

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)	
1	Zone 1						
	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 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
	Activity 5 - Superstructure						
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109	
	Crane Lorry 5.5 tonne < gross vehicle weight =< 38 tonne	[1]	105	1	50%	102	
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106	
	Poker, vibratory, hand-held (electric)	[1]	102	5	50%	106	
	Bar bender and cutter (electric)	CNP 021	90	1	50%	87	
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	2	100%	98	
Concrete lorry mixer	CNP 044	109	1	50%	106		
Drill/grinder, hand-held (electric)	CNP 065	98	2	30%	96		
Water pump (electric)	CNP 281	88	2	30%	86		
Excavator/ loader, wheeled/ tracked	CNP 081	112	2	30%	110		
Fork Lift Truck	[2]	104	2	30%	102		
Hoist, passenger/ material (electric)	CNP 122	95	2	30%	93		
Total SWL, dB (A)						115	
2b	Zone 2 (for area with more plant) [3]						
	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
	Activity 5 - Superstructure						
	Crane, tower (electric)	CNP 049	95	1	50%	92	
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109	
	Crane Lorry 5.5 tonne < gross vehicle weight =< 38 tonne	[1]	105	1	50%	102	
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106	
Poker, vibratory, hand-held (electric)	[1]	102	5	50%	106		
Bar bender and cutter (electric)	CNP 021	90	1	50%	87		
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	1	50%	106		
Drill/grinder, hand-held (electric)	CNP 065	98	3	30%	98		
Water pump (electric)	CNP 281	88	2	30%	86		
Excavator/ loader, wheeled/ tracked	CNP 081	112	2	30%	110		
Fork Lift Truck	[2]	104	2	30%	102		
Hoist, passenger/ material (electric)	CNP 122	95	2	30%	93		
Total SWL, dB (A)						116	
3	Zone 3						
	Activity 4 - Basement and Underpass						
	Crane, tower (electric)	CNP 049	95	2	60%	96	
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	4	60%	116	
	Crane Lorry 5.5 tonne < gross vehicle weight =< 38 tonne	[1]	105	4	60%	109	
	Concrete pump, stationary/ lorry mounted	CNP 047	109	4	60%	113	
	Poker, vibratory, hand-held (electric)	[1]	102	20	60%	113	
	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	
	Air compressor, air flow > 30m3/min	CNP 003	104	2	100%	107	
Concrete lorry mixer	CNP 044	109	4	60%	113		
Total SWL, dB (A)						120	

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)	
	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	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	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	6	30%	101	
	Water pump (electric)	CNP 281	88	4	30%	89	
	Excavator/ loader, wheeled/ tracked	CNP 081	112	4	30%	113	
	Fork Lift Truck	[2]	104	4	30%	105	
	Hoist, passenger/ material (electric)	CNP 122	95	4	30%	96	
	Total SWL, dB (A)						118
	4	Zone 4					
Activity 1 - D Walling							
Crane, mobile/ barge mounted (diesel)		CNP 048	112	6	60%	118	
Air compressor, air flow > 30m3/min		CNP 003	104	6	100%	112	
Piling, diaphragm wall, hydraulic extractor		CNP 163	90	3	60%	93	
Excavator/ loader, wheeled/ tracked		CNP 081	112	6	60%	118	
Grout Mixer		[1]	90	3	60%	93	
Water pump, submersible (electric)		CNP 283	85	4	60%	89	
Dump truck		CNP 067	117	3	30%	117	
Concrete lorry mixer		CNP 044	109	3	60%	112	
Generator, super silenced, 70 dB(A) at 7 m		CNP 103	95	3	100%	100	
Total SWL, dB (A)						123	
Activity 2 - Bored Piling							
Crane, mobile/ barge mounted (diesel)		CNP 048	112	6	60%	118	
Excavator/ loader, wheeled/ tracked		CNP 081	112	6	30%	115	
Piling Rig		[2]	112	6	60%	118	
Drill Rig		[1]	110	6	60%	116	
Excavator/ loader, wheeled/ tracked	CNP 081	112	6	60%	118		
Piling, large diameter bored, grab and chisel	CNP 164	115	6	60%	121		
Piling, large diameter bored, reverse circulation drill	CNP 166	100	6	60%	106		
Piling, large diameter bored, oscillator	CNP 165	115	6	60%	121		
Air compressor, air flow > 30m3/min	CNP 003	104	6	100%	112		
Grout Mixer	[1]	90	6	60%	96		
Grout Pump	[1]	105	6	60%	111		
Bar bender and cutter (electric)	CNP 021	90	6	60%	96		
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	6	100%	103		
Dump truck	CNP 067	117	3	30%	117		
Concrete lorry mixer	CNP 044	109	3	60%	112		
Welding Set	[2]	78	6	60%	84		
Total SWL, dB (A)						127	
Activity 3 - Excavation							
Crane, mobile/ barge mounted (diesel)	CNP 048	112	6	60%	118		
Air compressor, air flow > 30m3/min	CNP 003	104	6	60%	110		
Excavator/ loader, wheeled/ tracked	CNP 081	112	6	60%	118		
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	6	100%	103		
Dump truck	CNP 067	117	9	30%	121		
Total SWL, dB (A)						124	
Activity 4 - Basement							
Crane, tower (electric)	CNP 049	95	4	60%	99		
Crane, mobile/ barge mounted (diesel)	CNP 048	112	8	60%	119		
Crane Lorry	[1]	105	8	60%	112		
Concrete pump, stationary/ lorry mounted	CNP 047	109	8	60%	116		
Poker, vibratory, hand-held (electric)	[1]	102	40	60%	116		
Bar bender and cutter (electric)	CNP 021	90	8	60%	97		
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	8	100%	104		
Air compressor, air flow > 30m3/min	CNP 003	104	4	100%	110		
Concrete lorry mixer	CNP 044	109	8	60%	116		
Total SWL, dB (A)						123	
5	Park Construction - Zone B						
	Dump truck	CNP 067	117	1	60%	115	
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	60%	110	
	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	
	Lorry	CNP 141	112	1	60%	110	
Total SWL, dB (A)						118	
6	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

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)	
7/9	East / West 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	
	Maximum SWL, dB (A)					115	
	8	East Concrete Batching Plant (Demolition)					
		Tracked crane (30kW)	BS 5228 Table D.7/105	108	2	60%	109
Generator, super silenced, 70 dB(A) at 7 m		CNP 103	95	2	60%	96	
Welding set		[2]	78	2	60%	79	
Total SWL, dB (A)					109		
10	West Concrete Batching Plant (Construction)						
	Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	4	60%	99	
	Excavator/ loader, wheeled/ tracked	CNP 081	112	2	60%	113	
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	2	60%	113	
	Dump truck	CNP 067	117	2	30%	115	
	Poker, vibratory, hand-held (electric)	[1]	102	4	60%	106	
	Breaker, hand-held, mass > 35kg	CNP 026	114	1	60%	112	
	Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	2	60%	103	
	Concrete lorry mixer	CNP 044	109	2	60%	110	
	Total SWL, dB (A)					120	
11	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		
12/13	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	
	14	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.

Unmitigated Construction Noise Impact

NSR: HT1 (The Harbourside Tower 1)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB	Distance (m)	Distance Correction, dB	Facade Correction,	Calculated SPL,	2016												2017											
						4	5	6	7	8	9	10	11	12	1	2	3												
1) Zone 1																													
Activity 5 - Superstructure	118	481	-62	3	59	59																							
2) Zone 2																													
Activity 4 - Basement and Underpass																													
Zone 2.1	115	116	-49	3	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68		
Zone 2.2	115	102	-48	3	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69			
Zone 2.3	114	203	-54	3	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63			
Zone 2.4	114	357	-59	3	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58			
Zone 2.5	114	377	-60	3	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58			
Zone 2.6	114	258	-56	3	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61			
Zone 2.7	115	179	-53	3	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65			
Zone 2.8	115	228	-55	3	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62			
Activity 5 - Superstructure																													
Zone 2.1	116	116	-49	3	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69			
Zone 2.2	116	102	-48	3	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70			
Zone 2.3	115	203	-54	3	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64			
Zone 2.4	115	357	-59	3	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59			
Zone 2.5	115	377	-60	3	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59			
Zone 2.6	115	258	-56	3	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62			
Zone 2.7	116	179	-53	3	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66			
Zone 2.8	116	228	-55	3	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63			
3) Zone 3																													
Activity 4 - Basement and Underpass																													
Activity 5 - Superstructure	118	248	-56	3	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66			
4) Zone 4																													
Activity 1 - D Walling	123	571	-63	3	63			63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63			
Activity 2 - Bored Piling	127	571	-63	3	67							67	67	67	67	67	67	67	67	67	67	67	67	67	67				
Activity 3 - Excavation	124	655	-64	3	63										63	63	63	63	63	63	63	63	63	63	63				
Activity 4 - Basement	123	571	-63	3	63																63	63	63	63	63				
5) Park Construction - Zone B																													
6) Flyover	115	287	-57	3	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61			
7) East Concrete Batching Plant (Operation)	115	461	-61	3	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57			
8) East Concrete Batching Plant (Demolition)	109	461	-61	3	51																		51	51	51				
9) West Concrete Batching Plant (Construction)	120	506	-62	3	61							61	61	61	61	61	61	61	61	61	61	61	61	61	61				
10) West Concrete Batching Plant (Operation)	115	506	-62	3	56																		56	56	56				
11) Barging Point (BP)																													
BP4	120	307	-58	3	66	66	66	66	66	66	66	66	66	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	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	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	60	60	60	60	60	60	60	60				
12) West Pier (Optional)	117	846	-67	3	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54				
13) South Pier (Optional)	117	347	-59	3	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62				
14) Viewing Platform (Optional)	115	342	-59	3	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59				
Predicted Noise Level of the Project, dB(A)						79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79			
																					2016		2017						
																					Min	Max	Min	Max					

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

No concurrent project is identified in and after 2016. Hence, no cumulative construction noise impact is assessed.

Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.

Unmitigated Construction Noise Impact

NSR: HT3 (The Harbourside Tower 3)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB	Distance (m)	Distance Correction, dB	Facade Correction,	Calculated SPL,	2016												2017															
						4	5	6	7	8	9	10	11	12	1	2	3																
1) Zone 1																																	
Activity 5 - Superstructure	118	576	-63	3	58	58																											
2) Zone 2																																	
Activity 4 - Basement and Underpass																																	
Zone 2.1	115	111	-49	3	69	69	69	69	69	69	69	69	69	69	69	69	69																
Zone 2.2	115	169	-53	3	65	65	65	65	65	65	65	65	65	65	65	65	65																
Zone 2.3	114	302	-58	3	60	60	60	60	60	60	60	60	60	60	60	60	60																
Zone 2.4	114	446	-61	3	56	56	56	56	56	56	56	56	56	56	56	56	56																
Zone 2.5	114	456	-61	3	56	56	56	56	56	56	56	56	56	56	56	56	56																
Zone 2.6	114	342	-59	3	58	58	58	58	58	58	58	58	58	58	58	58	58																
Zone 2.7	115	228	-55	3	62	62	62	62	62	62	62	62	62	62	62	62	62																
Zone 2.8	115	208	-54	3	63	63	63	63	63	63	63	63	63	63	63	63	63																
Activity 5 - Superstructure																																	
Zone 2.1	116	111	-49	3	70	70	70	70	70	70	70	70	70	70	70	70	70																
Zone 2.2	116	169	-53	3	66	66	66	66	66	66	66	66	66	66	66	66	66																
Zone 2.3	115	302	-58	3	61	61	61	61	61	61	61	61	61	61	61	61	61																
Zone 2.4	115	446	-61	3	57	57	57	57	57	57	57	57	57	57	57	57	57																
Zone 2.5	115	456	-61	3	57	57	57	57	57	57	57	57	57	57	57	57	57																
Zone 2.6	115	342	-59	3	60	60	60	60	60	60	60	60	60	60	60	60	60																
Zone 2.7	116	228	-55	3	63	63	63	63	63	63	63	63	63	63	63	63	63																
Zone 2.8	116	208	-54	3	64	64	64	64	64	64	64	64	64	64	64	64	64																
3) Zone 3																																	
Activity 4 - Basement and Underpass																																	
Activity 5 - Superstructure	118	179	-53	3	70	70	70	70	70	70	70	70	70	70	70	70	70																
4) Zone 4																																	
Activity 1 - D Walling	123	481	-62	3	64		64	64	64	64	64	64	64	64	64	64	64																
Activity 2 - Bored Piling	127	481	-62	3	69					69	69	69	69	69	69	69	69																
Activity 3 - Excavation	124	564	-63	3	64					64	64	64	64	64	64	64	64																
Activity 4 - Basement	123	481	-62	3	65										65	65	65																
5) Park Construction - Zone B																																	
6) Flyover	115	198	-54	3	65	65	65	65	65	65	65	65	65	65	65	65	65																
7) East Concrete Batching Plant (Operation)	115	554	-63	3	55	55	55	55	55	55	55	55	55	55	55	55	55																
8) East Concrete Batching Plant (Demolition)	109	554	-63	3	49											49	49																
9) West Concrete Batching Plant (Construction)	120	419	-60	3	63				63	63	63	63	63	63	63	63	63																
10) West Concrete Batching Plant (Operation)	115	419	-60	3	58										58	58	58																
11) Barging Point (BP)																																	
BP4	120	302	-58	3	66	66	66	66	66	66	66	66	66	66	66	66	66																
BP5	120	312	-58	3	65	65	65	65	65	65	65	65	65	65	65	65	65																
BP6	120	461	-61	3	62	62	62	62	62	62	62	62	62	62	62	62	62																
BP7	120	576	-63	3	60	60	60	60	60	60	60	60	60	60	60	60	60																
12) West Pier (Optional)	117	756	-66	3	55	55	55	55	55	55	55	55	55	55	55	55	55																
13) South Pier (Optional)	117	327	-58	3	62	62	62	62	62	62	62	62	62	62	62	62	62																
14) Viewing Platform (Optional)	115	412	-60	3	58	58	58	58	58	58	58	58	58	58	58	58	58																
Predicted Noise Level of the Project, dB(A)																79	79	79	79	79	79	79	79	79	79	78	78	78	78	79	79	78	78

Note: Bold figure in shaded box denotes exceedance of relevant construction noise criteria
 No concurrent project is identified in and after 2016. Hence, no cumulative construction noise impact is assessed.
 Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.

Unmitigated Construction Noise Impact

NSR: VT1 (The Victoria Towers - Tower 1)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB	Distance (m)	Distance Correction, dB	Facade Correction,	Calculated SPL,	2016												2017															
						4	5	6	7	8	9	10	11	12	1	2	3																
1) Zone 1																																	
Activity 5 - Superstructure	118	74	-45	3	75	75																											
2) Zone 2																																	
Activity 4 - Basement and Underpass																																	
Zone 2.1	114	676	-65	3	53	53	53	53	53	53	53	53	53	53	53	53	53	53															
Zone 2.2	114	502	-62	3	55	55	55	55	55	55	55	55	55	55	55	55	55	55															
Zone 2.3	115	343	-59	3	59	59	59	59	59	59	59	59	59	59	59	59	59	59															
Zone 2.4	115	205	-54	3	63	63	63	63	63	63	63	63	63	63	63	63	63	63															
Zone 2.5	115	195	-54	3	64	64	64	64	64	64	64	64	64	64	64	64	64	64															
Zone 2.6	115	353	-59	3	59	59	59	59	59	59	59	59	59	59	59	59	59	59															
Zone 2.7	114	517	-62	3	55	55	55	55	55	55	55	55	55	55	55	55	55	55															
Zone 2.8	114	716	-65	3	52	52	52	52	52	52	52	52	52	52	52	52	52	52															
Activity 5 - Superstructure																																	
Zone 2.1	115	676	-65	3	54	54	54	54	54	54	54	54	54	54	54	54	54	54															
Zone 2.2	115	502	-62	3	56	56	56	56	56	56	56	56	56	56	56	56	56	56															
Zone 2.3	116	343	-59	3	60	60	60	60	60	60	60	60	60	60	60	60	60	60															
Zone 2.4	116	205	-54	3	64	64	64	64	64	64	64	64	64	64	64	64	64	64															
Zone 2.5	116	195	-54	3	65	65	65	65	65	65	65	65	65	65	65	65	65	65															
Zone 2.6	116	353	-59	3	60	60	60	60	60	60	60	60	60	60	60	60	60	60															
Zone 2.7	115	517	-62	3	56	56	56	56	56	56	56	56	56	56	56	56	56	56															
Zone 2.8	115	716	-65	3	53	53	53	53	53	53	53	53	53	53	53	53	53	53															
3) Zone 3																																	
Activity 4 - Basement and Underpass																																	
Activity 5 - Superstructure	118	901	-67	3	54	54	54	54	54	54	54	54	54	54	54	54	54	54															
4) Zone 4																																	
Activity 1 - D Walling	123	1191	-70	3	56		56	56	56	56	56	56	56	56	56	56	56	56															
Activity 2 - Bored Piling	127	1191	-70	3	61					61	61	61	61	61	61	61	61	61															
Activity 3 - Excavation	124	1271	-70	3	57						57	57	57	57	57	57	57	57															
Activity 4 - Basement	123	1191	-70	3	57											57	57	57															
5) Park Construction - Zone B																																	
6) Flyover	115	914	-67	3	51	51	51	51	51	51	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	66	66															
8) East Concrete Batching Plant (Demolition)	109	158	-52	3	60												60	60															
9) West Concrete Batching Plant (Construction)	120	1136	-69	3	54				54	54	54	54	54	54	54	54	54	54															
10) West Concrete Batching Plant (Operation)	115	1136	-69	3	49												49	49															
11) Barging Point (BP)																																	
BP4	120	751	-66	3	58	58	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	57	57															
BP6	120	1001	-68	3	55	55	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	55	55															
12) West Pier (Optional)	117	1451	-71	3	49	49	49	49	49	49	49	49	49	49	49	49	49	49															
13) South Pier (Optional)	117	786	-66	3	54	54	54	54	54	54	54	54	54	54	54	54	54	54															
14) Viewing Platform (Optional)	115	422	-61	3	58	58	58	58	58	58	58	58	58	58	58	58	58	58															
Predicted Noise Level of the Project, dB(A)															78	75	75	75	75	75	75	75	75	75	75	74	74	74	74	75	78	74	74

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

No concurrent project is identified in and after 2016. Hence, no cumulative construction noise impact is assessed.

Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.

Unmitigated Construction Noise Impact

NSR: LCS (Lai Chack Middle School)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB	Distance (m)	Distance Correction, dB	Facade Correction,	Calculated SPL,	2016												2017																
						4	5	6	7	8	9	10	11	12	1	2	3																	
1) Zone 1																																		
Activity 5 - Superstructure	118	105	-48	3	72	72																												
2) Zone 2																																		
Activity 4 - Basement and Underpass																																		
Zone 2.1	114	685	-65	3	52	52	52	52	52	52	52	52	52	52	52	52	52	52																
Zone 2.2	114	505	-62	3	55	55	55	55	55	55	55	55	55	55	55	55	55	55																
Zone 2.3	115	355	-59	3	59	59	59	59	59	59	59	59	59	59	59	59	59	59																
Zone 2.4	115	205	-54	3	63	63	63	63	63	63	63	63	63	63	63	63	63	63																
Zone 2.5	115	175	-53	3	65	65	65	65	65	65	65	65	65	65	65	65	65	65																
Zone 2.6	115	350	-59	3	59	59	59	59	59	59	59	59	59	59	59	59	59	59																
Zone 2.7	114	515	-62	3	55	55	55	55	55	55	55	55	55	55	55	55	55	55																
Zone 2.8	114	720	-65	3	52	52	52	52	52	52	52	52	52	52	52	52	52	52																
Activity 5 - Superstructure																																		
Zone 2.1	115	685	-65	3	54	54	54	54	54	54	54	54	54	54	54	54	54	54																
Zone 2.2	115	505	-62	3	56	56	56	56	56	56	56	56	56	56	56	56	56	56																
Zone 2.3	116	355	-59	3	60	60	60	60	60	60	60	60	60	60	60	60	60	60																
Zone 2.4	116	205	-54	3	64	64	64	64	64	64	64	64	64	64	64	64	64	64																
Zone 2.5	116	175	-53	3	66	66	66	66	66	66	66	66	66	66	66	66	66	66																
Zone 2.6	116	350	-59	3	60	60	60	60	60	60	60	60	60	60	60	60	60	60																
Zone 2.7	115	515	-62	3	56	56	56	56	56	56	56	56	56	56	56	56	56	56																
Zone 2.8	115	720	-65	3	53	53	53	53	53	53	53	53	53	53	53	53	53	53																
3) Zone 3																																		
Activity 4 - Basement and Underpass																																		
Activity 5 - Superstructure	118	905	-67	3	54	54	54	54	54	54	54	54	54	54	54	54	54	54																
4) Zone 4																																		
Activity 1 - D Walling																																		
Activity 2 - Bored Piling	127	1198	-70	3	61					61	61	61	61	61	61	61	61	61																
Activity 3 - Excavation	124	1279	-70	3	57					57	57	57	57	57	57	57	57	57																
Activity 4 - Basement	123	1198	-70	3	57										57	57	57	57																
5) Park Construction - Zone B																																		
6) Flyover	115	927	-67	3	51	51	51	51	51	51	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	66	66																
8) East Concrete Batching Plant (Demolition)	109	160	-52	3	60											60	60	60																
9) West Concrete Batching Plant (Construction)	120	1150	-69	3	54				54	54	54	54	54	54	54	54	54	54																
10) West Concrete Batching Plant (Operation)	115	1150	-69	3	49											49	49	49																
11) Barging Point (BP)																																		
BP4	120	750	-66	3	58	58	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	57	57																
BP6	120	993	-68	3	55	55	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	55	55																
12) West Pier (Optional)	117	1455	-71	3	49	49	49	49	49	49	49	49	49	49	49	49	49	49																
13) South Pier (Optional)	117	780	-66	3	55	55	55	55	55	55	55	55	55	55	55	55	55	55																
14) Viewing Platform (Optional)	115	398	-60	3	58	58	58	58	58	58	58	58	58	58	58	58	58	58																
Predicted Noise Level of the Project, dB(A)															77	75	75	75	75	75	75	75	75	75	76	75	75	75	75	75	75	75	75	75

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

No concurrent project is identified in and after 2016. Hence, no cumulative construction noise impact is assessed.

Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.

Unmitigated Construction Noise Impact

NSR: CRGPS (Canton Road Government Primary School)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB	Distance (m)	Distance Correction, dB	Facade Correction,	Calculated SPL,	2016												2017																	
						4	5	6	7	8	9	10	11	12	1	2	3																		
1) Zone 1																																			
Activity 5 - Superstructure	118	120	-50	3	71	71																													
2) Zone 2																																			
Activity 4 - Basement and Underpass																																			
Zone 2.1	114	680	-65	3	53	53	53	53	53	53	53	53	53	53	53	53	53	53																	
Zone 2.2	114	520	-62	3	55	55	55	55	55	55	55	55	55	55	55	55	55	55																	
Zone 2.3	115	360	-59	3	58	58	58	58	58	58	58	58	58	58	58	58	58	58																	
Zone 2.4	115	220	-55	3	63	63	63	63	63	63	63	63	63	63	63	63	63	63																	
Zone 2.5	115	190	-54	3	64	64	64	64	64	64	64	64	64	64	64	64	64	64																	
Zone 2.6	115	355	-59	3	59	59	59	59	59	59	59	59	59	59	59	59	59	59																	
Zone 2.7	114	520	-62	3	55	55	55	55	55	55	55	55	55	55	55	55	55	55																	
Zone 2.8	114	720	-65	3	52	52	52	52	52	52	52	52	52	52	52	52	52	52																	
Activity 5 - Superstructure																																			
Zone 2.1	115	680	-65	3	54	54	54	54	54	54	54	54	54	54	54	54	54	54																	
Zone 2.2	115	520	-62	3	56	56	56	56	56	56	56	56	56	56	56	56	56	56																	
Zone 2.3	116	360	-59	3	60	60	60	60	60	60	60	60	60	60	60	60	60	60																	
Zone 2.4	116	220	-55	3	64	64	64	64	64	64	64	64	64	64	64	64	64	64																	
Zone 2.5	116	190	-54	3	65	65	65	65	65	65	65	65	65	65	65	65	65	65																	
Zone 2.6	116	355	-59	3	60	60	60	60	60	60	60	60	60	60	60	60	60	60																	
Zone 2.7	115	520	-62	3	56	56	56	56	56	56	56	56	56	56	56	56	56	56																	
Zone 2.8	115	720	-65	3	53	53	53	53	53	53	53	53	53	53	53	53	53	53																	
3) Zone 3																																			
Activity 4 - Basement and Underpass																																			
Activity 5 - Superstructure	118	905	-67	3	54	54	54	54	54	54	54	54	54	54	54	54	54	54																	
4) Zone 4																																			
Activity 1 - D Walling																																			
Activity 2 - Bored Piling	127	1229	-70	3	61		61	61	61	61	61	61	61	61	61	61	61	61																	
Activity 3 - Excavation	124	1283	-70	3	57						57	57	57	57	57	57	57	57																	
Activity 4 - Basement	123	1229	-70	3	57										57	57	57	57																	
5) Park Construction - Zone B																																			
6) Flyover	115	933	-67	3	51	51	51	51	51	51	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	65	65																	
8) East Concrete Batching Plant (Demolition)	109	170	-53	3	59												59	59																	
9) West Concrete Batching Plant (Construction)	120	1155	-69	3	54				54	54	54	54	54	54	54	54	54	54																	
10) West Concrete Batching Plant (Operation)	115	1155	-69	3	49												49	49																	
11) Barging Point (BP)																																			
BP4	120	745	-65	3	58	58	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	57	57																	
BP6	120	993	-68	3	55	55	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	55	55																	
12) West Pier (Optional)	117	1455	-71	3	49	49	49	49	49	49	49	49	49	49	49	49	49	49																	
13) South Pier (Optional)	117	775	-66	3	55	55	55	55	55	55	55	55	55	55	55	55	55	55																	
14) Viewing Platform (Optional)	115	400	-60	3	58	58	58	58	58	58	58	58	58	58	58	58	58	58																	
Predicted Noise Level of the Project, dB(A)															76	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75

Note: **Bold** figure in shaded box denotes exceedance of relevant construction noise criteria
 No concurrent project is identified in and after 2016. Hence, no cumulative construction noise impact is assessed.
 Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.

Unmitigated Construction Noise Impact

NSR: FQ (Fire Services Department Staff Quarter)

Construction Programme with Predicted Noise Level (dB, (A))	Total SWL, dB	Distance (m)	Distance Correction, dB	Facade Correction,	Calculated SPL,	2016												2017											
						4	5	6	7	8	9	10	11	12	1	2	3												
1) Zone 1																													
Activity 5 - Superstructure	118	82	-46	3	74	74																							
2) Zone 2																													
Activity 4 - Basement and Underpass																													
Zone 2.1	114	580	-63	3	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54			
Zone 2.2	114	415	-60	3	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57			
Zone 2.3	115	256	-56	3	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61			
Zone 2.4	115	112	-49	3	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69			
Zone 2.5	115	82	-46	3	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71			
Zone 2.6	115	251	-56	3	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62			
Zone 2.7	114	411	-60	3	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57			
Zone 2.8	114	610	-64	3	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53			
Activity 5 - Superstructure																													
Zone 2.1	115	580	-63	3	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55			
Zone 2.2	115	415	-60	3	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58			
Zone 2.3	116	256	-56	3	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62			
Zone 2.4	116	112	-49	3	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70			
Zone 2.5	116	82	-46	3	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72			
Zone 2.6	116	251	-56	3	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63			
Zone 2.7	115	411	-60	3	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58			
Zone 2.8	115	610	-64	3	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55			
3) Zone 3																													
Activity 4 - Basement and Underpass																													
Activity 5 - Superstructure	118	800	-66	3	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57			
4) Zone 4																													
Activity 1 - D Walling	123	1100	-69	3	57																								
Activity 2 - Bored Piling	127	1100	-69	3	62																								
Activity 3 - Excavation	124	1179	-69	3	58																								
Activity 4 - Basement	123	1100	-69	3	58																								
5) Park Construction - Zone B																													
6) Flyover	115	828	-66	3	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52			
7) East Concrete Batching Plant (Operation)	115	68	-45	3	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73			
8) East Concrete Batching Plant (Demolition)	109	68	-45	3	67																								
9) West Concrete Batching Plant (Construction)	120	1050	-68	3	55																								
10) West Concrete Batching Plant (Operation)	115	1050	-68	3	50																								
11) Barging Point (BP)																													
BP4	120	650	-64	3	59	59	59	59	59	59	59	59	59	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	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	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	55	55	55	55	55	55	55	55	55			
12) West Pier (Optional)	117	1350	-71	3	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50			
13) South Pier (Optional)	117	680	-65	3	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56			
14) Viewing Platform (Optional)	115	291	-57	3	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61			
Predicted Noise Level of the Project, dB(A)						82	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81		
																								2016		2017			
																								Min	Max	Min	Max		

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

No concurrent project is identified in and after 2016. Hence, no cumulative construction noise impact is assessed.

Distances between NSR and the activities are different in same zone since worst case scenario of their notional point have been adopted.

