

**Appendix 4-3A**  
**Calculation of Construction Noise Levels**  
**(Unmitigated Scenario)**

Appendix 4-3A-1 Summary Table of Calculated Construction Noise Level at NSRs (Unmitigated Scenario)

NSR Label	Descriptions	Calculated Construction Noise Level from Each Construction Activity, dB(A)																							Cumulative Construction Noise Due to Concurrent Works												Highest Noise Level, dB(A)	Noise Criteria, dB(A)			
		Phase A			Phase B				Phase C				Phase D			Phase B, C and D																									
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	B+V	A+V	C+V	D+E+V	D+F+V	H+V	I+J+M+V	I+K+N+O+V	I+K+N+P+V	N+P+V	G+V+R	V+R	L+V+R			Q+V+R	S+T	S+U
		(A) Reproffing of pond and planting work	(B) Vegetation Clearance	(C) General site clearance	(D) Retaining wall construction	(E) Installation of Vertical Drain	(F) Placement of Fill and Surcharge	(G) Removal of surcharge	(H) General Site clearance	(I) Retaining Wall construction	(J) Installation of Vertical Drain	(K) Placement of Filling and surcharge	(L) Removal of surcharge	(M) General site clearance	(N) Retaining wall construction	(O) Installation of vertical drain	(P) Placement of filling and surcharge	(Q) Removal of surcharge	(R) Foundation	(S) Superstructure	(T) Construction of Underground	(U) Roadworks Construction	(V) Dump Trucks Travelling on Haul Road																		
Existing NSRs																																									
N1	Fairview Park	79	78	72	69	61	70	69	79	76	68	77	76	73	65	74	73	73	72	70	69	59	78	79	72	70	73	79	79	81	81	77	75	74	78	76	75	74	81	75	
N1b	Fairview Park	80	79	73	70	62	71	70	81	78	70	79	78	78	75	67	76	75	75	74	71	60	79	80	73	71	74	81	81	82	83	78	76	75	79	78	76	76	83	75	
N1c	Fairview Park	80	79	74	71	63	72	71	82	79	71	80	79	79	76	68	77	76	76	75	73	72	61	79	80	74	72	75	82	82	83	84	80	77	76	81	79	77	77	84	75
N2a	Fairview Park	79	78	75	72	64	73	72	83	80	72	81	80	81	78	70	79	78	78	77	75	74	62	78	79	75	73	76	83	84	85	86	81	79	78	82	81	79	78	86	75
N3	Fairview Park	75	74	78	75	67	76	75	88	85	77	86	85	87	84	76	85	84	83	82	80	79	63	75	75	78	76	79	88	90	90	91	88	84	83	88	87	85	84	91	75
N4	Fairview Park	74	73	75	72	64	73	72	79	76	68	77	76	82	79	71	80	79	78	77	75	74	60	73	74	75	72	75	79	83	83	84	82	79	78	80	82	79	79	84	75
N4a	Fairview Park	74	73	75	72	64	73	72	80	77	69	78	77	83	80	72	81	80	79	78	76	75	61	73	74	75	73	76	80	84	84	85	83	80	79	81	83	80	80	85	75
N4c	Fairview Park	73	72	77	74	66	75	74	83	80	72	81	80	90	87	79	88	87	84	83	81	80	61	73	74	78	75	78	83	90	89	91	91	85	84	86	89	85	85	91	75
N5	Temporary house at Yau Mei San Tsuen	92	91	85	82	74	83	82	77	74	66	75	74	77	74	66	75	74	82	81	79	78	63	91	92	85	82	85	77	79	79	81	78	85	82	82	82	83	82	92	75
N6	Palm Springs	80	79	73	70	62	71	70	77	74	66	75	74	73	70	62	71	70	74	73	71	70	59	79	80	73	71	73	77	77	78	79	74	75	74	77	75	75	75	80	75
N7	Temporary house at Yau Mei San Tsuen	78	77	80	77	69	78	77	78	75	67	76	75	75	72	64	73	72	76	75	73	72	61	77	78	80	78	80	78	78	79	80	75	80	76	79	78	77	77	80	75
N9	Fairview Park	65	64	70	67	59	68	67	71	68	60	69	68	74	71	63	72	71	71	70	68	67	57	64	65	70	68	70	71	75	74	76	74	73	71	73	74	72	72	76	75
N8	Palm Springs	73	72	76	73	65	74	73	76	73	65	74	73	72	69	61	70	69	73	72	70	69	59	72	73	76	74	77	76	76	77	78	73	76	73	76	75	74	74	78	75
N10	Palm Springs	80	79	71	68	60	69	68	77	74	66	75	74	73	70	62	71	70	71	70	68	67	59	79	80	71	69	72	77	77	78	79	73	73	71	75	73	72	71	80	75
N_sch	Hong Chi Morninglight School Yuen long	65	64	66	63	55	64	63	68	65	57	66	65	67	64	56	65	64	65	64	62	61	55	64	65	66	64	67	68	70	70	72	68	67	65	68	68	66	66	72	70 (65 during examination)
N_ch	Christian Ministry Institute	72	71	75	72	64	73	72	72	69	61	70	69	71	68	60	69	68	72	71	69	68	59	72	72	75	73	76	72	73	74	75	72	75	73	74	74	74	73	76	70 (65 during examination)
N11	Temporary house at Yau Mei San Tsuen	91	90	86	83	75	84	83	81	78	70	79	78	78	75	67	76	75	81	80	78	77	64	90	91	86	84	87	81	81	83	83	79	85	81	83	82	82	82	91	75
N12	Village house at Chuk Yuen Tsuen	67	66	74	71	63	72	71	71	68	60	69	68	74	71	63	72	71	72	71	69	68	59	66	67	74	71	74	71	75	75	76	75	74	72	73	75	73	73	76	75
N13	Village house at Chuk Yuen Tsuen	67	66	74	71	63	72	71	71	68	60	69	68	74	71	63	72	71	71	70	68	67	58	67	68	74	71	74	71	75	74	76	75	74	72	73	74	73	72	76	75
N14	Village house at Yau Mei San Tsuen	73	72	76	73	65	74	73	72	69	61	70	69	73	70	62	71	70	73	72	70	69	59	72	73	76	74	76	72	74	75	76	73	76	73	75	75	74	74	76	75

Remark:

Please refer to Figure 4-2A for the geographical location of NSRs.

Please refer to Appendix 1-1 for the construction duration of each Work Group, and Appendix 4-3A for the construction plant inventory and sample calculations.

Bold numbers indicate exceedance of the relevant noise criteria for construction activities.

Appendix 4-3A-2 Plant Inventory and Calculated SWLs of Yau Mei San Tsuen Project (Unmitigated)

Construct-ion Area	Construction Activity	Sub. Work Group	PMEs Inventory - Unmitigated						Highest SWL of Each Construction Activity, dB(A) <sub>s</sub>		
			Powered Mechanical Equipment	TM Ref.	SWL per unit, dB(A)	Qty	Total, SWL	Total SWL, dB(A)			
Wetland Restoration (Phase A)	(A) Reprofilling of pond and planting work	A1	Earthworks	Air Compressor	CNP003	104	1	104	121	121	
				Generator, Standard	CNP101	108	2	111			
				Dump Truck	CNP067	117	1	117			
				Excavator	CNP087	112	3	117			
		A2	Ground stabilization	Roller, Vibratory	CNP186	108	3	113	114		
				Power Rammer (Petrol)	CNP169	108	1	108			
	(B) Vegetation Clearance	B1	Vegetation Clearance	Dump Truck	CNP067	117	1	117	120		120
				Excavator	CNP087	112	2	115			
				Generator, Standard	CNP101	108	2	111			
	Site Formation/preloading (Phase B)	(C) General site clearance	C1	General Site Clearance	Air Compressor	CNP003	104	2	107		127
Breaker, excavator mounted					CNP 027	122	2	125			
Dump Truck					CNP067	117	2	120			
Excavator					CNP087	112	4	118			
Generator, Standard					CNP101	108	2	111			
Water Pump, Submersible (electric)					CNP283	85	2	88			
(D) Retaining wall construction		D1	Earthwork	Breaker, excavator mounted	CNP 027	122	1	122	124		
				Dump Truck	CNP067	117	1	117			
				Excavator	CNP087	112	3	117			
				Water Pump, Submersible (electric)	CNP283	85	2	88			
		D2	General Work	Air Compressor	CNP003	104	1	104	118		
				Bar Bender and Cutter	CNP021	90	1	90			
				Mobile Crane	CNP048	112	1	112			
				Generator, Standard	CNP101	108	2	111			
				Lorry	CNP141	112	1	112			
				Power Rammer (Petrol)	CNP169	108	1	108			
				Saw, Circular, Wood	CNP201	108	1	108			
		Water Pump, Submersible (electric)	CNP283	85	1	85					
		D3	Foundation	Continuous Flight Auger	CNP167	114	2	117	118		
				Generator, standard	CNP101	108	1	108			
		D4	Concreting	Concrete Lorry Mixer	CNP044	109	1	109	116		
				Concrete Pump	CNP047	109	2	112			
				Poker, Vibratory, Hand-held	CNP170	113	1	113			
		(E) Installation of Vertical Drain	E1	Installation of Vertical Drain	Band Drain Installation Machine	CNP050	105	12	116	116	
(F) Placement of Fill and Surcharge	F1	Placement of Filling and Surcharge	Bulldozer	CNP030	115	3	120	125	125		
			Dump Truck	CNP067	117	3	122				
			Excavator	CNP087	112	2	115				
			Generator, Standard	CNP101	108	2	111				
			Roller, Vibratory	CNP186	108	3	113				
(G) Removal of surcharge	G1	Removal of Surcharge	Bulldozer	CNP030	115	2	118	124	124		
			Dump Truck	CNP067	117	3	122				
			Excavator	CNP087	112	2	115				
			Generator, Standard	CNP101	108	2	111				

Construction Area	Construction Activity	Sub. Work Group	PMEs Inventory - Unmitigated						Total SWL, dB(A)	Highest SWL of Each Construction Activity, dB(A) <sub>e</sub>
			Powered Mechanical Equipment	TM Ref.	SWL per unit, dB(A)	Qty	Total SWL			
Site Formation/preloading (Phase C)	(H) General Site clearance	H1 General Site Clearance	Air Compressor	CNP003	104	2	107	127	127	
			Breaker, excavator mounted	CNP 027	122	2	125			
			Dump Truck	CNP067	117	3	122			
			Excavator	CNP087	112	4	118			
			Generator, Standard	CNP101	108	2	111			
			Water Pump, Submersible (electric)	CNP283	85	2	88			
	(I) Retaining Wall construction	I1 Earthwork	Earthwork	Breaker, excavator mounted	CNP 027	122	1	122	124	124
				Dump Truck	CNP067	117	1	117		
				Excavator	CNP087	112	3	117		
				Water Pump, Submersible (electric)	CNP283	85	2	88		
		I2 General Work	General Work	Air Compressor	CNP003	104	1	104	118	
				Bar Bender and Cutter	CNP021	90	1	90		
				Mobile Crane	CNP048	112	1	112		
				Generator, Standard	CNP101	108	2	111		
				Lorry	CNP141	112	1	112		
				Power Rammer (Petrol)	CNP169	108	1	108		
				Saw, Circular, Wood	CNP201	108	1	108		
				Water Pump, Submersible (electric)	CNP283	85	1	85		
		I3 Foundation	Foundation	Continuous Flight Auger	CNP167	114	2	117	117	
				Generator, standard	CNP101	108	1	108		
	I4 Concreting	Concreting	Concrete Lorry Mixer	CNP044	109	1	109	116		
			Concrete Pump	CNP047	109	2	112			
			Poker, Vibratory, Hand-held	CNP170	113	1	113			
	(J) Installation of Vertical Drain	J1 Installation of Vertical Drain	Vertical Drain	Band Drain Installation Machine	CNP050	105	12	116	116	116
(K) Placement of Filling and surcharge	K1 Placement of Filling and Surcharge	Placement of Filling and Surcharge	Bulldozer	CNP030	115	3	120	125	125	
			Dump Truck	CNP067	117	3	122			
			Excavator	CNP087	112	2	115			
			Generator, Standard	CNP101	108	2	111			
			Roller, Vibratory	CNP186	108	3	113			
(L) Removal of surcharge	L1 Removal of Surcharge	Removal of Surcharge	Bulldozer	CNP030	115	2	118	124	124	
			Dump Truck	CNP067	117	3	122			
			Excavator	CNP087	112	2	115			
			Generator, Standard	CNP101	108	2	111			
Site Formation/preloading (Phase D)	(M) General site clearance	M1 General Site Clearance	Air Compressor	CNP003	104	2	107	127	127	
			Breaker, excavator mounted	CNP 027	122	2	125			
			Dump Truck	CNP067	117	3	122			
			Excavator	CNP087	112	3	117			
			Generator, Standard	CNP101	108	2	111			
			Water Pump, Submersible (electric)	CNP283	85	2	88			
	(N) Retaining wall construction	N1 Earthwork	Earthwork	Breaker, excavator mounted	CNP 027	122	1	122		

Construction Area	Construction Activity	Sub. Work Group	PMEs Inventory - Unmitigated						Highest SWL of Each Construction Activity, dB(A) <sub>e</sub>		
			Powered Mechanical Equipment	TM Ref.	SWL per unit, dB(A)	Qty	Total, SWL	Total SWL, dB(A)			
			Dump Truck	CNP067	117	1	117	124	124		
			Excavator	CNP087	112	3	117				
			Water Pump, Submersible (electric)	CNP283	85	2	88				
		N2	General Work	Air Compressor	CNP003	104	1	104		118	
				Bar Bender and Cutter	CNP021	90	1	90			
				Mobile Crane	CNP048	112	1	112			
				Generator, Standard	CNP101	108	2	111			
				Lorry	CNP141	112	1	112			
				Power Rammer (Petrol)	CNP169	108	1	108			
				Saw, Circular, Wood	CNP201	108	1	108			
		N3	Foundation	Continuous Flight Auger	CNP167	114	2	117		118	
				Generator, standard	CNP101	108	1	108			
		N4	Concreting	Concrete Lorry Mixer	CNP044	109	1	109		116	
				Concrete Pump	CNP047	109	2	112			
				Poker, Vibratory, Hand-held	CNP170	113	1	113			
		(O) Installation of vertical drain	O1	Installation of Vertical Drain	Band Drain Installation Machine	CNP050	105	12		116	116
		(P) Placement of filling and surcharge	P1	Placement of Filling and Surcharge	Bulldozer	CNP030	115	3		120	125
					Dump Truck	CNP067	117	3		122	
					Excavator	CNP087	112	2		115	
					Generator, Standard	CNP101	108	2		111	
Roller, Vibratory	CNP186				108	3	113				
(Q) Removal of surcharge	Q1	Removal of Surcharge	Bulldozer	CNP030	115	2	118	124			
			Dump Truck	CNP067	117	3	122				
			Excavator	CNP087	112	2	115				
			Generator, Standard	CNP101	108	2	111				
Phase B, C and D	(R) Foundation	R1	General foundation construction	Air Compressor	CNP003	104	8	113	125		
				Bar bender and cutter (electric)	CNP021	90	6	98			
				Mobile Crane	CNP048	112	4	118			
				Generator, standard	CNP101	108	8	117			
				Lorry	CNP141	112	5	119			
				Drill/grinder, hand-held (electric)	CNP065	98	10	108			
				Excavator	CNP081	112	4	118			
				Saw, circular, wood	CNP201	108	4	114			
				Water pump, submersible (electric)	CNP283	85	5	92			
		R2	Piling works	Generator, standard	CNP101	108	8	117	122		
				Continuous Flight Auger (CFA) piles (piling, earth auger)	CNP167	114	4	120			
		R3	Concreting Works	Concrete Lorry Mixer	CNP044	109	6	117	124		
				Generator, standard	CNP101	108	8	117			
				Poker, vibratory, hand-held	CNP170	113	8	122			
					0						
Phase B, C and D	(S) Superstructure	S1	General construction works	Air Compressor	CNP003	104	7	112	122		
				Bar bender and cutter (electric)	CNP021	90	9	100			
				Mobile Crane	CNP048	112	3	117			
				Drill/grinder, hand-held (electric)	CNP065	98	10	108			
				Generator, standard	CNP101	108	7	116			
				Saw, circular, wood	CNP201	108	8	117			
						124					

PMEs Inventory - Unmitigated											
Construct-ion Area	Construction Activity	Sub. Work Group	Powered Mechanical Equipment	TM Ref.	SWL per unit, dB(A)	Qty	Total, SWL	Total SWL, dB(A)	Highest SWL of Each Construction Activity, dB(A) <sub>e</sub>		
Phase B, C and D	(T) Construction of Underground Utilities	S2	Concreting works	Concrete Lorry Mixer	CNP044	109	5	116	124	122	
				Concrete Pump	CNP047	109	2	112			
				Generator, standard	CNP101	108	8	117			
				Poker, vibratory, hand-held	CNP170	113	7	121			
		T1	Earthwork	Breaker, hand-held, mass >=20kg and <= 35kg	CNP025	111	1	111	122		
				Dump Truck	CNP067	117	2	120			
				Excavator	CNP087	112	2	115			
			T2	Utilities laying	Air Compressor	CNP003	104	2	107		117
					Generator, Standard	CNP101	108	2	111		
					Lorry	CNP141	112	2	115		
					Water Pump, Submersible (electric)	CNP283	85	10	95		
			T3	Ground reinstatement	Concrete Lorry Mixer	CNP044	109	2	112		119
Power Rammer (Petrol)	CNP169				108	2	111				
Poker, Vibratory, Hand-held	CNP170	113			2	116					
Roller, Vibratory	CNP186	108			2	111					
Phase B, C and D	(U) Roadworks Construction	U1	Earthwork	Dump Truck	CNP067	117	2	120	121		
				Excavator	CNP087	112	2	115			
		U2	Concreting Works	Concrete Lorry Mixer	CNP044	109	2	112	118		
				Generator, Standard	CNP101	108	2	111			
				Poker, Vibratory, Hand-held	CNP170	113	2	116			
		U3	Road Finishing	Air Compressor	CNP003	104	2	107	118		
				Asphalt Paver	CNP004	109	2	112			
				Generator, Standard	CNP101	108	2	111			
				Lorry	CNP141	112	1	112			
				Power Rammer (Petrol)	CNP169	108	1	108			
				Road Roller	CNP185	108	1	108			
		-	(V) Dump Trucks Travelling on Haul Road During Site Formation	V1	Dump Trucks Travelling on Haul Road per hour	Dump Truck (5.5 tonne < Gross vehicle weight <= 38 tonne)	EPD *	105	10	115	115

Note: <sup>Ⓔ</sup> The highest SWL calculated for each Construction Activity for construction noise impact assessment. Each Construction Activity has been divided into several sub. work groups based on the sequence of construction works. The respective sub-work groups of each Construction Activity will not overlap with one another.

Appendix 4-3A-3 Calculation of Construction Noise Level (Unmitigated Scenario)

NSR	Construction Activity	Total SWL, dB(A)	Dist. (NSR to Site Boundary) (A), m	Dist. (Site Boundary to Notional Source) (B), m	Horz. Distance (= A+B), m	Dist. Corr., dB(A)	Façade Corr., dB(A)	CNL, dB(A)	
N1	Phase A	(A) Reprofiting of pond and planting work	121	39	29	68	-44.6	3.0	79
		(B) Vegetation Clearance	120	39	29	68	-44.6	3.0	78
	Phase B	(C) General site clearance	127	285	25	310	-57.8	3.0	72
		(D) Retaining wall construction	124	285	25	310	-57.8	3.0	69
		(E) Installation of Vertical Drain	116	285	25	310	-57.8	3.0	61
		(F) Placement of Fill and Surcharge	125	285	25	310	-57.8	3.0	70
		(G) Removal of surcharge	124	285	25	310	-57.8	3.0	69
	Phase C	(H) General Site clearance	127	93	50	143	-51.1	3.0	79
		(I) Retaining Wall construction	124	93	50	143	-51.1	3.0	76
		(J) Installation of Vertical Drain	116	93	50	143	-51.1	3.0	68
		(K) Placement of Filling and surcharge	125	93	50	143	-51.1	3.0	77
		(L) Removal of surcharge	124	93	50	143	-51.1	3.0	76
	Phase D	(M) General site clearance	127	178	18	196	-53.8	3.0	76
		(N) Retaining wall construction	124	178	18	196	-53.8	3.0	73
		(O) Installation of vertical drain	116	178	18	196	-53.8	3.0	65
		(P) Placement of filling and surcharge	125	178	18	196	-53.8	3.0	74
		(Q) Removal of surcharge	124	178	18	196	-53.8	3.0	73
	Phase B to D	(R) Foundation	125	179	36	215	-54.6	3.0	73
		(S) Superstructure	124	179	36	215	-54.6	3.0	72
(T) Construction of Underground Utilities		122	179	36	215	-54.6	3.0	70	
	(U) Roadworks Construction	121	179	36	215	-54.6	3.0	69	
N1b	Phase A	(A) Reprofiting of pond and planting work	121	34	27	61	-43.7	3.0	80
		(B) Vegetation Clearance	120	34	27	61	-43.7	3.0	79
	Phase B	(C) General site clearance	127	249	26	275	-56.8	3.0	73
		(D) Retaining wall construction	124	249	26	275	-56.8	3.0	70
		(E) Installation of Vertical Drain	116	249	26	275	-56.8	3.0	62
		(F) Placement of Fill and Surcharge	125	249	26	275	-56.8	3.0	71
		(G) Removal of surcharge	124	249	26	275	-56.8	3.0	70
	Phase C	(H) General Site clearance	127	78	41	119	-49.5	3.0	81
		(I) Retaining Wall construction	124	78	41	119	-49.5	3.0	78
		(J) Installation of Vertical Drain	116	78	41	119	-49.5	3.0	70
		(K) Placement of Filling and surcharge	125	78	41	119	-49.5	3.0	79
		(L) Removal of surcharge	124	78	41	119	-49.5	3.0	78
	Phase D	(M) General site clearance	127	144	18	162	-52.2	3.0	78
		(N) Retaining wall construction	124	144	18	162	-52.2	3.0	75
		(O) Installation of vertical drain	116	144	18	162	-52.2	3.0	67
		(P) Placement of filling and surcharge	125	144	18	162	-52.2	3.0	76
		(Q) Removal of surcharge	124	144	18	162	-52.2	3.0	75
	Phase B to D	(R) Foundation	125	143	36	179	-53.0	3.0	75
		(S) Superstructure	124	143	36	179	-53.0	3.0	74
(T) Construction of Underground Utilities		122	143	36	179	-53.0	3.0	72	
	(U) Roadworks Construction	121	143	36	179	-53.0	3.0	71	
N1c	Phase A	(A) Reprofiting of pond and planting work	121	33	29	62	-43.8	3.0	80
		(B) Vegetation Clearance	120	33	29	62	-43.8	3.0	79
	Phase B	(C) General site clearance	127	227	26	253	-56.0	3.0	74
		(D) Retaining wall construction	124	227	26	253	-56.0	3.0	71
		(E) Installation of Vertical Drain	116	227	26	253	-56.0	3.0	63
		(F) Placement of Fill and Surcharge	125	227	26	253	-56.0	3.0	72
		(G) Removal of surcharge	124	227	26	253	-56.0	3.0	71
	Phase C	(H) General Site clearance	127	68	36	104	-48.3	3.0	82
		(I) Retaining Wall construction	124	68	36	104	-48.3	3.0	79
		(J) Installation of Vertical Drain	116	68	36	104	-48.3	3.0	71
		(K) Placement of Filling and surcharge	125	68	36	104	-48.3	3.0	80
		(L) Removal of surcharge	124	68	36	104	-48.3	3.0	79
	Phase D	(M) General site clearance	127	122	18	140	-50.9	3.0	79
		(N) Retaining wall construction	124	122	18	140	-50.9	3.0	76
		(O) Installation of vertical drain	116	122	18	140	-50.9	3.0	68
		(P) Placement of filling and surcharge	125	122	18	140	-50.9	3.0	77
		(Q) Removal of surcharge	124	122	18	140	-50.9	3.0	76
	Phase B to D	(R) Foundation	125	122	36	158	-52.0	3.0	76
		(S) Superstructure	124	122	36	158	-52.0	3.0	75
(T) Construction of Underground Utilities		122	122	36	158	-52.0	3.0	73	
	(U) Roadworks Construction	121	122	36	158	-52.0	3.0	72	
N2a	Phase A	(A) Reprofiting of pond and planting work	121	37	33	70	-44.9	3.0	79
		(B) Vegetation Clearance	120	37	33	70	-44.9	3.0	78
	Phase B	(C) General site clearance	127	200	26	226	-55.1	3.0	75
		(D) Retaining wall construction	124	200	26	226	-55.1	3.0	72
		(E) Installation of Vertical Drain	116	200	26	226	-55.1	3.0	64
		(F) Placement of Fill and Surcharge	125	200	26	226	-55.1	3.0	73
		(G) Removal of surcharge	124	200	26	226	-55.1	3.0	72
	Phase C	(H) General Site clearance	127	55	32	87	-46.8	3.0	83
		(I) Retaining Wall construction	124	55	32	87	-46.8	3.0	80
		(J) Installation of Vertical Drain	116	55	32	87	-46.8	3.0	72
		(K) Placement of Filling and surcharge	125	55	32	87	-46.8	3.0	81
		(L) Removal of surcharge	124	55	32	87	-46.8	3.0	80
	Phase D	(M) General site clearance	127	97	17	114	-49.1	3.0	81
		(N) Retaining wall construction	124	97	17	114	-49.1	3.0	78
		(O) Installation of vertical drain	116	97	17	114	-49.1	3.0	70
		(P) Placement of filling and surcharge	125	97	17	114	-49.1	3.0	79
		(Q) Removal of surcharge	124	97	17	114	-49.1	3.0	78
	Phase B to D	(R) Foundation	125	95	36	131	-50.3	3.0	78
		(S) Superstructure	124	95	36	131	-50.3	3.0	77
(T) Construction of Underground Utilities		122	95	36	131	-50.3	3.0	75	
	(U) Roadworks Construction	121	95	36	131	-50.3	3.0	74	

NSR	Construction Activity	Total SWL, dB(A)	Dist. (NSR to Site Boundary) (A), m	Dist. (Site Boundary to Notional Source) (B), m	Horz. Distance (= A+B), m	Dist. Corr., dB(A)	Façade Corr., dB(A)	CNL, dB(A)	
N3	Phase A	(A) Reprofiting of pond and planting work	121	79	31	110	-48.8	3.0	75
		(B) Vegetation Clearance	120	79	31	110	-48.8	3.0	74
	Phase B	(C) General site clearance	127	135	26	161	-52.1	3.0	78
		(D) Retaining wall construction	124	135	26	161	-52.1	3.0	75
		(E) Installation of Vertical Drain	116	135	26	161	-52.1	3.0	67
		(F) Placement of Fill and Surcharge	125	135	26	161	-52.1	3.0	76
	Phase C	(G) Removal of surcharge	124	135	26	161	-52.1	3.0	75
		(H) General Site clearance	127	26	22	48	-41.6	3.0	88
		(I) Retaining Wall construction	124	26	22	48	-41.6	3.0	85
		(J) Installation of Vertical Drain	116	26	22	48	-41.6	3.0	77
		(K) Placement of Filling and surcharge	125	26	22	48	-41.6	3.0	86
		(L) Removal of surcharge	124	26	22	48	-41.6	3.0	85
	Phase D	(M) General site clearance	127	36	20	56	-42.9	3.0	87
		(N) Retaining wall construction	124	36	20	56	-42.9	3.0	84
		(O) Installation of vertical drain	116	36	20	56	-42.9	3.0	76
		(P) Placement of filling and surcharge	125	36	20	56	-42.9	3.0	85
		(Q) Removal of surcharge	124	36	20	56	-42.9	3.0	84
	Phase B to D	(R) Foundation	125	33	35	68	-44.6	3.0	83
		(S) Superstructure	124	33	35	68	-44.6	3.0	82
		(T) Construction of Underground Utilities	122	33	35	68	-44.6	3.0	80
(U) Roadworks Construction		121	33	35	68	-44.6	3.0	79	
N4	Phase A	(A) Reprofiting of pond and planting work	121	101	31	132	-50.4	3.0	74
		(B) Vegetation Clearance	120	101	31	132	-50.4	3.0	73
	Phase B	(C) General site clearance	127	209	29	238	-55.5	3.0	75
		(D) Retaining wall construction	124	209	29	238	-55.5	3.0	72
		(E) Installation of Vertical Drain	116	209	29	238	-55.5	3.0	64
		(F) Placement of Fill and Surcharge	125	209	29	238	-55.5	3.0	73
	Phase C	(G) Removal of surcharge	124	209	29	238	-55.5	3.0	72
		(H) General Site clearance	127	115	23	138	-50.8	3.0	79
		(I) Retaining Wall construction	124	115	23	138	-50.8	3.0	76
		(J) Installation of Vertical Drain	116	115	23	138	-50.8	3.0	68
		(K) Placement of Filling and surcharge	125	115	23	138	-50.8	3.0	77
		(L) Removal of surcharge	124	115	23	138	-50.8	3.0	76
	Phase D	(M) General site clearance	127	83	19	102	-48.2	3.0	82
		(N) Retaining wall construction	124	83	19	102	-48.2	3.0	79
		(O) Installation of vertical drain	116	83	19	102	-48.2	3.0	71
		(P) Placement of filling and surcharge	125	83	19	102	-48.2	3.0	80
		(Q) Removal of surcharge	124	83	19	102	-48.2	3.0	79
	Phase B to D	(R) Foundation	125	85	40	125	-49.9	3.0	78
		(S) Superstructure	124	85	40	125	-49.9	3.0	77
		(T) Construction of Underground Utilities	122	85	40	125	-49.9	3.0	75
(U) Roadworks Construction		121	85	40	125	-49.9	3.0	74	
N4a	Phase A	(A) Reprofiting of pond and planting work	121	91	32	123	-49.8	3.0	74
		(B) Vegetation Clearance	120	91	32	123	-49.8	3.0	73
	Phase B	(C) General site clearance	127	194	29	223	-54.9	3.0	75
		(D) Retaining wall construction	124	194	29	223	-54.9	3.0	72
		(E) Installation of Vertical Drain	116	194	29	223	-54.9	3.0	64
		(F) Placement of Fill and Surcharge	125	194	29	223	-54.9	3.0	73
	Phase C	(G) Removal of surcharge	124	194	29	223	-54.9	3.0	72
		(H) General Site clearance	127	97	23	120	-49.6	3.0	80
		(I) Retaining Wall construction	124	97	23	120	-49.6	3.0	77
		(J) Installation of Vertical Drain	116	97	23	120	-49.6	3.0	69
		(K) Placement of Filling and surcharge	125	97	23	120	-49.6	3.0	78
		(L) Removal of surcharge	124	97	23	120	-49.6	3.0	77
	Phase D	(M) General site clearance	127	71	19	90	-47.1	3.0	83
		(N) Retaining wall construction	124	71	19	90	-47.1	3.0	80
		(O) Installation of vertical drain	116	71	19	90	-47.1	3.0	72
		(P) Placement of filling and surcharge	125	71	19	90	-47.1	3.0	81
		(Q) Removal of surcharge	124	71	19	90	-47.1	3.0	80
	Phase B to D	(R) Foundation	125	74	38	112	-49.0	3.0	79
		(S) Superstructure	124	74	38	112	-49.0	3.0	78
		(T) Construction of Underground Utilities	122	74	38	112	-49.0	3.0	76
(U) Roadworks Construction		121	74	38	112	-49.0	3.0	75	
N4c	Phase A	(A) Reprofiting of pond and planting work	121	101	35	136	-50.7	3.0	73
		(B) Vegetation Clearance	120	101	35	136	-50.7	3.0	72
	Phase B	(C) General site clearance	127	141	29	170	-52.6	3.0	77
		(D) Retaining wall construction	124	141	29	170	-52.6	3.0	74
		(E) Installation of Vertical Drain	116	141	29	170	-52.6	3.0	66
		(F) Placement of Fill and Surcharge	125	141	29	170	-52.6	3.0	75
	Phase C	(G) Removal of surcharge	124	141	29	170	-52.6	3.0	74
		(H) General Site clearance	127	66	22	88	-46.9	3.0	83
		(I) Retaining Wall construction	124	66	22	88	-46.9	3.0	80
		(J) Installation of Vertical Drain	116	66	22	88	-46.9	3.0	72
		(K) Placement of Filling and surcharge	125	66	22	88	-46.9	3.0	81
		(L) Removal of surcharge	124	66	22	88	-46.9	3.0	80
	Phase D	(M) General site clearance	127	22	18	40	-40.0	3.0	90
		(N) Retaining wall construction	124	22	18	40	-40.0	3.0	87
		(O) Installation of vertical drain	116	22	18	40	-40.0	3.0	79
		(P) Placement of filling and surcharge	125	22	18	40	-40.0	3.0	88
		(Q) Removal of surcharge	124	22	18	40	-40.0	3.0	87
	Phase B to D	(R) Foundation	125	24	37	61	-43.7	3.0	84
		(S) Superstructure	124	24	37	61	-43.7	3.0	83
		(T) Construction of Underground Utilities	122	24	37	61	-43.7	3.0	81
(U) Roadworks Construction		121	24	37	61	-43.7	3.0	80	



NSR	Construction Activity	Total SWL, dB(A)	Dist. (NSR to Site Boundary) (A), m	Dist. (Site Boundary to Notional Source) (B), m	Horz. Distance (= A+B), m	Dist. Corr., dB(A)	Façade Corr., dB(A)	CNL, dB(A)	
N5	Phase A	(A) Reprofiting of pond and planting work	121	4	12	16	-32.1	3.0	92
		(B) Vegetation Clearance	120	4	12	16	-32.1	3.0	91
	Phase B	(C) General site clearance	127	34	39	73	-45.2	3.0	85
		(D) Retaining wall construction	124	34	39	73	-45.2	3.0	82
		(E) Installation of Vertical Drain	116	34	39	73	-45.2	3.0	74
		(F) Placement of Fill and Surcharge	125	34	39	73	-45.2	3.0	83
	Phase C	(G) Removal of surcharge	124	34	39	73	-45.2	3.0	82
		(H) General Site clearance	127	138	50	188	-53.5	3.0	77
		(I) Retaining Wall construction	124	138	50	188	-53.5	3.0	74
		(J) Installation of Vertical Drain	116	138	50	188	-53.5	3.0	66
	Phase D	(K) Placement of Filling and surcharge	125	138	50	188	-53.5	3.0	75
		(L) Removal of surcharge	124	138	50	188	-53.5	3.0	74
		(M) General site clearance	127	149	24	173	-52.7	3.0	77
		(N) Retaining wall construction	124	149	24	173	-52.7	3.0	74
	Phase B to D	(O) Installation of vertical drain	116	149	24	173	-52.7	3.0	66
		(P) Placement of filling and surcharge	125	149	24	173	-52.7	3.0	75
		(Q) Removal of surcharge	124	149	24	173	-52.7	3.0	74
		(R) Foundation	125	32	50	82	-46.3	3.0	82
	Phase B to D	(S) Superstructure	124	32	50	82	-46.3	3.0	81
		(T) Construction of Underground Utilities	122	32	50	82	-46.3	3.0	79
(U) Roadworks Construction		121	32	50	82	-46.3	3.0	78	
N6		Phase A	(A) Reprofiting of pond and planting work	121	23	38	61	-43.7	3.0
	(B) Vegetation Clearance		120	23	38	61	-43.7	3.0	79
	Phase B	(C) General site clearance	127	268	28	296	-57.4	3.0	73
		(D) Retaining wall construction	124	268	28	296	-57.4	3.0	70
		(E) Installation of Vertical Drain	116	268	28	296	-57.4	3.0	62
		(F) Placement of Fill and Surcharge	125	268	28	296	-57.4	3.0	71
	Phase C	(G) Removal of surcharge	124	268	28	296	-57.4	3.0	70
		(H) General Site clearance	127	150	28	178	-53.0	3.0	77
		(I) Retaining Wall construction	124	150	28	178	-53.0	3.0	74
		(J) Installation of Vertical Drain	116	150	28	178	-53.0	3.0	66
	Phase D	(K) Placement of Filling and surcharge	125	150	28	178	-53.0	3.0	75
		(L) Removal of surcharge	124	150	28	178	-53.0	3.0	74
		(M) General site clearance	127	258	30	288	-57.2	3.0	73
		(N) Retaining wall construction	124	258	30	288	-57.2	3.0	70
	Phase B to D	(O) Installation of vertical drain	116	258	30	288	-57.2	3.0	62
		(P) Placement of filling and surcharge	125	258	30	288	-57.2	3.0	71
		(Q) Removal of surcharge	124	258	30	288	-57.2	3.0	70
		(R) Foundation	125	153	50	203	-54.1	3.0	74
	Phase B to D	(S) Superstructure	124	153	50	203	-54.1	3.0	73
		(T) Construction of Underground Utilities	122	153	50	203	-54.1	3.0	71
(U) Roadworks Construction		121	153	50	203	-54.1	3.0	70	
N7		Phase A	(A) Reprofiting of pond and planting work	121	66	11	77	-45.7	3.0
	(B) Vegetation Clearance		120	66	11	77	-45.7	3.0	77
	Phase B	(C) General site clearance	127	96	33	129	-50.2	3.0	80
		(D) Retaining wall construction	124	96	33	129	-50.2	3.0	77
		(E) Installation of Vertical Drain	116	96	33	129	-50.2	3.0	69
		(F) Placement of Fill and Surcharge	125	96	33	129	-50.2	3.0	78
	Phase C	(G) Removal of surcharge	124	96	33	129	-50.2	3.0	77
		(H) General Site clearance	127	137	27	164	-52.3	3.0	78
		(I) Retaining Wall construction	124	137	27	164	-52.3	3.0	75
		(J) Installation of Vertical Drain	116	137	27	164	-52.3	3.0	67
	Phase D	(K) Placement of Filling and surcharge	125	137	27	164	-52.3	3.0	76
		(L) Removal of surcharge	124	137	27	164	-52.3	3.0	75
		(M) General site clearance	127	205	33	238	-55.5	3.0	75
		(N) Retaining wall construction	124	205	33	238	-55.5	3.0	72
	Phase B to D	(O) Installation of vertical drain	116	205	33	238	-55.5	3.0	64
		(P) Placement of filling and surcharge	125	205	33	238	-55.5	3.0	73
		(Q) Removal of surcharge	124	205	33	238	-55.5	3.0	72
		(R) Foundation	125	103	50	153	-51.7	3.0	76
	Phase B to D	(S) Superstructure	124	103	50	153	-51.7	3.0	75
		(T) Construction of Underground Utilities	122	103	50	153	-51.7	3.0	73
(U) Roadworks Construction		121	103	50	153	-51.7	3.0	72	
N9		Phase A	(A) Reprofiting of pond and planting work	121	340	28	368	-59.3	3.0
	(B) Vegetation Clearance		120	340	28	368	-59.3	3.0	84
	Phase B	(C) General site clearance	127	389	25	414	-60.3	3.0	70
		(D) Retaining wall construction	124	389	25	414	-60.3	3.0	67
		(E) Installation of Vertical Drain	116	389	25	414	-60.3	3.0	59
		(F) Placement of Fill and Surcharge	125	389	25	414	-60.3	3.0	68
	Phase C	(G) Removal of surcharge	124	389	25	414	-60.3	3.0	67
		(H) General Site clearance	127	345	22	367	-59.3	3.0	71
		(I) Retaining Wall construction	124	345	22	367	-59.3	3.0	68
		(J) Installation of Vertical Drain	116	345	22	367	-59.3	3.0	60
	Phase D	(K) Placement of Filling and surcharge	125	345	22	367	-59.3	3.0	69
		(L) Removal of surcharge	124	345	22	367	-59.3	3.0	68
		(M) General site clearance	127	219	39	258	-56.2	3.0	74
		(N) Retaining wall construction	124	219	39	258	-56.2	3.0	71
	Phase B to D	(O) Installation of vertical drain	116	219	39	258	-56.2	3.0	63
		(P) Placement of filling and surcharge	125	219	39	258	-56.2	3.0	72
		(Q) Removal of surcharge	124	219	39	258	-56.2	3.0	71
		(R) Foundation	125	227	50	277	-56.8	3.0	71
	Phase B to D	(S) Superstructure	124	227	50	277	-56.8	3.0	70
		(T) Construction of Underground Utilities	122	227	50	277	-56.8	3.0	68
(U) Roadworks Construction		121	227	50	277	-56.8	3.0	67	

NSR	Construction Activity	Total SWL, dB(A)	Dist. (NSR to Site Boundary) (A), m	Dist. (Site Boundary to Notional Source) (B), m	Horz. Distance (= A+B), m	Dist. Corr., dB(A)	Façade Corr., dB(A)	CNL, dB(A)	
N6	Phase A	(A) Reprofiting of pond and planting work	121	136	12	148	-51.4	3.0	73
		(B) Vegetation Clearance	120	136	12	148	-51.4	3.0	72
		(C) General site clearance	127	166	33	199	-54.0	3.0	76
	Phase B	(D) Retaining wall construction	124	166	33	199	-54.0	3.0	73
		(E) Installation of Vertical Drain	116	166	33	199	-54.0	3.0	65
		(F) Placement of Fill and Surcharge	125	166	33	199	-54.0	3.0	74
		(G) Removal of surcharge	124	166	33	199	-54.0	3.0	73
	Phase C	(H) General Site clearance	127	172	35	207	-54.3	3.0	76
		(I) Retaining Wall construction	124	172	35	207	-54.3	3.0	73
		(J) Installation of Vertical Drain	116	172	35	207	-54.3	3.0	65
		(K) Placement of Filling and surcharge	125	172	35	207	-54.3	3.0	74
		(L) Removal of surcharge	124	172	35	207	-54.3	3.0	73
	Phase D	(M) General site clearance	127	269	32	301	-57.6	3.0	72
		(N) Retaining wall construction	124	269	32	301	-57.6	3.0	69
		(O) Installation of vertical drain	116	269	32	301	-57.6	3.0	61
		(P) Placement of filling and surcharge	125	269	32	301	-57.6	3.0	70
		(Q) Removal of surcharge	124	269	32	301	-57.6	3.0	69
	Phase B to D	(R) Foundation	125	176	50	226	-55.1	3.0	73
		(S) Superstructure	124	176	50	226	-55.1	3.0	72
		(T) Construction of Underground Utilities	122	176	50	226	-55.1	3.0	70
		(U) Roadworks Construction	121	176	50	226	-55.1	3.0	69
N10	Phase A	(A) Reprofiting of pond and planting work	121	24	37	61	-43.7	3.0	80
		(B) Vegetation Clearance	120	24	37	61	-43.7	3.0	79
		(C) General site clearance	127	331	25	356	-59.0	3.0	71
	Phase B	(D) Retaining wall construction	124	331	25	356	-59.0	3.0	68
		(E) Installation of Vertical Drain	116	331	25	356	-59.0	3.0	60
		(F) Placement of Fill and Surcharge	125	331	25	356	-59.0	3.0	69
		(G) Removal of surcharge	124	331	25	356	-59.0	3.0	68
	Phase C	(H) General Site clearance	127	137	48	185	-53.3	3.0	77
		(I) Retaining Wall construction	124	137	48	185	-53.3	3.0	74
		(J) Installation of Vertical Drain	116	137	48	185	-53.3	3.0	66
		(K) Placement of Filling and surcharge	125	137	48	185	-53.3	3.0	75
		(L) Removal of surcharge	124	137	48	185	-53.3	3.0	74
	Phase D	(M) General site clearance	127	276	21	297	-57.4	3.0	73
		(N) Retaining wall construction	124	276	21	297	-57.4	3.0	70
		(O) Installation of vertical drain	116	276	21	297	-57.4	3.0	62
		(P) Placement of filling and surcharge	125	276	21	297	-57.4	3.0	71
		(Q) Removal of surcharge	124	276	21	297	-57.4	3.0	70
	Phase B to D	(R) Foundation	125	262	38	300	-57.5	3.0	71
		(S) Superstructure	124	262	38	300	-57.5	3.0	70
		(T) Construction of Underground Utilities	122	262	38	300	-57.5	3.0	68
		(U) Roadworks Construction	121	262	38	300	-57.5	3.0	67
N_sch	Phase A	(A) Reprofiting of pond and planting work	121	340	30	370	-59.3	3.0	65
		(B) Vegetation Clearance	120	340	30	370	-59.3	3.0	64
		(C) General site clearance	127	631	25	656	-64.3	3.0	66
	Phase B	(D) Retaining wall construction	124	631	25	656	-64.3	3.0	63
		(E) Installation of Vertical Drain	116	631	25	656	-64.3	3.0	55
		(F) Placement of Fill and Surcharge	125	631	25	656	-64.3	3.0	64
		(G) Removal of surcharge	124	631	25	656	-64.3	3.0	63
	Phase C	(H) General Site clearance	127	439	48	487	-61.7	3.0	68
		(I) Retaining Wall construction	124	439	48	487	-61.7	3.0	65
		(J) Installation of Vertical Drain	116	439	48	487	-61.7	3.0	57
		(K) Placement of Filling and surcharge	125	439	48	487	-61.7	3.0	66
		(L) Removal of surcharge	124	439	48	487	-61.7	3.0	65
	Phase D	(M) General site clearance	127	520	18	538	-62.6	3.0	67
		(N) Retaining wall construction	124	520	18	538	-62.6	3.0	64
		(O) Installation of vertical drain	116	520	18	538	-62.6	3.0	56
		(P) Placement of filling and surcharge	125	520	18	538	-62.6	3.0	65
		(Q) Removal of surcharge	124	520	18	538	-62.6	3.0	64
	Phase B to D	(R) Foundation	125	526	36	562	-63.0	3.0	65
		(S) Superstructure	124	526	36	562	-63.0	3.0	64
		(T) Construction of Underground Utilities	122	526	36	562	-63.0	3.0	62
		(U) Roadworks Construction	121	526	36	562	-63.0	3.0	61
N_ch	Phase A	(A) Reprofiting of pond and planting work	121	145	9	154	-51.7	3.0	72
		(B) Vegetation Clearance	120	145	9	154	-51.7	3.0	71
		(C) General site clearance	127	191	32	223	-54.9	3.0	75
	Phase B	(D) Retaining wall construction	124	191	32	223	-54.9	3.0	72
		(E) Installation of Vertical Drain	116	191	32	223	-54.9	3.0	64
		(F) Placement of Fill and Surcharge	125	191	32	223	-54.9	3.0	73
		(G) Removal of surcharge	124	191	32	223	-54.9	3.0	72
	Phase C	(H) General Site clearance	127	290	42	332	-58.4	3.0	72
		(I) Retaining Wall construction	124	290	42	332	-58.4	3.0	69
		(J) Installation of Vertical Drain	116	290	42	332	-58.4	3.0	61
		(K) Placement of Filling and surcharge	125	290	42	332	-58.4	3.0	70
		(L) Removal of surcharge	124	290	42	332	-58.4	3.0	69
	Phase D	(M) General site clearance	127	321	43	364	-59.2	3.0	71
		(N) Retaining wall construction	124	321	43	364	-59.2	3.0	68
		(O) Installation of vertical drain	116	321	43	364	-59.2	3.0	60
		(P) Placement of filling and surcharge	125	321	43	364	-59.2	3.0	69
		(Q) Removal of surcharge	124	321	43	364	-59.2	3.0	68
	Phase B to D	(R) Foundation	125	190	50	240	-55.6	3.0	72
		(S) Superstructure	124	190	50	240	-55.6	3.0	71
		(T) Construction of Underground Utilities	122	190	50	240	-55.6	3.0	69
		(U) Roadworks Construction	121	190	50	240	-55.6	3.0	68

NSR	Construction Activity	Total SWL, dB(A)	Dist. (NSR to Site Boundary) (A), m	Dist. (Site Boundary to Notional Source) (B), m	Horz. Distance (= A+B), m	Dist. Corr., dB(A)	Façade Corr., dB(A)	CNL, dB(A)	
N11	Phase A	(A) Reprofitting of pond and planting work	121	6	11	17	-32.6	3.0	91
		(B) Vegetation Clearance	120	6	11	17	-32.6	3.0	90
		(C) General site clearance	127	31	31	62	-43.8	3.0	86
	Phase B	(D) Retaining wall construction	124	31	31	62	-43.8	3.0	83
		(E) Installation of Vertical Drain	116	31	31	62	-43.8	3.0	75
		(F) Placement of Fill and Surcharge	125	31	31	62	-43.8	3.0	84
		(G) Removal of surcharge	124	31	31	62	-43.8	3.0	83
	Phase C	(H) General Site clearance	127	79	34	113	-49.0	3.0	81
		(I) Retaining Wall construction	124	79	34	113	-49.0	3.0	78
		(J) Installation of Vertical Drain	116	79	34	113	-49.0	3.0	70
		(K) Placement of Filling and surcharge	125	79	34	113	-49.0	3.0	79
		(L) Removal of surcharge	124	79	34	113	-49.0	3.0	78
	Phase D	(M) General site clearance	127	138	20	158	-52.0	3.0	78
		(N) Retaining wall construction	124	138	20	158	-52.0	3.0	75
		(O) Installation of vertical drain	116	138	20	158	-52.0	3.0	67
		(P) Placement of filling and surcharge	125	138	20	158	-52.0	3.0	76
		(Q) Removal of surcharge	124	138	20	158	-52.0	3.0	75
		(R) Foundation	125	41	50	91	-47.2	3.0	81
	Phase B to D	(S) Superstructure	124	41	50	91	-47.2	3.0	80
		(T) Construction of Underground Utilities	122	41	50	91	-47.2	3.0	78
(U) Roadworks Construction		121	41	50	91	-47.2	3.0	77	
N12	Phase A	(A) Reprofitting of pond and planting work	121	278	14	292	-57.3	3.0	67
		(B) Vegetation Clearance	120	278	14	292	-57.3	3.0	66
		(C) General site clearance	127	240	28	268	-56.5	3.0	74
	Phase B	(D) Retaining wall construction	124	240	28	268	-56.5	3.0	71
		(E) Installation of Vertical Drain	116	240	28	268	-56.5	3.0	63
		(F) Placement of Fill and Surcharge	125	240	28	268	-56.5	3.0	72
		(G) Removal of surcharge	124	240	28	268	-56.5	3.0	71
	Phase C	(H) General Site clearance	127	332	36	368	-59.3	3.0	71
		(I) Retaining Wall construction	124	332	36	368	-59.3	3.0	68
		(J) Installation of Vertical Drain	116	332	36	368	-59.3	3.0	60
		(K) Placement of Filling and surcharge	125	332	36	368	-59.3	3.0	69
		(L) Removal of surcharge	124	332	36	368	-59.3	3.0	68
	Phase D	(M) General site clearance	127	226	16	242	-55.7	3.0	74
		(N) Retaining wall construction	124	226	16	242	-55.7	3.0	71
		(O) Installation of vertical drain	116	226	16	242	-55.7	3.0	63
		(P) Placement of filling and surcharge	125	226	16	242	-55.7	3.0	72
		(Q) Removal of surcharge	124	226	16	242	-55.7	3.0	71
		(R) Foundation	125	227	32	259	-56.2	3.0	72
	Phase B to D	(S) Superstructure	124	227	32	259	-56.2	3.0	71
		(T) Construction of Underground Utilities	122	227	32	259	-56.2	3.0	69
(U) Roadworks Construction		121	227	32	259	-56.2	3.0	68	
N13	Phase A	(A) Reprofitting of pond and planting work	121	270	13	283	-57.0	3.0	67
		(B) Vegetation Clearance	120	270	13	283	-57.0	3.0	66
		(C) General site clearance	127	240	28	268	-56.5	3.0	74
	Phase B	(D) Retaining wall construction	124	240	28	268	-56.5	3.0	71
		(E) Installation of Vertical Drain	116	240	28	268	-56.5	3.0	63
		(F) Placement of Fill and Surcharge	125	240	28	268	-56.5	3.0	72
		(G) Removal of surcharge	124	240	28	268	-56.5	3.0	71
	Phase C	(H) General Site clearance	127	335	40	375	-59.5	3.0	71
		(I) Retaining Wall construction	124	335	40	375	-59.5	3.0	68
		(J) Installation of Vertical Drain	116	335	40	375	-59.5	3.0	60
		(K) Placement of Filling and surcharge	125	335	40	375	-59.5	3.0	69
		(L) Removal of surcharge	124	335	40	375	-59.5	3.0	68
	Phase D	(M) General site clearance	127	236	17	253	-56.0	3.0	74
		(N) Retaining wall construction	124	236	17	253	-56.0	3.0	71
		(O) Installation of vertical drain	116	236	17	253	-56.0	3.0	63
		(P) Placement of filling and surcharge	125	236	17	253	-56.0	3.0	72
		(Q) Removal of surcharge	124	236	17	253	-56.0	3.0	71
		(R) Foundation	125	238	33	271	-56.6	3.0	71
	Phase B to D	(S) Superstructure	124	238	33	271	-56.6	3.0	70
		(T) Construction of Underground Utilities	122	238	33	271	-56.6	3.0	68
(U) Roadworks Construction		121	238	33	271	-56.6	3.0	67	
N14	Phase A	(A) Reprofitting of pond and planting work	121	130	9	139	-50.8	3.0	73
		(B) Vegetation Clearance	120	130	9	139	-50.8	3.0	72
		(C) General site clearance	127	163	41	204	-54.2	3.0	76
	Phase B	(D) Retaining wall construction	124	163	41	204	-54.2	3.0	73
		(E) Installation of Vertical Drain	116	163	41	204	-54.2	3.0	65
		(F) Placement of Fill and Surcharge	125	163	41	204	-54.2	3.0	74
		(G) Removal of surcharge	124	163	41	204	-54.2	3.0	73
	Phase C	(H) General Site clearance	127	262	50	312	-57.9	3.0	72
		(I) Retaining Wall construction	124	262	50	312	-57.9	3.0	69
		(J) Installation of Vertical Drain	116	262	50	312	-57.9	3.0	61
		(K) Placement of Filling and surcharge	125	262	50	312	-57.9	3.0	70
		(L) Removal of surcharge	124	262	50	312	-57.9	3.0	69
	Phase D	(M) General site clearance	127	273	26	299	-57.5	3.0	73
		(N) Retaining wall construction	124	273	26	299	-57.5	3.0	70
		(O) Installation of vertical drain	116	273	26	299	-57.5	3.0	62
		(P) Placement of filling and surcharge	125	273	26	299	-57.5	3.0	71
		(Q) Removal of surcharge	124	273	26	299	-57.5	3.0	70
		(R) Foundation	125	170	50	220	-54.8	3.0	73
	Phase B to D	(S) Superstructure	124	170	50	220	-54.8	3.0	72
		(T) Construction of Underground Utilities	122	170	50	220	-54.8	3.0	70
(U) Roadworks Construction		121	170	50	220	-54.8	3.0	69	

Remark: \*\* Distance is based on shortest horizontal distance.

# The notional noise source location is assumed based on the methodology listed in the statutory Technical Memorandum on Noise from Construction work other than Percussive Piling and that used in the approved EIA report for Wo Shan Wai. It has been assumed that all PME items are operating and gathered within a worksite for a conservative assessment.

NSR	Construction Activity	Total SWL, dB(A)	Dist. (NSR to Site Boundary) (A), m	Dist. (Site Boundary to Notional Source) (B), m	Horz. Distance (= A+B), m	Dist. Corr., dB(A)	Façade Corr., dB(A)	CNL, dB(A)
-----	-----------------------	------------------	-------------------------------------	---	---------------------------	--------------------	---------------------	------------

**Calculation of Noise Level Due to Travelling of Dump Truck within the Project Construction Area During Site Formation, Filling and Excavation Stage**

NSR	Construction Activity	No. of Trucks/hr.	SWL per Unit, dB(A)	Horz. Distance From NSR, m	Average Speed, km/hr	Calculated LAeq Due to Travelling of Dump Truck, dB(A) <sup>®</sup>
N1	Dump Trucks Travelling on Haul Road	10	115	183	10	59
N1b	Dump Trucks Travelling on Haul Road	10	115	151	10	60
N1c	Dump Trucks Travelling on Haul Road	10	115	133	10	61
N2a	Dump Trucks Travelling on Haul Road	10	115	112	10	62
N3	Dump Trucks Travelling on Haul Road	10	115	72	10	63
N4	Dump Trucks Travelling on Haul Road	10	115	160	10	60
N4a	Dump Trucks Travelling on Haul Road	10	115	142	10	61
N4c	Dump Trucks Travelling on Haul Road	10	115	117	10	61
N5	Dump Trucks Travelling on Haul Road	10	115	76	10	63
N6	Dump Trucks Travelling on Haul Road	10	115	190	10	59
N7	Dump Trucks Travelling on Haul Road	10	115	132	10	61
N9	Dump Trucks Travelling on Haul Road	10	115	335	10	57
N8	Dump Trucks Travelling on Haul Road	10	115	201	10	59
N10	Dump Trucks Travelling on Haul Road	10	115	218	10	59
N_sch	Dump Trucks Travelling on Haul Road	10	115	522	10	55
N_ch	Dump Trucks Travelling on Haul Road	10	115	219	10	59
N11	Dump Trucks Travelling on Haul Road	10	115	71	10	64
N12	Dump Trucks Travelling on Haul Road	10	115	226	10	59
N13	Dump Trucks Travelling on Haul Road	10	115	239	10	58
N14	Dump Trucks Travelling on Haul Road	10	115	209	10	59

**Remark:** \* According to information available at EPD website: [http://www.epd.gov.hk/epd/english/application\\_for\\_licences/guidance/files/OtherSWLe.pdf](http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

**®** Based on equation in the British Standard "Noise Control on Construction and Open Sites, BS 5228: Part 1: 2009":  $LA_{eq} = SWL - 33 + 10 \log_{10} Q - 10 \log_{10} V - 10 \log_{10} d$

Where,

SWL = Sound Power Level of the dump truck

Q is the number of vehicles per hour

V is the average speed (10 km/hr)

D is the distance of receiver position from the haul road (m)