



Appendix E
Noise Analysis Worksheets

Construction Noise Impact Analysis

Construction Activity Reference Noise Levels

Construction Stage	Noise Level at 50 Feet ^a
Ground Cleaning	82 dBA
Grading/Excavation	86 dBA
Foundations	77 dBA
Structural	83 dBA
Finishing	86 dBA

Construction Noise From Project Site

Receiver Location	Distance to Center of Activity (ft)	Distance Adjustment	Barrier Insertion Loss	Construction Noise at Receiver Location During Construction Stage			Noise Level Range			
				Ground Clearing	Grading/Excavation	Foundation Construction	Structural Construction	Finishing/Cleanup	Low	High
Civic Auditorium	25	6 dBA	0 dBA	88 dBA	92 dBA	83 dBA	89 dBA	92 dBA	83 dBA	92 dBA
Sheraton Hotel	25	6 dBA	0 dBA	88 dBA	92 dBA	83 dBA	89 dBA	92 dBA	83 dBA	92 dBA
Paseo Colorado	75	-4 dBA	0 dBA	78 dBA	82 dBA	73 dBA	79 dBA	82 dBA	73 dBA	82 dBA
Residential east of Euclid Ave.	75	-4 dBA	0 dBA	78 dBA	82 dBA	73 dBA	79 dBA	82 dBA	73 dBA	82 dBA
Concord-Pasadena Senior Housing	130	-8 dBA	-5 dBA	69 dBA	73 dBA	64 dBA	70 dBA	73 dBA	64 dBA	73 dBA
Arpeggio Apartments	130	-8 dBA	-15 dBA	59 dBA	63 dBA	54 dBA	60 dBA	63 dBA	54 dBA	63 dBA
MFR at Marengo Ave./Cordova St.	200	-12 dBA	-5 dBA	65 dBA	69 dBA	60 dBA	66 dBA	69 dBA	60 dBA	69 dBA

Combined Noise Levels and Significance Conclusion

Receiver Location	Daytime Ambient L _{eq} ^b	Maximum Noise During Construction	Daytime Ambient With Construction	Increase Over Lowest Daytime Ambient L _{eq}	Significant Impact? (Exceed 85 dBA)
Civic Auditorium	67 dBA	92 dBA	92 dBA	25 dBA	n/a
Sheraton Hotel	60 dBA	92 dBA	92 dBA	32 dBA	Yes
Paseo Colorado	67 dBA	82 dBA	83 dBA	16 dBA	No
Residential east of Euclid Ave.	60 dBA	82 dBA	83 dBA	23 dBA	No
Concord-Pasadena Senior Housing	60 dBA	73 dBA	73 dBA	13 dBA	No
Arpeggio Apartments	58 dBA	63 dBA	64 dBA	6 dBA	No
MFR at Marengo Ave./Cordova St.	58 dBA	69 dBA	69 dBA	11 dBA	No

^a EPA, Noise from Construction Equipment and Operations, Building Equipment and Home Appliances, PB 206717, 1971.

^b Based on noise measurement data.

Construction Noise Impact Analysis

Construction Activity Reference Noise Levels

Construction Stage	Noise Level at 50 Feet ^a
Ground Clearing	82 dBA
Grading/Excavation	86 dBA
Foundations	77 dBA
Structural	83 dBA
Finishing	86 dBA

Construction Noise From Project Site

Receiver Location	Distance to Center of Activity (ft)	Distance Adjustment	Barrier Insertion Loss	Construction Noise at Receiver Location During Construction Stage				Noise Level Range		
				Ground Clearing	Grading/Excavation	Foundation Construction	Structural Construction	Finishing/Cleanup	Low	High
Civic Auditorium	25	6 dBA	0 dBA	88 dBA	92 dBA	83 dBA	89 dBA	92 dBA	83 dBA	92 dBA
Sheraton Hotel	25	6 dBA	-10 dBA	78 dBA	82 dBA	73 dBA	79 dBA	82 dBA	73 dBA	82 dBA
Paseo Colorado	75	-4 dBA	0 dBA	78 dBA	82 dBA	73 dBA	79 dBA	82 dBA	73 dBA	82 dBA
Residential east of Euclid Ave.	75	-4 dBA	0 dBA	78 dBA	82 dBA	73 dBA	79 dBA	82 dBA	73 dBA	82 dBA
Concord-Pasadena Senior Housing	130	-8 dBA	-5 dBA	69 dBA	73 dBA	64 dBA	70 dBA	73 dBA	64 dBA	73 dBA
Arpeggio Apartments	130	-8 dBA	-15 dBA	59 dBA	63 dBA	54 dBA	60 dBA	63 dBA	54 dBA	63 dBA
MFR at Marengo Ave./Cordova St.	200	-12 dBA	-5 dBA	65 dBA	69 dBA	60 dBA	66 dBA	69 dBA	60 dBA	69 dBA

Combined Noise Levels and Significance Conclusion

Receiver Location	Daytime Ambient L _{eq} ^b	Maximum Noise During Construction	Daytime Ambient With Construction	Increase Over Lowest Daytime Ambient L _{eq}	Significant Impact? (Exceed 85 dBA)
Civic Auditorium	67 dBA	92 dBA	92 dBA	25 dBA	n/a
Sheraton Hotel	60 dBA	82 dBA	82 dBA	22 dBA	No
Paseo Colorado	67 dBA	82 dBA	83 dBA	16 dBA	No
Residential east of Euclid Ave.	60 dBA	82 dBA	83 dBA	23 dBA	No
Concord-Pasadena Senior Housing	60 dBA	73 dBA	73 dBA	13 dBA	No
Arpeggio Apartments	58 dBA	63 dBA	64 dBA	6 dBA	No
MFR at Marengo Ave./Cordova St.	58 dBA	69 dBA	69 dBA	11 dBA	No

^a EPA, Noise from Construction Equipment and Operations, Building Equipment and Home Appliances, PB 206717, 1971.

^b Based on noise measurement data.

**Pasadena Conference Center
Parking Structure Noise Analysis**

Reference Noise Level		60.0 dBA					
Ambient Noise Level		60.1 dBA					
Parking Level	Receiver Distance (feet)	Distance-adjusted Noise Level	Barrier Insertion Loss	Total Adjusted Noise Level	Composite Noise Level	Composite Noise plus Ambient	Increase Over Ambient
1	100	54.0 dBA	-3.0 dBA	51.0 dBA	51.0 dBA	60.6 dBA	0.5 dBA
2	101	53.9 dBA	-5.0 dBA	48.9 dBA	53.1 dBA	60.9 dBA	0.8 dBA
3	102	53.8 dBA	-9.0 dBA	44.8 dBA	53.7 dBA	61.0 dBA	0.9 dBA
4	105	53.6 dBA	-12.0 dBA	41.6 dBA	53.9 dBA	61.0 dBA	0.9 dBA
5	108	53.3 dBA	-12.0 dBA	41.3 dBA	54.2 dBA	61.1 dBA	1.0 dBA
6	111	53.0 dBA	-12.0 dBA	41.0 dBA	54.4 dBA	61.1 dBA	1.0 dBA
7	116	52.7 dBA	-12.0 dBA	40.7 dBA	54.6 dBA	61.2 dBA	1.1 dBA