

Appendix E

Noise and Vibration

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**Coastal Transportation Corridor Specific Plan &
West Los Angeles Transportation Improvement and Mitigation Specific Plan Amendment Project
EIR
Construction Noise**

Lincoln Boulevard and Sepulveda Boulevard BRT Platforms/Reconfiguration of I-10 Ramps at Bundy Drive

Distance from the Construction Area (ft)		50	75	100	500	25	50	100	175	25	50	75
Reduction from Reference Distance(dBA)		Ref	4	6	20	Ref	9	18	25	Ref	-	-
Equipment Description	Number of Equipment	Leq (dBA)				Lv (VdB)				PPV (in/sec)		
Grubbing/Land Clearing												
Crawler Tractor	1	88	84	81	69	0	0	0	0	0	0	0
Excavator	2	87	83	81	69	0	0	0	0	0	0	0
Water Truck	1	89	85	82	70	86	77	68	61	0.076	0.027	0.015
Grubbing/Land Clearing Total		92	89	86	74	86	77	68	61	0.076	0.027	0.015
Grading/Excavation												
Crane	1	82	78	75	63	0	0	0	0	0	0	0
Crawler Tractor	1	88	84	81	69	0	0	0	0	0	0	0
Excavator	2	87	83	81	67	0	0	0	0	0	0	0
Grader	1	87	83	80	68	0	0	0	0	0	0	0
Roller	2	90	86	83	71	97	88	79	72	0.21	0.074	0.040
Rubber Tired Loader	1	80	76	73	61	0	0	0	0	0	0	0
Scraper	1	87	83	80	68	0	0	0	0	0	0	0
Tractor/Loader/Backhoe	3	89	85	83	71	0	0	0	0	0	0	0
Water Truck	1	89	85	82	70	86	77	68	61	0.076	0.027	0.015
Grading/Excavation Total		97	93	91	79	97	88	79	72	0.210	0.074	0.040
Drainage/Utilities/Subgrade												
Air Compressor	1	81	77	75	63	0	0	0	0	0	0	0
Generator Set	1	77	73	71	59	0	0	0	0	0	0	0
Grader	1	87	83	80	67	0	0	0	0	0	0	0
Plate Compactor	1	75	71	69	57	0	0	0	0	0	0	0
Pump	1	83	79	77	65	0	0	0	0	0	0	0
Rough Terrain Forklift	1	80	76	73	61	0	0	0	0	0	0	0
Scraper	1	87	83	80	68	0	0	0	0	0	0	0
Tractor/Loader/Backhoe	3	89	85	83	71	0	0	0	0	0	0	0
Water Truck	1	89	85	82	70	86	77	68	61	0.076	0.027	0.015
Drainage/Utilities/Subgrade Total		95	91	89	76	86	77	68	61	0.076	0.027	0.015
Paving												
Paver	1	87	83	80	68	0	0	0	0	0	0	0
Paving Equipment	1	87	83	80	68	0	0	0	0	0	0	0
Roller	2	90	86	83	70	97	88	79	72	0.210	0.074	0.040
Tractor/Loader/Backhoe	3	89	85	83	71	0	0	0	0	0	0	0
Paving Total		94	91	88	76	97	88	79	72	0.210	0.074	0.040

Lincoln Boulevard Bridge Enhancement

Distance from the Construction Area (ft)	50	60	100	400	25	60	100	315	25	50	75	
Reduction from Reference Distance(dBA)	Ref	2	6	18	Ref	11	18	33	Ref	-	-	
Equipment Description	Number of Equipment	Leq (dBA)				Lv (VdB)				PPV (in/sec)		
Grubbing/Land Clearing												
Crawler Tractor	1	88	86	81	69	0	0	0	0	0	0	0
Excavator	2	87	85	81	69	0	0	0	0	0	0	0
Water Truck	1	89	87	82	70	86	75	68	53	0.076	0.027	0.015
Grubbing/Land Clearing Total		92	91	86	74	86	75	68	53	0.076	0.027	0.015
Grading/Excavation												
Crane	1	82	80	75	63	0	0	0	0	0	0	0
Pile Driver	1	94	-	88	76	104	0	86	71	0.644	0.228	0.124
Crawler Tractor	1	88	86	81	69	0	0	0	0	0	0	0
Excavator	2	87	85	81	67	0	0	0	0	0	0	0
Grader	1	87	85	80	68	0	0	0	0	0	0	0
Roller	2	90	88	83	71	97	86	79	64	0.21	0.074	0.040
Rubber Tired Loader	1	80	78	73	61	0	0	0	0	0	0	0
Scraper	1	87	85	80	68	0	0	0	0	0	0	0
Tractor/Loader/Backhoe	2	87	85	81	69	0	0	0	0	0	0	0
Water Truck	1	89	87	82	70	86	75	68	53	0.076	0.027	0.015
Grading/Excavation Total		98	95	92	80	105	86	87	72	0.644	0.228	0.124
Drainage/Utilities/Subgrade												
Air Compressor	1	81	79	75	63	0	0	0	0	0	0	0
Generator Set	1	77	75	71	59	0	0	0	0	0	0	0
Grader	2	90	88	83	70	0	0	0	0	0	0	0
Plate Compactor	1	75	73	69	57	0	0	0	0	0	0	0
Pump	1	83	81	77	65	0	0	0	0	0	0	0
Rough Terrain Forklift	1	80	78	73	61	0	0	0	0	0	0	0
Scraper	2	90	88	83	71	0	0	0	0	0	0	0
Tractor/Loader/Backhoe	2	87	85	81	69	0	0	0	0	0	0	0
Water Truck	1	89	87	82	70	86	75	68	53	0.076	0.027	0.015
Drainage/Utilities/Subgrade Total		95	94	89	77	86	75	68	53	0.076	0.027	0.015
Paving												
Paver	1	87	85	80	68	0	0	0	0	0	0	0
Paving Equipment	1	87	85	80	68	0	0	0	0	0	0	0
Roller	2	90	88	83	70	97	86	79	64	0.210	0.074	0.040
Tractor/Loader/Backhoe	2	87	85	81	69	0	0	0	0	0	0	0
Paving Total		94	92	88	76	97	86	79	64	0.210	0.074	0.040

Other Transportation Improvements

Distance from the Construction Area (ft)		50	75	100	500	25	50	75	81	25	50	75
Reduction from Reference Distance(dBA)		Ref	4	6	20	Ref	9	14	15	Ref	-	-
Equipment Description	Number of Equipment	Leq (dBA)				Lv (VdB)				PPV (in/sec)		
		Front End Loaders	1	80	76	74	60	0	0	0	0	0
Concrete Mixers	1	82	78	76	62	0	0	0	0	0	0	0
Pavers	1	87	83	81	67	0	0	0	0	0	0	0
Truck	1	89	85	83	69	86	77	72	71	0.076	0.027	0.015
Jackhammer	1	90	86	84	70	79	70	65	64	0.035	0.012	0.007
Other Transportation Improvements Total		92	89	86	72	87	78	72	71	0.076	0.027	0.015

Equipment list obtained from Air Quality analysis.

Assume all equipment operates at the same time during each phase. For other transportation improvements, trucks and jackhammers are likely to operate simultaneously.

Calculations based on FHWA. 2006. Roadway Construction Noise Model. January.

Equipment noise level from City of Los Angeles. 2006. LA CEQA Thresholds Guide. Assumes a 20% usage factor to convert peak pile driver noise to Leq.

Closest residence would be approx 50 feet from the Lincoln Boulevard and Sepulveda Boulevard BRT platforms construction.

Closest residence is approx 100-400 feet from the closest to the farthest end of Lincoln Blvd bridge and approx 50 feet from Lincoln Boulevard widening project.

*Calculated values at 60 feet are from widening of Lincoln Boulevard and do not include pile driving. *

