Community Park -Speaker 42018

Name	Source type	Lw dB(A)	
Speaker Community Park	Point	103.6	
Speaker Community Park	Point	103.6	
Speaker Community Park	Point	103.6	
Speaker Community Park	Point	103.6	

Paseo Marina
Assessed contribution level - Community Park -Speaker 42018

Source	Leq,d dB(A)
Receiver R1	Leq,d 25.0 dB(A)
Speaker Community Park	20.8
Speaker Community Park	18.9
Speaker Community Park	18.8
Speaker Community Park	16.5
Receiver R2	Leq,d 52.5 dB(A)
Speaker Community Park	46.9
Speaker Community Park	46.7
Speaker Community Park	46.3
Speaker Community Park	46.0
Receiver R3	Leq,d 22.3 dB(A)
Speaker Community Park	17.0
Speaker Community Park	16.9
Speaker Community Park	16.4
Speaker Community Park	14.3
Receiver R4	Leq,d 20.8 dB(A)
Speaker Community Park	16.0
Speaker Community Park	14.8
Speaker Community Park	14.3
Speaker Community Park	13.5

Paseo Marina
Source Levels in dB(A) - Community Park - People 42018

Name	Source type	Lw dB(A)	
Community Park	Area	94.1	

Paseo Marina
Assessed contribution level - Community Park - People 42018

9

Source	Leq,d dB(A)	
Receiver R1	Leq,d 21.1	dB(A)
Community Park	21.1	
Receiver R2	Leq,d 49.2	dB(A)
Community Park	49.2	
Receiver R3	Leq,d 33.5	dB(A)
Community Park	33.5	
Receiver R4	Leq,d 16.5	dB(A)
Community Park	16.5	

AES
ACOUSTICAL ENGINEERING SERVICES

Off-Site Traffic Noise Calculations
Project: Paseo Marina Project

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 8%

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
Abbot Kinney Boulevard										
- North of Venice Blvd.	50	10	35	35	1,560	19,500	8%	0	0	68.9
- Between Venice Blvd. and Washington Blvd.	50	10	35	35	1,485	18,563	8%	0	0	68.6
Lincoln Boulevard										
- Between Rose Ave. and Venice Blvd.	70	10	45	35	3,304	41,300	8%	0	0	70.9
- Between Venice Blvd. and Washington Blvd.	70	10	45	35	3,268	40,850	8%	0	0	70.9
- Between Washington Blvd. and Maxella Ave.	80	10	50	35	4,203	52,538	8%	0	0	71.6
- Between Maxella Ave. and Mindanao Wy.	80	10	50	35	3,931	49,138	8%	0	0	71.3
- Between Mindanao Wy. and Jefferson Blvd.	80	10	50	35	4,829	60,363	8%	0	0	72.2
Glencoe Avenue										
- Between Washington Blvd. and Maxella Ave.	40	10	30	35	1,437	17,963	8%	0	0	69.2
- Between Maxella Ave. and Mindanao Wy.	40	10	30	35	1,308	16,350	8%	0	0	68.8
- South of Mindanao Wy.	50	10	35	35	1,922	24,025	8%	0	0	69.8
Centinela Avenue										
- Between Venice Ave. and Washington Blvd.	70	10	45	35	2,725	34,063	8%	0	0	70.1
- Between Washington Blvd. and Short Ave.	60	10	40	35	2,820	35,250	8%	0	0	70.8
- Between Short Ave. and Culver Blvd.	60	10	40	35	2,969	37,113	8%	0	0	71.1
Venice Boulevard										
- Between Abbot Kinney Blvd. and Lincoln Blvd.	90	10	55	35	1,965	24,563	8%	0	0	67.8
- Between Lincoln Blvd. and Beethoven St.	100	10	60	35	2,777	34,713	8%	0	0	69.0
- Between Beethoven St. and Centinela Ave.	100	10	60	35	3,225	40,313	8%	0	0	69.6
Washington Boulevard										
- West of Abbot Kinney Blvd.	70	10	45	35	1,892	23,650	8%	0	0	68.5
- Between Abbot Kinney Blvd. and Lincoln Blvd.	70	10	45	35	2,803	35,038	8%	0	0	70.2
- Between Lincoln Blvd. and Glencoe Ave.	70	10	45	35	2,264	28,300	8%	0	0	69.3
- Between Glencoe Ave. and Centinela Ave.	70	10	45	35	2,487	31,088	8%	0	0	69.7
Maxella Avenue										

AES
ACOUSTICAL ENGINEERING SERVICES

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
- Between Lincoln Blvd. and Glencoe Ave.	40	10	30	35	964	12,050	8%	0	0	67.5
- East of Glencoe Ave.	40	10	30	35	588	7,350	8%	0	0	65.3
Mindano Way										
- Between Lincoln Blvd. and Glencoe Ave.	60	10	40	35	1,782	22,275	8%	0	0	68.8
- East of Glencoe Ave.	60	10	40	35	613	7,663	8%	0	0	64.2

* Estimated based on Google Earth map.

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

Date Printed: 2/15/2019

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ACOUSTICAL ENGINEERING SERVICES

Off-Site Traffic Noise Calculations
Project: Paseo Marina Project

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 8%

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
Abbot Kinney Boulevard										
- North of Venice Blvd.	50	10	35	35	1,575	19,688	8%	0	0	68.9
- Between Venice Blvd. and Washington Blvd.	50	10	35	35	1,496	18,700	8%	0	0	68.7
Lincoln Boulevard										
- Between Rose Ave. and Venice Blvd.	70	10	45	35	3,325	41,563	8%	0	0	70.9
- Between Venice Blvd. and Washington Blvd.	70	10	45	35	3,298	41,225	8%	0	0	70.9
- Between Washington Blvd. and Maxella Ave.	80	10	50	35	4,218	52,725	8%	0	0	71.6
- Between Maxella Ave. and Mindanao Wy.	80	10	50	35	3,945	49,313	8%	0	0	71.3
- Between Mindanao Wy. and Jefferson Blvd.	80	10	50	35	4,836	60,450	8%	0	0	72.2
Glencoe Avenue										
- Between Washington Blvd. and Maxella Ave.	40	10	30	35	1,505	18,813	8%	0	0	69.4
- Between Maxella Ave. and Mindanao Wy.	40	10	30	35	1,333	16,663	8%	0	0	68.9
- South of Mindanao Wy.	50	10	35	35	2,020	25,250	8%	0	0	70.0
Centinela Avenue										
- Between Venice Ave. and Washington Blvd.	70	10	45	35	2,731	34,138	8%	0	0	70.1
- Between Washington Blvd. and Short Ave.	60	10	40	35	2,820	35,250	8%	0	0	70.8
- Between Short Ave. and Culver Blvd.	60	10	40	35	2,977	37,213	8%	0	0	71.1
Venice Boulevard										
- Between Abbot Kinney Blvd. and Lincoln Blvd.	90	10	55	35	1,966	24,575	8%	0	0	67.8
- Between Lincoln Blvd. and Beethoven St.	100	10	60	35	2,780	34,750	8%	0	0	69.0
- Between Beethoven St. and Centinela Ave.	100	10	60	35	3,228	40,350	8%	0	0	69.6
Washington Boulevard										
- West of Abbot Kinney Blvd.	70	10	45	35	1,898	23,725	8%	0	0	68.5
- Between Abbot Kinney Blvd. and Lincoln Blvd.	70	10	45	35	2,827	35,338	8%	0	0	70.2
- Between Lincoln Blvd. and Glencoe Ave.	70	10	45	35	2,271	28,388	8%	0	0	69.3
- Between Glencoe Ave. and Centinela Ave.	70	10	45	35	2,502	31,275	8%	0	0	69.7
Maxella Avenue										

Date Printed: 2/15/2019

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ACOUSTICAL ENGINEERING SERVICES

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
- Between Lincoln Blvd. and Glencoe Ave.	40	10	30	35	972	12,150	8%	0	0	67.5
- East of Glencoe Ave.	40	10	30	35	588	7,350	8%	0	0	65.3
Mindano Way										
- Between Lincoln Blvd. and Glencoe Ave.	60	10	40	35	1,806	22,575	8%	0	0	68.9
- East of Glencoe Ave.	60	10	40	35	618	7,725	8%	0	0	64.2

* Estimated based on Google Earth map.

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

Date Printed: 2/15/2019

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ACOUSTICAL ENGINEERING SERVICES

Off-Site Traffic Noise Calculations
Project: Paseo Marina Project

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 8%

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
Abbot Kinney Boulevard										
- North of Venice Blvd.	50	10	35	35	1,751	21,887	8%	0	0	69.4
- Between Venice Blvd. and Washington Blvd.	50	10	35	35	1,613	20,163	8%	0	0	69.0
Lincoln Boulevard										
- Between Rose Ave. and Venice Blvd.	70	10	45	35	3,885	48,563	8%	0	0	71.6
- Between Venice Blvd. and Washington Blvd.	70	10	45	35	3,991	49,888	8%	0	0	71.7
- Between Washington Blvd. and Maxella Ave.	80	10	50	35	4,918	61,475	8%	0	0	72.2
- Between Maxella Ave. and Mindanao Wy.	80	10	50	35	4,612	57,650	8%	0	0	72.0
- Between Mindanao Wy. and Jefferson Blvd.	80	10	50	35	5,590	69,875	8%	0	0	72.8
Glencoe Avenue										
- Between Washington Blvd. and Maxella Ave.	40	10	30	35	1,573	19,663	8%	0	0	69.6
- Between Maxella Ave. and Mindanao Wy.	40	10	30	35	1,478	18,475	8%	0	0	69.3
- South of Mindanao Wy.	50	10	35	35	2,186	27,328	8%	0	0	70.3
Centinela Avenue										
- Between Venice Ave. and Washington Blvd.	70	10	45	35	3,088	38,600	8%	0	0	70.6
- Between Washington Blvd. and Short Ave.	60	10	40	35	3,348	41,850	8%	0	0	71.6
- Between Short Ave. and Culver Blvd.	60	10	40	35	3,432	42,900	8%	0	0	71.7
Venice Boulevard										
- Between Abbot Kinney Blvd. and Lincoln Blvd.	90	10	55	35	2,227	27,838	8%	0	0	68.3
- Between Lincoln Blvd. and Beethoven St.	100	10	60	35	2,985	37,313	8%	0	0	69.3
- Between Beethoven St. and Centinela Ave.	100	10	60	35	3,459	43,238	8%	0	0	69.9
Washington Boulevard										
- West of Abbot Kinney Blvd.	70	10	45	35	2,137	26,717	8%	0	0	69.0
- Between Abbot Kinney Blvd. and Lincoln Blvd.	70	10	45	35	3,096	38,700	8%	0	0	70.6
- Between Lincoln Blvd. and Glencoe Ave.	70	10	45	35	2,463	30,788	8%	0	0	69.6
- Between Glencoe Ave. and Centinela Ave.	70	10	45	35	2,772	34,650	8%	0	0	70.2
Maxella Avenue										

AES
ACOUSTICAL ENGINEERING SERVICES

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
- Between Lincoln Blvd. and Glencoe Ave.	40	10	30	35	1,112	13,900	8%	0	0	68.1
- East of Glencoe Ave.	40	10	30	35	668	8,352	8%	0	0	65.9
Mindano Way										
- Between Lincoln Blvd. and Glencoe Ave.	60	10	40	35	1,968	24,600	8%	0	0	69.3
- East of Glencoe Ave.	60	10	40	35	761	9,509	8%	0	0	65.1

* Estimated based on Google Earth map.

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

Date Printed: 2/15/2019

AES
ACOUSTICAL ENGINEERING SERVICES

Off-Site Traffic Noise Calculations
Project: Paseo Marina Project

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 8%

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
Abbot Kinney Boulevard										
- North of Venice Blvd.	50	10	35	35	1,766	22,075	8%	0	0	69.4
- Between Venice Blvd. and Washington Blvd.	50	10	35	35	1,624	20,300	8%	0	0	69.0
Lincoln Boulevard										
- Between Rose Ave. and Venice Blvd.	70	10	45	35	3,906	48,825	8%	0	0	71.6
- Between Venice Blvd. and Washington Blvd.	70	10	45	35	4,021	50,263	8%	0	0	71.8
- Between Washington Blvd. and Maxella Ave.	80	10	50	35	4,934	61,675	8%	0	0	72.3
- Between Maxella Ave. and Mindanao Wy.	80	10	50	35	4,626	57,825	8%	0	0	72.0
- Between Mindanao Wy. and Jefferson Blvd.	80	10	50	35	5,597	69,963	8%	0	0	72.8
Glencoe Avenue										
- Between Washington Blvd. and Maxella Ave.	40	10	30	35	1,666	20,825	8%	0	0	69.8
- Between Maxella Ave. and Mindanao Wy.	40	10	30	35	1,528	19,100	8%	0	0	69.5
- South of Mindanao Wy.	50	10	35	35	2,284	28,553	8%	0	0	70.5
Centinela Avenue										
- Between Venice Ave. and Washington Blvd.	70	10	45	35	3,094	38,675	8%	0	0	70.6
- Between Washington Blvd. and Short Ave.	60	10	40	35	3,348	41,850	8%	0	0	71.6
- Between Short Ave. and Culver Blvd.	60	10	40	35	3,440	43,000	8%	0	0	71.7
Venice Boulevard										
- Between Abbot Kinney Blvd. and Lincoln Blvd.	90	10	55	35	2,228	27,850	8%	0	0	68.3
- Between Lincoln Blvd. and Beethoven St.	100	10	60	35	2,988	37,350	8%	0	0	69.3
- Between Beethoven St. and Centinela Ave.	100	10	60	35	3,463	43,288	8%	0	0	69.9
Washington Boulevard										
- West of Abbot Kinney Blvd.	70	10	45	35	2,143	26,792	8%	0	0	69.0
- Between Abbot Kinney Blvd. and Lincoln Blvd.	70	10	45	35	3,120	39,000	8%	0	0	70.7
- Between Lincoln Blvd. and Glencoe Ave.	70	10	45	35	2,470	30,875	8%	0	0	69.7
- Between Glencoe Ave. and Centinela Ave.	70	10	45	35	2,786	34,825	8%	0	0	70.2
Maxella Avenue										

AES
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
- Between Lincoln Blvd. and Glencoe Ave.	40	10	30	35	1,120	14,000	8%	0	0	68.1
- East of Glencoe Ave.	40	10	30	35	668	8,352	8%	0	0	65.9
Mindano Way										
- Between Lincoln Blvd. and Glencoe Ave.	60	10	40	35	2,016	25,200	8%	0	0	69.4
- East of Glencoe Ave.	60	10	40	35	766	9,571	8%	0	0	65.2

* Estimated based on Google Earth map.

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

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