

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)			
1	Zone 1								
	Activity 3 - Excavation								
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	2	60%	113			
	Air compressor, air flow > 30m3/min	CNP 003	104	2	100%	107			
	Excavator/ loader, wheeled/ tracked	CNP 081	112	2	60%	113			
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	2	100%	98			
	Dump truck	CNP 067	117	3	30%	117			
	Total SWL, dB (A)						119		
	Activity 4 - Basement and Underpass								
	Crane, tower (electric)	CNP 049	95	1	50%	92			
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	2	50%	112			
	Crane Lorry 5.5 tonne < gross vehicle weight =< 38 tonne	[1]	105	2	50%	105			
	Concrete pump, stationary/ lorry mounted	CNP 047	109	2	50%	109			
	Poker, vibratory, hand-held (electric)	[1]	102	10	50%	109			
	Bar bender and cutter (electric)	CNP 021	90	2	50%	90			
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	2	100%	98			
	Air compressor, air flow > 30m3/min	CNP 003	104	1	100%	104			
	Concrete lorry mixer	CNP 044	109	2	50%	109			
	Total SWL, dB (A)						117		
	Activity 5 - Superstructure								
	Crane, tower (electric)	CNP 049	95	1	50%	92			
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	2	50%	112			
	Crane Lorry 5.5 tonne < gross vehicle weight =< 38 tonne	[1]	105	2	50%	105			
	Concrete pump, stationary/ lorry mounted	CNP 047	109	2	50%	109			
	Poker, vibratory, hand-held (electric)	[1]	102	5	50%	106			
	Bar bender and cutter (electric)	CNP 021	90	2	50%	90			
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	3	100%	100			
	Air compressor, air flow > 30m3/min	CNP 003	104	1	100%	104			
	Concrete lorry mixer	CNP 044	109	2	50%	109			
	Drill/grinder, hand-held (electric)	CNP 065	98	5	30%	100			
	Water pump (electric)	CNP 281	88	3	30%	88			
	Excavator/ loader, wheeled/ tracked	CNP 081	112	3	30%	112			
	Fork Lift Truck	[2]	104	3	30%	104			
	Hoist, passenger/ material (electric)	CNP 122	95	3	30%	95			
	Total SWL, dB (A)						118		
	2a	Zone 2 (for area with less plant) [3]							
		Activity 1 - D Walling							
		Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110		
		Air compressor, air flow > 30m3/min	CNP 003	104	1	100%	104		
		Excavator/ loader, wheeled/ tracked	CNP 081	112	1	60%	110		
		Total SWL, dB (A)						113	
		Activity 2 - Bored Piling							
		Group 1							
		Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110		
		Excavator/ loader, wheeled/ tracked	CNP 081	112	1	30%	107		
		Piling Rig	[2]	112	1	60%	110		
		Drill Rig	[1]	110	1	60%	108		
		Excavator/ loader, wheeled/ tracked	CNP 081	112	1	60%	110		
		Piling, large diameter bored, grab and chisel	CNP 164	115	1	60%	113		
		Piling, large diameter bored, reverse circulation drill	CNP 166	100	1	60%	98		
		Piling, large diameter bored, oscillator	CNP 165	115	1	60%	113		
		Air compressor, air flow > 30m3/min	CNP 003	104	1	100%	104		
		Welding Set	[2]	78	1	60%	76		
		Total SWL, dB (A)						119	
		Group 2							
		Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110		
		Grout Mixer	[1]	90	1	60%	88		
		Grout Pump	[1]	105	1	60%	103		
		Bar bender and cutter (electric)	CNP 021	90	1	60%	88		
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95		
		Total SWL, dB (A)						111	
		Maximum SWL, dB (A) of Activity 2						119	
		Activity 3 - Excavation							
		Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110		
		Air compressor, air flow > 30m3/min	CNP 003	104	1	100%	104		
		Excavator/ loader, wheeled/ tracked	CNP 081	112	1	60%	110		
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95		
		Dump truck	CNP 067	117	1	30%	112		
		Total SWL, dB (A)						116	
		Activity 4 - Basement and Underpass							
		Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110		
		Crane Lorry 5.5 tonne < gross vehicle weight =< 38 tonne	[1]	105	1	60%	103		
		Concrete pump, stationary/ lorry mounted	CNP 047	109	1	60%	107		
		Poker, vibratory, hand-held (electric)	[1]	102	5	60%	107		
		Bar bender and cutter (electric)	CNP 021	90	1	60%	88		
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95		
		Concrete lorry mixer	CNP 044	109	1	60%	107		
		Total SWL, dB (A)						114	
		2b	Zone 2 (for area with more plant) [3]						
			Activity 1 - D Walling						
			Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110	
			Air compressor, air flow > 30m3/min	CNP 003	104	1	100%	104	
			Piling, diaphragm wall, hydraulic extractor	CNP 163	90	1	60%	88	
			Excavator/ loader, wheeled/ tracked	CNP 081	112	1	60%	110	
			Grout Mixer	[1]	90	1	60%	88	
			Water pump, submersible (electric)	CNP 283	85	1	60%	83	
			Dump truck	CNP 067	117	1	30%	112	
			Concrete lorry mixer	CNP 044	109	1	60%	107	
			Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95	
			Total SWL, dB (A)						116

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)
Activity 2 - Bored Piling						
Group 1						
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110
	Excavator/ loader, wheeled/ tracked	CNP 081	112	1	30%	107
	Piling Rig	[2]	112	1	60%	110
	Drill Rig	[1]	110	1	60%	108
	Excavator/ loader, wheeled/ tracked	CNP 081	112	1	60%	110
	Piling, large diameter bored, grab and chisel	CNP 164	115	1	60%	113
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	1	60%	98
	Piling, large diameter bored, oscillator	CNP 165	115	1	60%	113
	Air compressor, air flow > 30m3/min	CNP 003	104	1	100%	104
	Welding Set	[2]	78	1	60%	76
Total SWL, dB (A)						119
Group 2						
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110
	Grout Mixer	[1]	90	1	60%	88
	Grout Pump	[1]	105	1	60%	103
	Bar bender and cutter (electric)	CNP 021	90	1	60%	88
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
	Dump truck	CNP 067	117	1	30%	112
	Concrete lorry mixer	CNP 044	109	1	60%	107
Total SWL, dB (A)						115
Maximum SWL, dB (A) of Activity 2						119
Activity 3 - Excavation						
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110
	Air compressor, air flow > 30m3/min	CNP 003	104	1	100%	104
	Excavator/ loader, wheeled/ tracked	CNP 081	112	1	60%	110
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
	Dump truck	CNP 067	117	2	30%	115
Total SWL, dB (A)						117
Activity 4 - Basement and Underpass						
	Crane, tower (electric)	CNP 049	95	1	60%	93
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110
	Crane Lorry 5.5 tonne < gross vehicle weight =< 38 tonne	[1]	105	1	60%	103
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	60%	107
	Poker, vibratory, hand-held (electric)	[1]	102	5	60%	107
	Bar bender and cutter (electric)	CNP 021	90	1	60%	88
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
	Air compressor, air flow > 30m3/min	CNP 003	104	1	100%	104
	Concrete lorry mixer	CNP 044	109	1	60%	107
Total SWL, dB (A)						115
3	Zone 3					
Activity 1 - D Walling						
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	4	60%	116
	Air compressor, air flow > 30m3/min	CNP 003	104	4	100%	110
	Piling, diaphragm wall, hydraulic extractor	CNP 163	90	2	60%	91
	Excavator/ loader, wheeled/ tracked	CNP 081	112	4	60%	116
	Grout Mixer	[1]	90	2	60%	91
	Water pump, submersible (electric)	CNP 283	85	3	60%	88
	Dump truck	CNP 067	117	2	30%	115
	Concrete lorry mixer	CNP 044	109	2	60%	110
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	2	100%	98
Total SWL, dB (A)						121
Activity 2 - Bored Piling						
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	4	60%	116
	Excavator/ loader, wheeled/ tracked	CNP 081	112	4	30%	113
	Piling Rig	[2]	112	4	60%	116
	Drill Rig	[1]	110	4	60%	114
	Excavator/ loader, wheeled/ tracked	CNP 081	112	4	60%	116
	Piling, large diameter bored, grab and chisel	CNP 164	115	4	60%	119
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	4	60%	104
	Piling, large diameter bored, oscillator	CNP 165	115	4	60%	119
	Air compressor, air flow > 30m3/min	CNP 003	104	4	100%	110
	Grout Mixer	[1]	90	4	60%	94
	Grout Pump	[1]	105	4	60%	109
	Bar bender and cutter (electric)	CNP 021	90	4	60%	94
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	4	100%	101
	Dump truck	CNP 067	117	2	30%	115
	Concrete lorry mixer	CNP 044	109	2	60%	110
	Welding Set	[2]	78	4	60%	82
Total SWL, dB (A)						126
4	Park Construction - Zone A					
Activity 1 - Park Construction [4]						
	Dump truck	CNP 067	117	2	60%	118
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	2	60%	113
	Excavator/ loader, wheeled/ tracked	CNP 081	112	2	60%	113
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	2	100%	98
	Lorry	CNP 141	112	2	60%	113
Total SWL, dB (A)						121
Activity 2 - Superstructure [4]						
	Crane, tower (electric)	CNP 049	95	1	50%	92
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	2	50%	112
	Crane Lorry 5.5 tonne < gross vehicle weight =< 38 tonne	[1]	105	2	50%	105
	Concrete pump, stationary/ lorry mounted	CNP 047	109	2	50%	109
	Poker, vibratory, hand-held (electric)	[1]	102	5	50%	106
	Bar bender and cutter (electric)	CNP 021	90	2	50%	90
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	3	100%	100
	Air compressor, air flow > 30m3/min	CNP 003	104	1	100%	104
	Concrete lorry mixer	CNP 044	109	2	50%	109
	Drill/grinder, hand-held (electric)	CNP 065	98	5	30%	100
	Water pump (electric)	CNP 281	88	3	30%	88
	Excavator/ loader, wheeled/ tracked	CNP 081	112	3	30%	112
	Fork Lift Truck	[2]	104	3	30%	104
	Hoist, passenger/ material (electric)	CNP 122	95	3	30%	95
Total SWL, dB (A)						118
Maximum SWL, dB (A)						121

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)	
5/6	ICC Footbridge / Flyover						
	Group 1						
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	1	100%	102	
	Breaker, hand-held, mass > 35kg	CNP 026	114	2	30%	112	
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	100%	112	
	Crane Lorry 5.5 tonne < gross vehicle weight <= 38 tonne	[1]	105	1	70%	103	
	Bar bender and cutter (electric)	CNP 021	90	1	80%	89	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95	
	Total SWL, dB (A)						115
	Group 2						
	Breaker, hand-held, mass > 35kg	CNP 026	114	2	30%	112	
	Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	108	1	30%	103	
	Concrete lorry mixer	CNP 044	109	1	50%	106	
	Poker, vibratory, hand-held (electric)	[1]	102	2	50%	102	
	Grout pump	[1]	105	1	20%	98	
	Saw, circular, wood	CNP 201	108	1	80%	107	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95	
	Total SWL, dB (A)						115
	Maximum SWL, dB (A)						115
	7	East Concrete Batching Plant (Operation)					
		Group 1					
		Excavator/ loader, wheeled/ tracked	CNP 081	112	1	60%	110
Concrete mixer (electric)		CNP 045	96	1	60%	94	
Generator, super silenced, 70 dB(A) at 7 m		CNP 103	95	2	60%	96	
Concrete mixer (petrol)		CNP 046	96	3	60%	99	
Concrete lorry mixer		CNP 044	109	2	60%	110	
Batching plant		CNP 022	108	1	60%	106	
Air compressor, air flow > 10m3/min and <= 30m3/min		CNP 002	102	2	60%	103	
Tipper Lorry		BS 5228 Table D.3/112	113	1	30%	108	
Total SWL, dB (A)						115	
Group 2							
Excavator/ loader, wheeled/ tracked		CNP 081	112	1	60%	110	
Concrete mixer (electric)		CNP 045	96	1	60%	94	
Generator, super silenced, 70 dB(A) at 7 m		CNP 103	95	2	60%	96	
Concrete mixer (petrol)		CNP 046	96	3	60%	99	
Concrete lorry mixer		CNP 044	109	2	60%	110	
Batching plant		CNP 022	108	1	60%	106	
Air compressor, air flow > 10m3/min and <= 30m3/min		CNP 002	102	2	60%	103	
Tipper Lorry		BS 5228 Table D.3/112	113	1	30%	108	
Total SWL, dB (A)						115	
Maximum SWL, dB (A)						115	
8	Barging Points						
	Derrick barge	CNP 061	104	1	60%	102	
	Tug boat	CNP 221	110	1	60%	108	
	Dump truck	CNP 067	117	6	30%	120	
	Excavator/ loader, wheeled/ tracked	CNP 081	112	1	60%	110	
	Conveyor belt	CNP 041	90	1	60%	88	
Total SWL, dB (A)						120	
9/10	Pier Construction (Optional)						
	Group 1						
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	1	100%	100	
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110	
	Tug boat	CNP 221	110	1	60%	108	
	Total SWL, dB (A)						112
	Group 2						
	Concrete pump, stationary/ lorry mounted	CNP 047	109	2	100%	112	
	Concrete lorry mixer	CNP 044	109	4	60%	113	
	Water pump (electric)	CNP 281	88	4	100%	94	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	2	100%	98	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	2	100%	105	
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110	
	Tug boat	CNP 221	110	1	60%	108	
	Total SWL, dB (A)						117
	Group 3						
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	2	100%	105	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	2	100%	98	
	Concrete pump, stationary/ lorry mounted	CNP 047	109	2	100%	112	
	Concrete lorry mixer	CNP 044	109	2	60%	110	
	Poker, vibratory, hand-held (electric)	[1]	102	4	80%	107	
Tug boat	CNP 221	110	1	60%	108		
Total SWL, dB (A)						117	
Maximum SWL, dB (A)						117	
11	Viewing Platform (Optional)						
	Group 1						
	Piling, large diameter bored, reverse circulation drill	CNP 166	100	1	100%	100	
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	80%	111	
	Tug boat	CNP 221	110	1	60%	108	
	Total SWL, dB (A)						113
	Group 2						
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	2	100%	115	
	Total SWL, dB (A)						115
	Maximum SWL, dB (A)						115

Note: [1] Details extracted from EPD website: http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf
 [2] SWL of Welding Plant and Piling Rig are referred to the Appendix 5.1 of approved EIA Report of Hong Kong Section of Guangzhou - Shenzhen - Hong Kong Express Rail Link (AEIAR-143/2009).
 [3] More plant have been assumed at the zones near the NSR for conservative approach.
 [4] Activities Park Construction and Superstructure in Zone A are at same period but will not be carried out simultaneously.

Unmitigated Construction Noise Impact

NSR: HT1 (The Harbourside Tower 1)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB (A)	Distance (m)	Distance Correction, dB (A)	Facade Correction, dB(A)	Calculated SPL, dB(A)	2014												2015			
						4	5	6	7	8	9	10	11	12	1	2	3				
1) Zone 1																					
Activity 3 - Excavation	119	481	-62	3	61	61	61	61	61												
Activity 4 - Basement and Underpass	117	481	-62	3	58			58	58	58	58										
Activity 5 - Superstructure	118	481	-62	3	59									59	59	59	59				
2) Zone 2																					
Activity 1 - D Walling																					
Zone 2.1	116	79	-46	3	73	73	73	73	73	73											
Zone 2.2	116	79	-46	3	73	73	73	73	73	73											
Zone 2.3	113	174	-53	3	64	64	64	64	64	64											
Zone 2.4	113	327	-58	3	58	58	58	58	58	58											
Zone 2.5	113	377	-60	3	57	57	57	57	57	57											
Zone 2.6	113	277	-57	3	59	59	59	59	59	59											
Zone 2.7	116	253	-56	3	63	63	63	63	63	63											
Zone 2.8	116	267	-57	3	63	63	63	63	63	63											
Activity 2 - Bored Piling																					
Zone 2.1	119	79	-46	3	76	76	76	76	76	76	76	76	76								
Zone 2.2	119	79	-46	3	76	76	76	76	76	76	76	76	76								
Zone 2.3	119	174	-53	3	69	69	69	69	69	69	69	69	69								
Zone 2.4	119	327	-58	3	64	64	64	64	64	64	64	64	64								
Zone 2.5	119	377	-60	3	63	63	63	63	63	63	63	63	63								
Zone 2.6	119	277	-57	3	65	65	65	65	65	65	65	65	65								
Zone 2.7	119	253	-56	3	66	66	66	66	66	66	66	66	66								
Zone 2.8	119	267	-57	3	66	66	66	66	66	66	66	66	66								
Activity 3 - Excavation																					
Zone 2.1	117	116	-49	3	71						71	71	71	71	71	71	71				
Zone 2.2	117	102	-48	3	72						72	72	72	72	72	72	72				
Zone 2.3	116	203	-54	3	65						65	65	65	65	65	65	65				
Zone 2.4	116	357	-59	3	60						60	60	60	60	60	60	60				
Zone 2.5	116	377	-60	3	59						59	59	59	59	59	59	59				
Zone 2.6	116	258	-56	3	62						62	62	62	62	62	62	62				
Zone 2.7	117	179	-53	3	67						67	67	67	67	67	67	67				
Zone 2.8	117	228	-55	3	65						65	65	65	65	65	65	65				
Activity 4 - Basement and Underpass																					
Zone 2.1	115	116	-49	3	68									68	68	68	68				
Zone 2.2	115	102	-48	3	69									69	69	69	69				
Zone 2.3	114	203	-54	3	63									63	63	63	63				
Zone 2.4	114	357	-59	3	58									58	58	58	58				
Zone 2.5	114	377	-60	3	58									58	58	58	58				
Zone 2.6	114	258	-56	3	61									61	61	61	61				
Zone 2.7	115	179	-53	3	65									65	65	65	65				
Zone 2.8	115	228	-55	3	62									62	62	62	62				
3) Zone 3																					
Activity 1 - D Walling	121	272	-57	3	67	67	67	67	67	67	67										
Activity 2 - Bored Piling	126	272	-57	3	72						72	72	72	72	72	72	72				
4) Park Construction - Zone A																					
Activity 1 - D Walling	121	576	-63	3	61	61	61	61	61	61	61	61	61	61	61	61	61				
5) ICC Footbridge																					
Activity 1 - D Walling	115	211	-54	3	64	64	64	64	64	64	64	64	64	64	64	64	64				
6) Flyover																					
Activity 1 - D Walling	115	287	-57	3	61						61	61	61	61	61	61	61				
7) East Concrete Batching Plant (Operation)																					
Activity 1 - D Walling	115	461	-61	3	57	57	57	57	57	57	57	57	57	57	57	57	57				
8) Barqing Point (BP)																					
BP4	120	307	-58	3	66	66	66	66	66	66	66	66	66	66	66	66	66				
BP5	120	327	-58	3	65	65	65	65	65	65	65	65	65	65	65	65	65				
BP6	120	506	-62	3	61	61	61	61	61	61	61	61	61	61	61	61	61				
BP7	120	616	-64	3	60	60	60	60	60	60	60	60	60	60	60	60	60				
9) West Pier (Optional)																					
Activity 1 - D Walling	117	846	-67	3	54	54	54	54	54	54	54	54	54	54	54	54	54				
10) South Pier (Optional)																					
Activity 1 - D Walling	117	347	-59	3	62	62	62	62	62	62	62	62	62	62	62	62	62				
11) Viewing Platform (Optional)																					
Activity 1 - D Walling	115	342	-59	3	59	59	59	59	59	59	59	59	59	59	59	59	59				
Predicted Noise Level of this Project, dB (A)																					
Predicted Noise Level of Express Rail Link, dB(A)¹																					
Predicted Noise Level of Road Works at West Kowloon, dB(A)²																					
Overall Cumulative Noise Level, dB(A)																					
														2014		2015					
														Min	Max	Min	Max				
														80	84	80	80				
														2014		2015					
														Min	Max	Min	Max				
														83	83	83	80				

Note: Bold figure in shaded box denotes exceedance of relevant construction noise criteria

- Predicted Noise Levels are referred to NSR WK9 in Appendix 5.8 of approved EIA of Express Rail Link (AEIAR-143/2009). Delaying of 6 months of WKT construction programme in VEP have been included in predicted noise level.
- Predicted Noise Levels are referred to NSR Arch4 in Appendix 3.13 of approved EIA of Road Works at West Kowloon (AEIAR-141/2009) for conservative approach.
- Since the NSR is located out of the 300m assessment area of the construction works of "Proposed Road Improvement Works in West Kowloon Reclamation" project, the cumulative noise impact is predicted to be low and has insignificant contribution to the NSR, therefore, cumulative noise impact is not taken into account at this NSR.
- Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.
- Phase 1 Concrete Batching Plant in Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility will be handed over to WKCD starting from the year of 2014. Since the operation of concreting batching plants before 2014 and the operation and demolition of phase 2 concreting batching plant have already been included in the noise impact assessment of the XRL project, separate noise impact assessment will only be calculated after handing over the phase 1 concrete batching plant to WKCD starting from the year of 2014.

Unmitigated Construction Noise Impact

NSR: AST (The Arch - Sun Tower)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB (A)	Distance (m)	Distance Correction, dB (A)	Facade Correction, dB(A)	Calculated SPL, dB(A)	2014												2015		
						4	5	6	7	8	9	10	11	12	1	2	3			
1) Zone 1																				
Activity 3 - Excavation	119	391	-60	3	63	63	63	63	63											
Activity 4 - Basement and Underpass	117	391	-60	3	60			60	60	60	60									
Activity 5 - Superstructure	118	391	-60	3	61										61	61	61	61	61	
2) Zone 2																				
Activity 1 - D Walling																				
Zone 2.1	116	130	-50	3	69	69	69	69	69	69										
Zone 2.2	116	73	-45	3	74	74	74	74	74	74										
Zone 2.3	116	96	-48	3	72	72	72	72	72	72										
Zone 2.4	113	228	-55	3	61	61	61	61	61	61										
Zone 2.5	113	312	-58	3	58	58	58	58	58	58										
Zone 2.6	113	247	-56	3	60	60	60	60	60	60										
Zone 2.7	116	252	-56	3	63	63	63	63	63	63										
Zone 2.8	113	302	-58	3	59	59	59	59	59	59										
Activity 2 - Bored Piling																				
Zone 2.1	119	130	-50	3	72	72	72	72	72	72	72	72	72							
Zone 2.2	119	73	-45	3	77	77	77	77	77	77	77	77	77							
Zone 2.3	119	96	-48	3	74	74	74	74	74	74	74	74	74							
Zone 2.4	119	228	-55	3	67	67	67	67	67	67	67	67	67							
Zone 2.5	119	312	-58	3	64	64	64	64	64	64	64	64	64							
Zone 2.6	119	247	-56	3	66	66	66	66	66	66	66	66	66							
Zone 2.7	119	252	-56	3	66	66	66	66	66	66	66	66	66							
Zone 2.8	119	302	-58	3	64	64	64	64	64	64	64	64	64							
Activity 3 - Excavation																				
Zone 2.1	117	178	-53	3	67						67	67	67	67	67	67	67	67	67	
Zone 2.2	117	92	-47	3	73						73	73	73	73	73	73	73	73	73	
Zone 2.3	117	139	-51	3	69						69	69	69	69	69	69	69	69	69	
Zone 2.4	116	257	-56	3	62						62	62	62	62	62	62	62	62	62	
Zone 2.5	116	302	-58	3	61						61	61	61	61	61	61	61	61	61	
Zone 2.6	116	203	-54	3	65						65	65	65	65	65	65	65	65	65	
Zone 2.7	117	188	-53	3	67						67	67	67	67	67	67	67	67	67	
Zone 2.8	116	282	-57	3	62						62	62	62	62	62	62	62	62	62	
Activity 4 - Basement and Underpass																				
Zone 2.1	115	178	-53	3	65										65	65	65	65	65	
Zone 2.2	115	92	-47	3	70										70	70	70	70	70	
Zone 2.3	115	139	-51	3	67										67	67	67	67	67	
Zone 2.4	114	257	-56	3	61										61	61	61	61	61	
Zone 2.5	114	302	-58	3	60										60	60	60	60	60	
Zone 2.6	114	203	-54	3	63										63	63	63	63	63	
Zone 2.7	115	188	-53	3	64										64	64	64	64	64	
Zone 2.8	114	282	-57	3	60										60	60	60	60	60	
3) Zone 3																				
Activity 1 - D Walling																				
Activity 2 - Bored Piling	126	362	-59	3	70						70	70	70	70	70	70	70	70	70	
4) Park Construction - Zone A																				
ICC Footbridge	115	298	-57	3	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	
Flyover	115	379	-60	3	59						59	59	59	59	59	59	59	59	59	
East Concrete Batching Plant (Operation)	115	377	-60	3	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	
8) Barqing Point (BP)																				
BP4	120	357	-59	3	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	
BP5	120	387	-60	3	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	
BP6	120	576	-63	3	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	
BP7	120	691	-65	3	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	
9) West Pier (Optional)																				
South Pier (Optional)	117	936	-67	3	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	
10) South Pier (Optional)																				
Viewing Platform (Optional)	115	297	-57	3	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	

Predicted Noise Level of this Project, dB (A)	82	82	83	83	84	83	82	83	80	80	80	80	80	80	80	80	80	80	80
Predicted Noise Level of Express Rail Link, dB(A) ¹	69	69	69	64	64	63	63	69	69	69	69	69	69	69	69	69	69	69	69
Predicted Noise Level of Road Works at West Kowloon, dB(A) ²	69	67	67	67	67	67	67												
Overall Cumulative Noise Level, dB(A)	83	83	83	83	84	83	83	83	80	80	80	80	80	80	80	80	80	80	80

Note: Bold figure in shaded box denotes exceedance of relevant construction noise criteria

- Predicted Noise Levels are referred to NSR WK14 in Appendix 5.8 of approved EIA of Express Rail Link (AEIAR-143/2009). Delaying of 6 months of WKT construction programme in VEP have been included in predicted noise level.
- Predicted Noise Levels are referred to NSR Arch2b in Appendix 3.13 of approved EIA of Road Works at West Kowloon (AEIAR-141/2009) for conservative approach.
- Since the NSR is located out of the 300m assessment area of the construction works of "Proposed Road Improvement Works in West Kowloon Reclamation" project, the cumulative noise impact is predicted to be low and has insignificant contribution to the NSR, therefore, cumulative noise impact is not taken into account at this NSR.
- Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.
- Phase 1 Concrete Batching Plant in Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility will be handed over to WKCD starting from the year of 2014. Since the operation of concreting batching plants before 2014 and the operation and demolition of phase 2 concreting batching plant have already been included in the noise impact assessment of the XRL project, separate noise impact assessment will only be calculated after handing over the phase 1 concrete batching plant to WKCD starting from the year of 2014.

Unmitigated Construction Noise Impact

NSR: WOB (Wai On Building)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB (A)	Distance (m)	Distance Correction, dB (A)	Facade Correction, dB(A)	Calculated SPL, dB(A)	2014										2015											
						4	5	6	7	8	9	10	11	12	1	2	3										
1) Zone 1																											
Activity 3 - Excavation	119	100	-48	3	74	74	74	74	74																		
Activity 4 - Basement and Underpass	117	100	-48	3	72			72	72	72	72																
Activity 5 - Superstructure	118	100	-48	3	73								73	73	73	73	73										
2) Zone 2																											
Activity 1 - D Walling																											
Zone 2.1	113	645	-64	3	52	52	52	52	52	52																	
Zone 2.2	113	485	-62	3	55	55	55	55	55	55																	
Zone 2.3	116	330	-58	3	61	61	61	61	61	61																	
Zone 2.4	116	180	-53	3	66	66	66	66	66	66																	
Zone 2.5	116	225	-55	3	64	64	64	64	64	64																	
Zone 2.6	116	400	-60	3	59	59	59	59	59	59																	
Zone 2.7	113	550	-63	3	54	54	54	54	54	54																	
Zone 2.8	113	745	-65	3	51	51	51	51	51	51																	
Activity 2 - Bored Piling																											
Zone 2.1	119	645	-64	3	58	58	58	58	58	58	58	58															
Zone 2.2	119	485	-62	3	60	60	60	60	60	60	60	60															
Zone 2.3	119	330	-58	3	64	64	64	64	64	64	64	64															
Zone 2.4	119	180	-53	3	69	69	69	69	69	69	69	69															
Zone 2.5	119	225	-55	3	67	67	67	67	67	67	67	67															
Zone 2.6	119	400	-60	3	62	62	62	62	62	62	62	62															
Zone 2.7	119	550	-63	3	59	59	59	59	59	59	59	59															
Zone 2.8	119	745	-65	3	57	57	57	57	57	57	57	57															
Activity 3 - Excavation																											
Zone 2.1	116	695	-65	3	54					54	54	54	54	54	54	54											
Zone 2.2	116	525	-62	3	56					56	56	56	56	56	56	56											
Zone 2.3	117	370	-59	3	61					61	61	61	61	61	61	61											
Zone 2.4	117	225	-55	3	65					65	65	65	65	65	65	65											
Zone 2.5	117	260	-56	3	64					64	64	64	64	64	64	64											
Zone 2.6	117	405	-60	3	60					60	60	60	60	60	60	60											
Zone 2.7	116	570	-63	3	56					56	56	56	56	56	56	56											
Zone 2.8	116	750	-66	3	53					53	53	53	53	53	53	53											
Activity 4 - Basement and Underpass																											
Zone 2.1	114	695	-65	3	52								52	52	52	52											
Zone 2.2	114	525	-62	3	55								55	55	55	55											
Zone 2.3	115	370	-59	3	58								58	58	58	58											
Zone 2.4	115	225	-55	3	63								63	63	63	63											
Zone 2.5	115	260	-56	3	61								61	61	61	61											
Zone 2.6	115	405	-60	3	57								57	57	57	57											
Zone 2.7	115	570	-63	3	54								54	54	54	54											
Zone 2.8	114	750	-66	3	52								52	52	52	52											
3) Zone 3																											
Activity 1 - D Walling	121	905	-67	3	57	57	57	57	57	57	57																
Activity 2 - Bored Piling	126	905	-67	3	62	62	62	62	62	62	62	62	62	62	62												
4) Park Construction - Zone A																											
5) ICC Footbridge	115	840	-66	3	52	52	52	52	52	52	52	52	52	52	52												
6) Flyover	115	922	-67	3	51					51	51	51	51	51	51	51											
7) East Concrete Batching Plant (Operation)	115	215	-55	3	63	63	63	63	63	63	63	63	63	63	63	63											
8) Barqing Point (BP)																											
BP4	120	805	-66	3	57	57	57	57	57	57	57	57	57	57	57	57											
BP5	120	850	-67	3	57	57	57	57	57	57	57	57	57	57	57	57											
BP6	120	1060	-69	3	55	55	55	55	55	55	55	55	55	55	55	55											
BP7	120	1160	-69	3	54	54	54	54	54	54	54	54	54	54	54	54											
9) West Pier (Optional)																											
10) South Pier (Optional)	117	1475	-71	3	49	49	49	49	49	49	49	49	49	49	49	49											
10) South Pier (Optional)																											
11) Viewing Platform (Optional)	115	508	-62	3	56	56	56	56	56	56	56	56	56	56	56	56											
Predicted Noise Level of this Project, dB (A)						78	78	79	79	78	77	77	78	76	76	76	76										
Predicted Noise Level of Express Rail Link, dB(A)¹						58	58	58	58	58	53	53	53	53	49	49	49										
Predicted Noise Level of Road Works at West Kowloon, dB(A)²						64	63	63	63	63	63																
Predicted Noise Level of Road Improvement Works in West Kowloon Reclamation, dB(A)³						63	66	63	70	69	69	69	70	63	63	46	46										
Overall Cumulative Noise Level, dB(A)						78	78	79	80	78	78	78	78	76	76	76	76										
<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td colspan="2">2014</td> <td colspan="2">2015</td> </tr> <tr> <td>Min</td><td>Max</td> <td>Min</td><td>Max</td> </tr> <tr> <td>76</td><td>79</td> <td>76</td><td>76</td> </tr> </table>																2014		2015		Min	Max	Min	Max	76	79	76	76
2014		2015																									
Min	Max	Min	Max																								
76	79	76	76																								

Note: Bold figure in shaded box denotes exceedance of relevant construction noise criteria

- Predicted Noise Levels are referred to NSR WKS in Appendix G of Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility.
- Predicted Noise Levels are referred to NSR WN in Appendix 3.13 of approved EIA of Road Works at West Kowloon (AEIAR-141/2009).
- Predicted Noise Levels are referred to NSR WOB in Appendix 2.4 of Preliminary Environmental Review Report - Scheme Q of Proposed Road Improvement Works in West Kowloon Reclamation for conservative approach. Delaying of 6 months of construction programme based on latest information have been included in predicted noise level.
- Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.
- Phase 1 Concrete Batching Plant in Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility will be handed over to WKCD starting from the year of 2014. Since the operation of concreting batching plants before 2014 and the operation and demolition of phase 2 concreting batching plant have already been included in the noise impact assessment of the XRL project, separate noise impact assessment will only be calculated after handing over the phase 1 concrete batching plant to WKCD starting from the year of 2014.

Unmitigated Construction Noise Impact

NSR: VT1 (The Victoria Towers - Tower 1)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB (A)	Distance (m)	Distance Correction, dB (A)	Facade Correction, dB(A)	Calculated SPL, dB(A)	2014										2015			
						4	5	6	7	8	9	10	11	12	1	2	3		
1) Zone 1																			
Activity 3 - Excavation	119	74	-45	3	77	77	77	77	77										
Activity 4 - Basement and Underpass	117	74	-45	3	74			74	74	74									
Activity 5 - Superstructure	118	74	-45	3	75								75	75	75	75			
2) Zone 2																			
Activity 1 - D Walling																			
Zone 2.1	113	626	-64	3	52	52	52	52	52	52									
Zone 2.2	113	472	-61	3	55	55	55	55	55	55									
Zone 2.3	116	328	-58	3	61	61	61	61	61	61									
Zone 2.4	116	170	-53	3	67	67	67	67	67	67									
Zone 2.5	116	156	-52	3	67	67	67	67	67	67									
Zone 2.6	116	328	-58	3	61	61	61	61	61	61									
Zone 2.7	113	482	-62	3	55	55	55	55	55	55									
Zone 2.8	113	691	-65	3	52	52	52	52	52	52									
Activity 2 - Bored Piling																			
Zone 2.1	119	626	-64	3	58	58	58	58	58	58	58	58	58	58	58	58			
Zone 2.2	119	472	-61	3	61	61	61	61	61	61	61	61	61	61	61	61			
Zone 2.3	119	328	-58	3	64	64	64	64	64	64	64	64	64	64	64	64			
Zone 2.4	119	170	-53	3	69	69	69	69	69	69	69	69	69	69	69	69			
Zone 2.5	119	156	-52	3	70	70	70	70	70	70	70	70	70	70	70	70			
Zone 2.6	119	328	-58	3	64	64	64	64	64	64	64	64	64	64	64	64			
Zone 2.7	119	482	-62	3	60	60	60	60	60	60	60	60	60	60	60	60			
Zone 2.8	119	691	-65	3	57	57	57	57	57	57	57	57	57	57	57	57			
Activity 3 - Excavation																			
Zone 2.1	116	676	-65	3	54					54	54	54	54	54	54	54			
Zone 2.2	116	502	-62	3	57					57	57	57	57	57	57	57			
Zone 2.3	117	343	-59	3	61					61	61	61	61	61	61	61			
Zone 2.4	117	205	-54	3	66					66	66	66	66	66	66	66			
Zone 2.5	117	195	-54	3	66					66	66	66	66	66	66	66			
Zone 2.6	117	353	-59	3	61					61	61	61	61	61	61	61			
Zone 2.7	116	517	-62	3	56					56	56	56	56	56	56	56			
Zone 2.8	116	716	-65	3	54					54	54	54	54	54	54	54			
Activity 4 - Basement and Underpass																			
Zone 2.1	114	676	-65	3	53								53	53	53	53			
Zone 2.2	114	502	-62	3	55								55	55	55	55			
Zone 2.3	115	343	-59	3	59								59	59	59	59			
Zone 2.4	115	205	-54	3	63								63	63	63	63			
Zone 2.5	115	195	-54	3	64								64	64	64	64			
Zone 2.6	115	353	-59	3	59								59	59	59	59			
Zone 2.7	115	517	-62	3	55								55	55	55	55			
Zone 2.8	114	716	-65	3	52								52	52	52	52			
3) Zone 3																			
Activity 1 - D Walling																			
Activity 2 - Bored Piling	126	886	-67	3	62	57	57	57	57	57	57	57	62	62	62	62			
4) Park Construction - Zone A																			
5) ICC Footbridge	115	827	-66	3	52	52	52	52	52	52	52	52	52	52	52	52			
6) Flyover	115	914	-67	3	51					51	51	51	51	51	51	51			
7) East Concrete Batching Plant (Operation)	115	158	-52	3	66	66	66	66	66	66	66	66	66	66	66	66			
8) Barqing Point (BP)																			
BP4	120	751	-66	3	58	58	58	58	58	58	58	58	58	58	58	58			
BP5	120	799	-66	3	57	57	57	57	57	57	57	57	57	57	57	57			
BP6	120	1001	-68	3	55	55	55	55	55	55	55	55	55	55	55	55			
BP7	120	1093	-69	3	55	55	55	55	55	55	55	55	55	55	55	55			
9) West Pier (Optional)	117	1451	-71	3	49	49	49	49	49	49	49	49	49	49	49	49			
10) South Pier (Optional)	117	786	-66	3	54	54	54	54	54	54	54	54	54	54	54	54			
11) Viewing Platform (Optional)	115	422	-61	3	58	58	58	58	58	58	58	58	58	58	58	58			
Predicted Noise Level of this Project, dB (A)						80	80	81	81	80	79	79	80	78	78	78	78		
Predicted Noise Level of Express Rail Link, dB(A) ¹						60	60	60	60	60	58	58	59	59	56	56	56		
Predicted Noise Level of Road Works at West Kowloon, dB(A) ²						60	59	59	59	59	59	59							
Predicted Noise Level of Road Improvement Works in West Kowloon Reclamation, dB(A) ³						59	62	59	66	65	65	65	66	59	59	43	43		
Overall Cumulative Noise Level, dB(A)						80	80	81	81	80	79	79	80	78	78	78	78		
														2014		2015			
														Min	Max	Min	Max		

Note: Bold figure in shaded box denotes exceedance of relevant construction noise criteria

- 1) Predicted Noise Levels are referred to NSR WK6 in Appendix G of Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility.
- 2) Predicted Noise Levels are referred to NSR VT2 in Appendix 3.13 of approved EIA of Road Works at West Kowloon (AEIAR-141/2009) for conservative approach.
- 3) Predicted Noise Levels are referred to NSR VT1 in Appendix 2.4 of Preliminary Environmental Review Report - Scheme Q of Proposed Road Improvement Works in West Kowloon Reclamation for conservative approach. Delaying of 6 months of construction programme based on latest information have been included in predicted noise level.
- 4) Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.
- 5) Phase 1 Concrete Batching Plant in Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility will be handed over to WKCD starting from the year of 2014. Since the operation of concreting batching plants before 2014 and the operation and demolition of phase 2 concreting batching plant have already been included in the noise impact assessment of the XRL project, separate noise impact assessment will only be calculated after handing over the phase 1 concrete batching plant to WKCD starting from the year of 2014.

Unmitigated Construction Noise Impact

NSR: VT2 (The Victoria Towers - Tower 2)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB (A)	Distance (m)	Distance Correction, dB (A)	Facade Correction, dB(A)	Calculated SPL, dB(A)	2014												2015			
						4	5	6	7	8	9	10	11	12	1	2	3				
1) Zone 1																					
Activity 3 - Excavation	119	78	-46	3	77	77	77	77	77												
Activity 4 - Basement and Underpass	117	78	-46	3	74			74	74	74	74										
Activity 5 - Superstructure	118	78	-46	3	75									75	75	75	75				
2) Zone 2																					
Activity 1 - D Walling																					
Zone 2.1	113	646	-64	3	52	52	52	52	52	52											
Zone 2.2	113	492	-62	3	54	54	54	54	54	54											
Zone 2.3	116	338	-59	3	61	61	61	61	61	61											
Zone 2.4	116	180	-53	3	66	66	66	66	66	66											
Zone 2.5	116	190	-54	3	66	66	66	66	66	66											
Zone 2.6	116	363	-59	3	60	60	60	60	60	60											
Zone 2.7	113	522	-62	3	54	54	54	54	54	54											
Zone 2.8	113	721	-65	3	51	51	51	51	51	51											
Activity 2 - Bored Piling																					
Zone 2.1	119	646	-64	3	58	58	58	58	58	58	58	58	58								
Zone 2.2	119	492	-62	3	60	60	60	60	60	60	60	60	60								
Zone 2.3	119	338	-59	3	63	63	63	63	63	63	63	63	63								
Zone 2.4	119	180	-53	3	69	69	69	69	69	69	69	69	69								
Zone 2.5	119	190	-54	3	68	68	68	68	68	68	68	68	68								
Zone 2.6	119	363	-59	3	63	63	63	63	63	63	63	63	63								
Zone 2.7	119	522	-62	3	60	60	60	60	60	60	60	60	60								
Zone 2.8	119	721	-65	3	57	57	57	57	57	57	57	57	57								
Activity 3 - Excavation																					
Zone 2.1	116	701	-65	3	54					54	54	54	54	54	54	54	54				
Zone 2.2	116	527	-62	3	56					56	56	56	56	56	56	56	56				
Zone 2.3	117	367	-59	3	61					61	61	61	61	61	61	61	61				
Zone 2.4	117	214	-55	3	66					66	66	66	66	66	66	66	66				
Zone 2.5	117	214	-55	3	66					66	66	66	66	66	66	66	66				
Zone 2.6	117	377	-60	3	61					61	61	61	61	61	61	61	61				
Zone 2.7	116	547	-63	3	56					56	56	56	56	56	56	56	56				
Zone 2.8	116	736	-65	3	53					53	53	53	53	53	53	53	53				
Activity 4 - Basement and Underpass																					
Zone 2.1	114	701	-65	3	52									52	52	52	52				
Zone 2.2	114	527	-62	3	55									55	55	55	55				
Zone 2.3	115	367	-59	3	58									58	58	58	58				
Zone 2.4	115	214	-55	3	63									63	63	63	63				
Zone 2.5	115	214	-55	3	63									63	63	63	63				
Zone 2.6	115	377	-60	3	58									58	58	58	58				
Zone 2.7	115	547	-63	3	55									55	55	55	55				
Zone 2.8	114	736	-65	3	52									52	52	52	52				
3) Zone 3																					
Activity 1 - D Walling																					
Activity 2 - Bored Piling	126	901	-67	3	62	62	62	62	62	62	62	62	62	62	62	62	62				
4) Park Construction - Zone A																					
Activity 1 - D Walling	121	1068	-69	3	55	55	55	55	55	55	55	55	55	55	55	55	55				
5) ICC Footbridge																					
Activity 1 - D Walling	115	846	-67	3	52	52	52	52	52	52	52	52	52	52	52	52	52				
6) Flyover																					
Activity 1 - D Walling	115	930	-67	3	51					51	51	51	51	51	51	51	51				
7) East Concrete Batching Plant (Operation)																					
Activity 1 - D Walling	115	183	-53	3	65	65	65	65	65	65	65	65	65	65	65	65	65				
8) Barqing Point (BP)																					
BP4	120	781	-66	3	57	57	57	57	57	57	57	57	57	57	57	57	57				
BP5	120	831	-66	3	57	57	57	57	57	57	57	57	57	57	57	57	57				
BP6	120	1036	-68	3	55	55	55	55	55	55	55	55	55	55	55	55	55				
BP7	120	1131	-69	3	54	54	54	54	54	54	54	54	54	54	54	54	54				
9) West Pier (Optional)																					
Activity 1 - D Walling	117	1471	-71	3	49	49	49	49	49	49	49	49	49	49	49	49	49				
10) South Pier (Optional)																					
Activity 1 - D Walling	117	816	-66	3	54	54	54	54	54	54	54	54	54	54	54	54	54				
11) Viewing Platform (Optional)																					
Activity 1 - D Walling	115	462	-61	3	57	57	57	57	57	57	57	57	57	57	57	57	57				
Predicted Noise Level of this Project, dB (A)																					
Predicted Noise Level of Express Rail Link, dB(A)¹																					
Predicted Noise Level of Road Works at West Kowloon, dB(A)²																					
Predicted Noise Level of Road Improvement Works in West Kowloon Reclamation, dB(A)³																					
Overall Cumulative Noise Level, dB(A)																					
														2014	2015						
														Min	Max	Min	Max				
														77	80	77	77				
														2014	2015						
														Min	Max	Min	Max				
														58	61	58	65				
														64	64	64	65				
														58	58	44	44				
														Min	Max	Min	Max				
														78	81	78	78				

Note: Bold figure in shaded box denotes exceedance of relevant construction noise criteria

- Predicted Noise Levels are referred to NSR WK6 in Appendix G of Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility.
- Predicted Noise Levels are referred to NSR VT2 in Appendix 3.13 of approved EIA of Road Works at West Kowloon (AEIAR-141/2009) for conservative approach.
- Predicted Noise Levels are referred to NSR VT2 in Appendix 2.4 of Preliminary Environmental Review Report - Scheme Q of Proposed Road Improvement Works in West Kowloon Reclamation for conservative approach. Delaying of 6 months of construction programme based on latest information have been included in predicted noise level.
- Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.
- Phase 1 Concrete Batching Plant in Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility will be handed over to WKCD starting from the year of 2014. Since the operation of concreting batching plants before 2014 and the operation and demolition of phase 2 concreting batching plant have already been included in the noise impact assessment of the XRL project, separate noise impact assessment will only be calculated after handing over the phase 1 concrete batching plant to WKCD starting from the year of 2014.

Unmitigated Construction Noise Impact

NSR: LCS (Lai Chack Middle School)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB (A)	Distance (m)	Distance Correction, dB (A)	Facade Correction, dB(A)	Calculated SPL, dB(A)	2014										2015		
						4	5	6	7	8	9	10	11	12	1	2	3	
1) Zone 1																		
Activity 3 - Excavation	119	105	-48	3	74	74	74	74	74									
Activity 4 - Basement and Underpass	117	105	-48	3	71			71	71	71	71							
Activity 5 - Superstructure	118	105	-48	3	72								72	72	72	72		
2) Zone 2																		
Activity 1 - D Walling																		
Zone 2.1	113	640	-64	3	52	52	52	52	52	52								
Zone 2.2	113	480	-62	3	55	55	55	55	55	55								
Zone 2.3	116	340	-59	3	61	61	61	61	61	61								
Zone 2.4	116	160	-52	3	67	67	67	67	67	67								
Zone 2.5	116	150	-52	3	68	68	68	68	68	68								
Zone 2.6	116	315	-58	3	61	61	61	61	61	61								
Zone 2.7	113	480	-62	3	55	55	55	55	55	55								
Zone 2.8	113	690	-65	3	52	52	52	52	52	52								
Activity 2 - Bored Piling																		
Zone 2.1	119	640	-64	3	58	58	58	58	58	58	58	58						
Zone 2.2	119	480	-62	3	60	60	60	60	60	60	60	60						
Zone 2.3	119	340	-59	3	63	63	63	63	63	63	63	63						
Zone 2.4	119	160	-52	3	70	70	70	70	70	70	70	70						
Zone 2.5	119	150	-52	3	71	71	71	71	71	71	71	71						
Zone 2.6	119	315	-58	3	64	64	64	64	64	64	64	64						
Zone 2.7	119	480	-62	3	60	60	60	60	60	60	60	60						
Zone 2.8	119	690	-65	3	57	57	57	57	57	57	57	57						
Activity 3 - Excavation																		
Zone 2.1	116	685	-65	3	54					54	54	54	54	54	54	54		
Zone 2.2	116	505	-62	3	57					57	57	57	57	57	57	57		
Zone 2.3	117	355	-59	3	61					61	61	61	61	61	61	61		
Zone 2.4	117	205	-54	3	66					66	66	66	66	66	66	66		
Zone 2.5	117	195	-54	3	66					66	66	66	66	66	66	66		
Zone 2.6	117	350	-59	3	61					61	61	61	61	61	61	61		
Zone 2.7	116	515	-62	3	56					56	56	56	56	56	56	56		
Zone 2.8	116	720	-65	3	54					54	54	54	54	54	54	54		
Activity 4 - Basement and Underpass																		
Zone 2.1	114	685	-65	3	52								52	52	52	52		
Zone 2.2	114	505	-62	3	55								55	55	55	55		
Zone 2.3	115	355	-59	3	59								59	59	59	59		
Zone 2.4	115	205	-54	3	63								63	63	63	63		
Zone 2.5	115	195	-54	3	64								64	64	64	64		
Zone 2.6	115	350	-59	3	59								59	59	59	59		
Zone 2.7	115	515	-62	3	55								55	55	55	55		
Zone 2.8	114	720	-65	3	52								52	52	52	52		
3) Zone 3																		
Activity 1 - D Walling																		
Activity 2 - Bored Piling	126	900	-67	3	62	62	62	62	62	62	62	62	62	62	62	62		
4) Park Construction - Zone A																		
5) ICC Footbridge	115	843	-67	3	52	52	52	52	52	52	52	52	52	52	52	52		
6) Flyover	115	927	-67	3	51					51	51	51	51	51	51	51		
7) East Concrete Batching Plant (Operation)	115	160	-52	3	66	66	66	66	66	66	66	66	66	66	66	66		
8) Barqing Point (BP)																		
BP4	120	750	-66	3	58	58	58	58	58	58	58	58	58	58	58	58		
BP5	120	795	-66	3	57	57	57	57	57	57	57	57	57	57	57	57		
BP6	120	993	-68	3	55	55	55	55	55	55	55	55	55	55	55	55		
BP7	120	1083	-69	3	55	55	55	55	55	55	55	55	55	55	55	55		
9) West Pier (Optional)																		
10) South Pier (Optional)	117	1455	-71	3	49	49	49	49	49	49	49	49	49	49	49	49		
10) South Pier (Optional)																		
11) Viewing Platform (Optional)	115	398	-60	3	58	58	58	58	58	58	58	58	58	58	58	58		
Predicted Noise Level of this Project, dB (A)						79	79	80	80	79	78	78	79	77	77	77	77	
Predicted Noise Level of Express Rail Link, dB(A) ¹						60	60	60	60	60	58	58	55	55				
Predicted Noise Level of Road Works at West Kowloon, dB(A) ²						60	59	59	59	59	59	59						
Predicted Noise Level of Road Improvement Works in West Kowloon Reclamation, dB(A) ³						62	65	62	69	68	68	68	69	62	62	42	42	
Overall Cumulative Noise Level, dB(A)						79	79	80	80	79	79	78	79	77	77	77	77	
														2014		2015		
														Min	Max	Min	Max	

Note: Bold figure in shaded box denotes exceedance of relevant construction noise criteria

- Predicted Noise Levels are referred to NSR WK7 in Appendix G of Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility.
- Predicted Noise Levels are referred to NSR VT2 in Appendix 3.13 of approved EIA of Road Works at West Kowloon (AEIAR-141/2009) for conservative approach.
- Predicted Noise Levels are referred to NSR LCS in Appendix 2.4 of Preliminary Environmental Review Report - Scheme Q of Proposed Road Improvement Works in West Kowloon Reclamation for conservative approach. Delaying of 6 months of construction programme based on latest information have been included in predicted noise level.
- Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.
- Phase 1 Concrete Batching Plant in Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility will be handed over to WKCD starting from the year of 2014. Since the operation of concreting batching plants before 2014 and the operation and demolition of phase 2 concreting batching plant have already been included in the noise impact assessment of the XRL project, separate noise impact assessment will only be calculated after handing over the phase 1 concrete batching plant to WKCD starting from the year of 2014.

Unmitigated Construction Noise Impact

NSR: CRGPS (Canton Road Government Primary School)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB (A)	Distance (m)	Distance Correction, dB (A)	Facade Correction, dB(A)	Calculated SPL, dB(A)	2014										2015		
						4	5	6	7	8	9	10	11	12	1	2	3	
1) Zone 1																		
Activity 3 - Excavation	119	120	-50	3	73	73	73	73	73									
Activity 4 - Basement and Underpass	117	120	-50	3	70			70	70	70	70							
Activity 5 - Superstructure	118	120	-50	3	71								71	71	71	71		
2) Zone 2																		
Activity 1 - D Walling																		
Zone 2.1	113	645	-64	3	52	52	52	52	52	52								
Zone 2.2	113	495	-62	3	54	54	54	54	54	54								
Zone 2.3	116	350	-59	3	60	60	60	60	60	60								
Zone 2.4	116	175	-53	3	66	66	66	66	66	66								
Zone 2.5	116	150	-52	3	68	68	68	68	68	68								
Zone 2.6	116	315	-58	3	61	61	61	61	61	61								
Zone 2.7	113	475	-62	3	55	55	55	55	55	55								
Zone 2.8	113	685	-65	3	52	52	52	52	52	52								
Activity 2 - Bored Piling																		
Zone 2.1	119	645	-64	3	58	58	58	58	58	58	58	58						
Zone 2.2	119	495	-62	3	60	60	60	60	60	60	60	60						
Zone 2.3	119	350	-59	3	63	63	63	63	63	63	63	63						
Zone 2.4	119	175	-53	3	69	69	69	69	69	69	69	69						
Zone 2.5	119	150	-52	3	71	71	71	71	71	71	71	71						
Zone 2.6	119	315	-58	3	64	64	64	64	64	64	64	64						
Zone 2.7	119	475	-62	3	61	61	61	61	61	61	61	61						
Zone 2.8	119	685	-65	3	57	57	57	57	57	57	57	57						
Activity 3 - Excavation																		
Zone 2.1	116	680	-65	3	54					54	54	54	54	54	54	54		
Zone 2.2	116	520	-62	3	56					56	56	56	56	56	56	56		
Zone 2.3	117	360	-59	3	61					61	61	61	61	61	61	61		
Zone 2.4	117	220	-55	3	65					65	65	65	65	65	65	65		
Zone 2.5	117	195	-54	3	66					66	66	66	66	66	66	66		
Zone 2.6	117	355	-59	3	61					61	61	61	61	61	61	61		
Zone 2.7	116	520	-62	3	56					56	56	56	56	56	56	56		
Zone 2.8	116	720	-65	3	54					54	54	54	54	54	54	54		
Activity 4 - Basement and Underpass																		
Zone 2.1	114	680	-65	3	53								53	53	53	53		
Zone 2.2	114	520	-62	3	55								55	55	55	55		
Zone 2.3	115	360	-59	3	58								58	58	58	58		
Zone 2.4	115	220	-55	3	63								63	63	63	63		
Zone 2.5	115	195	-54	3	64								64	64	64	64		
Zone 2.6	115	355	-59	3	59								59	59	59	59		
Zone 2.7	115	520	-62	3	55								55	55	55	55		
Zone 2.8	114	720	-65	3	52								52	52	52	52		
3) Zone 3																		
Activity 1 - D Walling																		
Activity 2 - Bored Piling																		
4) Park Construction - Zone A	121	1065	-69	3	55	55	55	55	55	55	55	55	55	55	55	55		
5) ICC Footbridge	115	847	-67	3	52	52	52	52	52	52	52	52	52	52	52	52		
6) Flyover	115	933	-67	3	51					51	51	51	51	51	51	51		
7) East Concrete Batching Plant (Operation)	115	170	-53	3	65	65	65	65	65	65	65	65	65	65	65	65		
8) Barqing Point (BP)																		
BP4	120	745	-65	3	58	58	58	58	58	58	58	58	58	58	58	58		
BP5	120	795	-66	3	57	57	57	57	57	57	57	57	57	57	57	57		
BP6	120	993	-68	3	55	55	55	55	55	55	55	55	55	55	55	55		
BP7	120	1080	-69	3	55	55	55	55	55	55	55	55	55	55	55	55		
9) West Pier (Optional)	117	1455	-71	3	49	49	49	49	49	49	49	49	49	49	49	49		
10) South Pier (Optional)	117	775	-66	3	55	55	55	55	55	55	55	55	55	55	55	55		
11) Viewing Platform (Optional)	115	400	-60	3	58	58	58	58	58	58	58	58	58	58	58	58		
Predicted Noise Level of this Project, dB (A)						78	78	79	79	79	79	78	78	78	76	76	76	
Predicted Noise Level of Express Rail Link, dB(A) ¹						60	60	60	60	60	60	58	58	55	55			
Predicted Noise Level of Road Works at West Kowloon, dB(A) ²						60	59	59	59	59	59							
Predicted Noise Level of Road Improvement Works in West Kowloon Reclamation, dB(A) ³						60	63	60	66	65	65	65	66	60	60	42	42	
Overall Cumulative Noise Level, dB(A)						78	79	79	79	79	78	78	79	76	76	76	76	
														2014		2015		
														Min	Max	Min	Max	

Note: Bold figure in shaded box denotes exceedance of relevant construction noise criteria

- Predicted Noise Levels are referred to NSR WK7 in Appendix G of Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility.
- Predicted Noise Levels are referred to NSR VT2 in Appendix 3.13 of approved EIA of Road Works at West Kowloon (AEIAR-141/2009) for conservative approach.
- Predicted Noise Levels are referred to NSR CGPS in Appendix 2.4 of Preliminary Environmental Review Report - Scheme Q of Proposed Road Improvement Works in West Kowloon Reclamation for conservative approach. Delaying of 6 months of construction programme based on latest information have been included in predicted noise level.
- Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.
- Phase 1 Concrete Batching Plant in Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility will be handed over to WKCD starting from the year of 2014. Since the operation of concreting batching plants before 2014 and the operation and demolition of phase 2 concreting batching plant have already been included in the noise impact assessment of the XRL project, separate noise impact assessment will only be calculated after handing over the phase 1 concrete batching plant to WKCD starting from the year of 2014.

Unmitigated Construction Noise Impact

NSR: FQ (Fire Services Department Staff Quarter)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB (A)	Distance (m)	Distance Correction, dB (A)	Facade Correction, dB(A)	Calculated SPL, dB(A)	2014												2015			
						4	5	6	7	8	9	10	11	12	1	2	3				
1) Zone 1																					
Activity 3 - Excavation	119	82	-46	3	76	76	76	76	76												
Activity 4 - Basement and Underpass	117	82	-46	3	73			73	73	73	73										
Activity 5 - Superstructure	118	82	-46	3	74									74	74	74	74				
2) Zone 2																					
Activity 1 - D Walling																					
Zone 2.1	113	540	-63	3	54	54	54	54	54	54											
Zone 2.2	113	386	-60	3	57	57	57	57	57	57											
Zone 2.3	116	251	-56	3	63	63	63	63	63	63											
Zone 2.4	116	87	-47	3	72	72	72	72	72	72											
Zone 2.5	116	68	-45	3	75	75	75	75	75	75											
Zone 2.6	116	226	-55	3	64	64	64	64	64	64											
Zone 2.7	113	386	-60	3	57	57	57	57	57	57											
Zone 2.8	113	590	-63	3	53	53	53	53	53	53											
Activity 2 - Bored Piling																					
Zone 2.1	119	540	-63	3	59	59	59	59	59	59	59	59	59								
Zone 2.2	119	386	-60	3	62	62	62	62	62	62	62	62	62								
Zone 2.3	119	251	-56	3	66	66	66	66	66	66	66	66	66								
Zone 2.4	119	87	-47	3	75	75	75	75	75	75	75	75	75								
Zone 2.5	119	68	-45	3	77	77	77	77	77	77	77	77	77								
Zone 2.6	119	226	-55	3	67	67	67	67	67	67	67	67	67								
Zone 2.7	119	386	-60	3	62	62	62	62	62	62	62	62	62								
Zone 2.8	119	590	-63	3	59	59	59	59	59	59	59	59	59								
Activity 3 - Excavation																					
Zone 2.1	116	580	-63	3	55					55	55	55	55	55	55	55	55				
Zone 2.2	116	415	-60	3	58					58	58	58	58	58	58	58	58				
Zone 2.3	117	256	-56	3	64					64	64	64	64	64	64	64	64				
Zone 2.4	117	112	-49	3	71					71	71	71	71	71	71	71	71				
Zone 2.5	117	97	-48	3	72					72	72	72	72	72	72	72	72				
Zone 2.6	117	251	-56	3	64					64	64	64	64	64	64	64	64				
Zone 2.7	116	411	-60	3	58					58	58	58	58	58	58	58	58				
Zone 2.8	116	610	-64	3	55					55	55	55	55	55	55	55	55				
Activity 4 - Basement and Underpass																					
Zone 2.1	114	580	-63	3	54									54	54	54	54				
Zone 2.2	114	415	-60	3	57									57	57	57	57				
Zone 2.3	115	256	-56	3	61									61	61	61	61				
Zone 2.4	115	112	-49	3	69									69	69	69	69				
Zone 2.5	115	97	-48	3	70									70	70	70	70				
Zone 2.6	115	251	-56	3	62									62	62	62	62				
Zone 2.7	115	411	-60	3	57									57	57	57	57				
Zone 2.8	114	610	-64	3	53									53	53	53	53				
3) Zone 3																					
Activity 1 - D Walling																					
Activity 2 - Bored Piling	126	795	-66	3	63	58	58	58	58	58	58										
4) Park Construction - Zone A																					
Activity 1 - D Walling	121	996	-68	3	56	56	56	56	56	56	56	56	56	56	56	56	56				
5) ICC Footbridge																					
Activity 1 - D Walling	115	744	-65	3	53	53	53	53	53	53	53	53	53								
6) Flyover																					
Activity 1 - D Walling	115	828	-66	3	52					52	52	52	52	52	52	52	52				
7) East Concrete Batching Plant (Operation)																					
Activity 1 - D Walling	115	68	-45	3	73	73	73	73	73	73	73	73	73	73	73	73	73				
8) Barqing Point (BP)																					
BP4	120	650	-64	3	59	59	59	59	59	59	59	59	59	59	59	59	59				
BP5	120	695	-65	3	58	58	58	58	58	58	58	58	58	58	58	58	58				
BP6	120	900	-67	3	56	56	56	56	56	56	56	56	56	56	56	56	56				
BP7	120	985	-68	3	55	55	55	55	55	55	55	55	55	55	55	55	55				
9) West Pier (Optional)																					
Activity 1 - D Walling	117	1350	-71	3	50	50	50	50	50	50	50	50	50	50	50	50	50				
10) South Pier (Optional)																					
Activity 1 - D Walling	117	680	-65	3	56	56	56	56	56	56	56	56	56	56	56	56	56				
11) Viewing Platform (Optional)																					
Activity 1 - D Walling	115	291	-57	3	61	61	61	61	61	61	61	61	61	61	61	61	61				
Predicted Noise Level of this Project, dB (A)						83	83	84	84	84	83	83	83	81	81	81	81				
Predicted Noise Level of Express Rail Link, dB(A)¹						69	69	69	68	68	67	67	64	64	58	58	58				
Predicted Noise Level of Road Works at West Kowloon, dB(A)²						60	59	59	59	59	59	59									
Predicted Noise Level of Road Improvement Works in West Kowloon Reclamation, dB(A)³						62	65	62	69	68	68	68	69	62	62	42	42				
Overall Cumulative Noise Level, dB(A)						84	84	84	84	84	83	83	84	81	81	81	81				
														2014		2015					
														Min	Max	Min	Max				

Note: Bold figure in shaded box denotes exceedance of relevant construction noise criteria

- Predicted Noise Levels are referred to NSR WK7a in Appendix G of Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility.
- Predicted Noise Levels are referred to NSR VT2 in Appendix 3.13 of approved EIA of Road Works at West Kowloon (AEIAR-141/2009) for conservative approach.
- Predicted Noise Levels are referred to NSR LCS in Appendix 2.4 of Preliminary Environmental Review Report - Scheme Q of Proposed Road Improvement Works in West Kowloon Reclamation for conservative approach. Delaying of 6 months of construction programme based on latest information have been included in predicted noise level.
- Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.
- Phase 1 Concrete Batching Plant in Environmental Review for Proposed West Kowloon Terminus Concrete Batching Facility will be handed over to WKCD starting from the year of 2014. Since the operation of concreting batching plants before 2014 and the operation and demolition of phase 2 concreting batching plant have already been included in the noise impact assessment of the XRL project, separate noise impact assessment will only be calculated after handing over the phase 1 concrete batching plant to WKCD starting from the year of 2014.

