

APPENDIX 5.4 Construction Plant Inventory (Unmitigated Scenario)

Construction Plant Inventory (Unmitigated Scenario)

Site	Activities	PME Group ⁽¹⁾	PME	TM or other ref.	No. of PME	SWL dB(A)/unit	% on time	Sub-total SWL dB(A)	Total SWL dB(A)	Max Activity SWL dB(A)		
A. San Hing Road Site Extension (Residential Site) (SF: 21 months)	A1. Site Clearance	1. Pavement Breaking / Excavation	Hand Held Breaker	CNP 025	2	111	100%	114	118	118		
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
			Generator, standard	CNP 101	1	108	100%	108				
			Water Pump (electric)	CNP 281	1	88	100%	88				
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105				
	2. Site Clearance		Compactor, Vibratory	CNP 050	1	105	60%	103	107			
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105				
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
			Generator, standard	CNP 101	1	108	100%	108				
			Water Pump (electric)	CNP 281	1	88	100%	88				
	A2. Land Decontamination Method 1 - Biopile	1. Excavation		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105	116	117	
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
				Generator, standard	CNP 101	1	108	100%	108			
				Water Pump (electric)	CNP 281	1	88	100%	88			
				Saw, circular, wood	CNP 201	1	108	50%	105			
		2. Biodegradation		Welding Plant	EIA ref 1	1	78	100%	78	111		
				Generator, standard	CNP 101	1	108	100%	108			
				Ventilation Fan	CNP 241	1	108	100%	108			
				Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105			
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
		Method 2 - Excavation & Cement Solidification	1. Sheet Piling		Piling, vibrating hammer	OCUPME-018	1	115	30%	110	116	
					Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114		
					Welding Plant	EIA ref 1	1	78	60%	76		
					Water Pump (electric)	CNP 281	1	88	100%	88		
					Saw, circular, wood	CNP 201	1	108	50%	105		
	2. Excavation			Generator, standard	CNP 101	1	108	60%	106	117		
				Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102			
				Piling, grab and chisel	CNP 164	1	115	30%	110			
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
				Welding Plant	EIA ref 1	1	78	100%	78			
	3. Mixing		Water Pump (electric)	CNP 281	1	88	100%	88	115			
			Saw, circular, wood	CNP 201	1	108	50%	105				
			Generator, standard	CNP 101	1	108	100%	108				
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
			Piling, oscillator	CNP 165	1	115	30%	110				
			Excavator/ Loader, wheeled/ tracked	CNP 081	1	112	80%	111				
			Welding Plant	EIA ref 1	1	78	60%	76				
			Water Pump (electric)	CNP 281	1	88	60%	86				
			Saw, circular, wood	CNP 201	1	108	50%	105				
			Generator, standard	CNP 101	1	108	100%	108				
	4. Backfilling		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102	117			
			Piling, earth auger, auger	CNP 167	1	114	40%	110				
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
			Welding Plant	EIA ref 1	1	78	100%	78				
			Water Pump (electric)	CNP 281	1	88	100%	88				
			Saw, circular, wood	CNP 201	1	108	50%	105				
			Generator, standard	CNP 101	1	108	100%	108				
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
			Welding Plant	EIA ref 1	1	78	100%	78				
	A3. Site Formation	1. Pavement Breaking / Excavation		Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115	115	
				Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102			
				Water Pump (electric)	CNP 281	1	88	100%	88			
				Generator, standard	CNP 101	1	108	100%	108			
				2. Compacting		Generator, standard	CNP 101	1	108			100%
	Water Pump (electric)	CNP 281	1	88		100%	88					
	A4. Piling and Building Works	1. Excavation, piling and superstructure works		Roller	CNP 185	2	108	100%	111	119	119	
				Mobile Crane	CNP 048	2	112	100%	115			
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
				Piling, Large Bored Pile	CNP 166	2	100	100%	103			
				Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	60%	103			
				Water Pump (electric)	CNP 281	1	88	100%	88			
				Generator, standard	CNP 101	1	108	100%	108			
				Concrete Lorry Mixer	CNP 044	1	109	50%	106			
				Air Compressor	CNP 001	1	100	70%	98			
				Concrete Pump	CNP 047	2	109	60%	110			
		2. Substructure Works		Concrete Pump	CNP 047	2	109	60%	110	118		
				Mobile Crane	CNP 048	2	112	100%	115			
				Lorry with Grab, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-036	1	105	50%	102			
				Water Pump (electric)	CNP 281	1	88	100%	88			
				Generator, standard	CNP 101	1	108	100%	108			
				Concrete Lorry Mixer	CNP 044	1	109	50%	106			
				Air Compressor	CNP 001	1	100	100%	100			
				Concrete Pump	CNP 047	2	109	60%	110			
				Bar Bender and Cutter (electric)	CNP 021	1	90	100%	90			
				Compactor, Vibratory	CNP 050	1	105	60%	103			
	Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	100%	102						
	B. Proposed SHR Sewerage Pumping Station	B1. Site Clearance	1. Pavement Breaking / Excavation	Hand Held Breaker	CNP 025	2	111	100%	114	118	118	
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
				Generator, standard	CNP 101	1	108	100%	108			
				Water Pump (electric)	CNP 281	1	88	100%	88			
				Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105			
		2. Site Clearance		Compactor, Vibratory	CNP 050	1	105	60%	103	107		
				Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105			
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
				Generator, standard	CNP 101	1	108	100%	108			
				Water Pump (electric)	CNP 281	1	88	100%	88			
	B2. Land Decontamination Method 1 - Biopile	1. Excavation		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105	116	117	
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
				Generator, standard	CNP 101	1	108	100%	108			
				Water Pump (electric)	CNP 281	1	88	100%	88			
				Saw, circular, wood	CNP 201	1	108	50%	105			
		2. Biodegradation		Welding Plant	EIA ref 1	1	78	100%	78	111		
				Generator, standard	CNP 101	1	108	100%	108			
				Ventilation Fan	CNP 241	1	108	100%	108			
				Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105			
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
		Method 2 - Excavation & Cement Solidification	1. Sheet Piling		Piling, vibrating hammer	OCUPME-018	1	115	30%	110	116	
					Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114		
					Welding Plant	EIA ref 1	1	78	60%	76		
Water Pump (electric)					CNP 281	1	88	100%	88			
Saw, circular, wood					CNP 201	1	108	50%	105			
2. Excavation			Generator, standard	CNP 101	1	108	60%	106	117			
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
			Piling, grab and chisel	CNP 164	1	115	30%	110				
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
			Welding Plant	EIA ref 1	1	78	100%	78				
3. Mixing		Water Pump (electric)	CNP 281	1	88	100%	88	115				
		Saw, circular, wood	CNP 201	1	108	50%	105					
		Generator, standard	CNP 101	1	108	100%	108					
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102					
		Piling, oscillator	CNP 165	1	115	30%	110					
		Excavator/ Loader, wheeled/ tracked	CNP 081	1	112	80%	111					
		Welding Plant	EIA ref 1	1	78	60%	76					
		Water Pump (electric)	CNP 281	1	88	60%	86					
		Saw, circular, wood	CNP 201	1	108	50%	105					
		Generator, standard	CNP 101	1	108	100%	108					
4. Backfilling		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102	117				
		Piling, earth auger, auger	CNP 167	1	114	40%	110					
		Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114					
		Welding Plant	EIA ref 1	1	78	100%	78					
		Water Pump (electric)	CNP 281	1	88	100%	88					
		Saw, circular, wood	CNP 201	1	108	50%	105					
		Generator, standard	CNP 101	1	108	100%	108					
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102					
		Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114					
		Welding Plant	EIA ref 1	1	78	100%	78					
B3. Site Formation	1. Pavement Breaking / Excavation		Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115	115		
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
			Water Pump (electric)	CNP 281	1	88	100%	88				
			Generator, standard	CNP 101	1	108	100%	108				
			2. Compacting		Generator, standard	CNP 101	1	108			100%	108

Construction Plant Inventory (Unmitigated Scenario)

Site	Activities	PME Group ⁽¹⁾	PME	TM or other ref.	No. of PME	SWL dB(A)/unit	% on time	Sub-total SWL dB(A)	Total SWL dB(A)	Max Activity SWL dB(A)	
B4. Foundation Works & Superstructure Construction			Water Pump (electric)	CNP 281	1	88	100%	88			
			Roller	CNP 185	2	108	100%	111			
	1. Excavation	Mobile Crane	CNP 048	2	112	100%	115	120	120		
		Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
		Piling, Large Bored Pile	CNP 166	2	100	80%	102				
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105				
		Water Pump (electric)	CNP 281	1	88	100%	88				
		Generator, standard	CNP 101	1	108	100%	108				
		Concrete Lorry Mixer	CNP 044	2	109	40%	108				
		Air Compressor	CNP 001	1	100	100%	100				
		Concrete Pump	CNP 047	2	109	100%	112				
		2. Substructure Works	Mobile Crane	CNP 048	2	112	100%			115	118
			Lorry with Grab, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-036	2	105	70%			106	
			Water Pump (electric)	CNP 281	1	88	100%			88	
			Generator, standard	CNP 101	1	108	100%			108	
			Concrete Lorry Mixer	CNP 044	2	109	40%			108	
			Air Compressor	CNP 001	1	100	70%			98	
			Concrete Pump	CNP 047	2	109	60%			110	
			Bar Bender and Cutter (electric)	CNP 021	1	90	60%			88	
	Compactor, Vibratory		CNP 050	1	105	60%	103				
	Poker, vibratory, hand-held (electric)		OCUPME-019	1	102	60%	100				
	B5. Construction of Associated Rising Main		1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115	
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne		OCUPME-038	2	105	50%	105			
		Water pump (electric)		CNP 281	1	88	80%	87			
		2. Pipe Laying	Generator, standard	CNP 101	1	108	80%	107	111		
			Generator, standard	CNP 101	1	108	100%	108			
			Concrete lorry mixer	CNP 044	1	109	40%	105			
			Air Compressor	CNP 001	1	100	100%	100			
			Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	60%	100			
		3. Reinstatement	Bar Bender and Cutter (electric)	CNP 021	1	90	100%	90	109		
			Water Pump (electric)	CNP 281	1	88	100%	88			
			Generator, standard	CNP 101	1	108	80%	107			
	B6. Upgrading Works of Existing Sewers & Modification of TM54 SPS	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115	115	
Dump Truck, 5.5 tonne < GVW ≤ 38 tonne			OCUPME-038	1	105	50%	102				
Water Pump (electric)			CNP 281	1	88	100%	88				
2. Pipe Laying		Generator, standard	CNP 101	1	108	100%	108	110			
		Concrete Lorry Mixer	CNP 044	1	109	30%	104				
		Air Compressor	CNP 001	1	100	100%	100				
		Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	30%	97				
		Bar Bender and Cutter (electric)	CNP 021	1	90	100%	90				
3. Reinstatement		Water Pump (electric)	CNP 281	1	88	100%	88	109			
		Generator, standard	CNP 101	1	108	80%	107				
		Air Compressor	CNP 001	1	100	80%	99				
B7. Installation of Equipment & Testing	1. Equipment Installation	Lorry with Grab, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-036	2	105	100%	108	108	108		
C. Realigned Hong Po Road (per 200 m) ⁽²⁾	C1. Site Clearance	1. Pavement Breaking / Excavation	Hand Held Breaker	CNP 025	2	111	100%	114	118	118	
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
			Generator, standard	CNP 101	1	108	100%	108			
		2. Site Clearance	Water Pump (electric)	CNP 281	1	88	100%	88	107		
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105			
			Compactor, Vibratory	CNP 050	1	105	60%	103			
	C2. Land Decontamination Method 1 - Biopile	1. Excavation	Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105	116		
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
			Generator, standard	CNP 101	1	108	100%	108			
			Water Pump (electric)	CNP 281	1	88	100%	88			
			Saw, circular, wood	CNP 201	1	108	50%	105			
		2. Biodegradation	Welding Plant	EIA ref 1	1	78	100%	78	111		
			Generator, standard	CNP 101	1	108	100%	108			
			Ventilation Fan	CNP 241	1	108	100%	108			
		3. Site Clearance	Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105	115		
		Method 2 - Excavation & Cement Solidification	1. Sheet Piling	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	116	
				Piling, vibrating hammer	OCUPME-018	1	115	30%	110		
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114		
				Welding Plant	EIA ref 1	1	78	60%	76		
				Water Pump (electric)	CNP 281	1	88	100%	88		
	2. Excavation		Saw, circular, wood	CNP 201	1	108	50%	105	117		
			Generator, standard	CNP 101	1	108	60%	106			
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102			
			Piling, grab and chisel	CNP 164	1	115	30%	110			
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
	3. Mixing		Welding Plant	EIA ref 1	1	78	100%	78	115		
			Water Pump (electric)	CNP 281	1	88	100%	88			
			Saw, circular, wood	CNP 201	1	108	50%	105			
			Generator, standard	CNP 101	1	108	100%	108			
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102			
	4. Backfilling	Piling, earth auger, auger	CNP 167	1	114	40%	110	117			
		Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
Welding Plant		EIA ref 1	1	78	100%	78					
Water Pump (electric)		CNP 281	1	88	100%	88					
Saw, circular, wood		CNP 201	1	108	50%	105					
C3. Site Formation	1. Pavement Breaking / Excavation	Generator, standard	CNP 101	1	108	100%	108	115			
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
		Water Pump (electric)	CNP 281	1	88	100%	88				
	2. Road Compacting	Generator, standard	CNP 101	1	108	100%	108	113			
		Water Pump (electric)	CNP 281	1	88	100%	88				
		Roller	CNP 185	2	108	100%	111				
C4. Infrastructure Works	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115			
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105				
		Water Pump (electric)	CNP 281	1	88	100%	88				
		Generator, standard	CNP 101	1	108	100%	108				
	2. Pipe Laying	Concrete Lorry Mixer	CNP 044	1	109	40%	105	111			
		Air Compressor	CNP 001	1	100	100%	100				
		Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99				
		Bar Bender and Cutter (electric)	CNP 021	1	90	50%	87				
		Water Pump (electric)	CNP 281	1	88	70%	86				
	3. Reinstatement	Generator, standard	CNP 101	1	108	100%	108	110			
		Air Compressor	CNP 001	1	100	100%	100				
		Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99				
		Compactor, Vibratory	CNP 050	1	105	30%	100				
		Bar Bender and Cutter (electric)	CNP 021	1	90	50%	87				
		Water Pump (electric)	CNP 281	1	88	70%	86				
C5. Roadworks	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115			
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
		Water Pump (electric)	CNP 281	1	88	100%	88				

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Site	Activities	PME Group ⁽¹⁾	PME	TM or other ref.	No. of PME	SWL dB(A)/unit	% on time	Sub-total SWL dB(A)	Total SWL dB(A)	Max Activity SWL dB(A)			
	2. Road Modification	Generator, standard	CNP 101	1	108	100%	108	111					
			CNP 101	1	108	100%	108						
			Water Pump (electric)	CNP 281	1	88	100%				88		
			Roller	CNP 185	1	108	100%				108		
		3. Road Paving	Compactor, vibratory	CNP 050	1	105	40%				101		
				Concrete Lorry Mixer	CNP 044	1	109				30%	104	
			Generator, standard	CNP 101	1	108	50%				105		
				Poker, vibratory, hand-held (electric)	OCUPME-019	1	102				50%	99	
		4. Road Compacting	Asphalt paver	CNP 004	1	109	60%				107		
				Roller	CNP 185	1	108				60%	106	
			Generator, standard	CNP 101	1	108	60%				106		
				C6. Erection of Noise Barriers	1. Substructure Works	Poker, vibratory, hand-held (electric)	OCUPME-019				1	102	100%
	Compactor, vibratory	CNP 050	1			105	60%	103					
	Bar Bender and Cutter (electric)	CNP 021	1			90	90%	90					
	Concrete Lorry Mixer	CNP 044	2			109	30%	107					
	2. Superstructure Works	Generator, standard	CNP 101		1	108	100%	108					
			Air compressor		CNP 001	1	100	100%	100				
		Mobile Crane	CNP 048		2	112	100%	115					
			Generator, standard		CNP 101	1	108	100%	108				
	D. Proposed Road L7 with J15 (per 200 m) ⁽²⁾	D1. Site Clearance	1. Pavement Breaking / Excavation	Hand Held Breaker	CNP 025	2	111	100%	114	118	119		
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
				Generator, standard	CNP 101	1	108	100%	108				
				Water Pump (electric)	CNP 281	1	88	100%	88				
			2. Site Clearance	Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105				
Compactor, Vibratory					CNP 050	1	105	60%	103				
Excavator/ Loader, wheeled/ tracked				CNP 081	2	112	80%	114					
				Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
D2. Site Formation (Construction of retaining structures & slopeworks)		1. Pavement Breaking / Excavation	Water Pump (electric)	CNP 281	1	88	100%	88	113				
				Generator, standard	CNP 101	1	108	100%				108	
			2. Road Compacting	Generator, standard	CNP 101	1	108	100%				108	
					Water Pump (electric)	CNP 281	1	88				100%	88
		3. Excavation	Mobile Crane	CNP 048	2	112	100%	115	119				
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%				114	
			Piling, Large Bored Pile	CNP 166	2	100	100%	103					
				Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	60%				103	
		D3. Infrastructure Works	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115			
					Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%				105
				Water Pump (electric)	CNP 281	1	88	100%	88				
					Generator, standard	CNP 101	1	108	100%				108
2. Pipe Laying			Generator, standard	CNP 101	1	108	100%	108	111				
				Concrete Lorry Mixer	CNP 044	1	109	40%				105	
			Air Compressor	CNP 001	1	100	100%	100					
				Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%				99	
3. Reinstatement	Generator, standard		CNP 101	1	108	100%	108	110					
			Air Compressor	CNP 001	1	100	100%				100		
			Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%				99		
			Compactor, Vibratory	CNP 050	1	105	30%				100		
	Bar Bender and Cutter (electric)	CNP 021	1	90	50%	87							
		Water Pump (electric)	CNP 281	1	88	70%	86						
		Generator, standard	CNP 101	1	108	100%	108						
		Air Compressor	CNP 001	1	100	100%	100						
E. San Hing Road Site with J4 (SF: 29 months)	E1. Site Clearance	1. Pavement Breaking / Excavation	Hand Held Breaker	CNP 025	2	111	100%	114	118	117			
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114					
			Generator, standard	CNP 101	1	108	100%	108					
			Water Pump (electric)	CNP 281	1	88	100%	88					
		2. Site Clearance	Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105					
				Compactor, Vibratory	CNP 050	1	105	60%				103	
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114					
				Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%				102	
	E2. Land Decontamination Method 1 - Biopile	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	116				
				Generator, standard	CNP 101	1	108	100%				108	
			Water Pump (electric)	CNP 281	1	88	100%	88					
				Saw, circular, wood	CNP 201	1	108	50%				105	
		2. Biodegradation	Generator, standard	CNP 101	1	108	100%	108	111				
				Ventilation Fan	CNP 241	1	108	100%				108	
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105					
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%				114	
		Method 2 - Excavation & Cement Solidification	1. Sheet Piling	Piling, vibrating hammer	OCUPME-018	1	115	30%	110	116			
					Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%				114
				Welding Plant	EIA ref 1	1	78	60%	76				
					Water Pump (electric)	CNP 281	1	88	100%				88
			2. Excavation	Saw, circular, wood	CNP 201	1	108	50%	105	117			
					Generator, standard	CNP 101	1	108	100%				108
				Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
					Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%				114
3. Mixing	Piling, grab and chisel		CNP 164	1	115	30%	110	115					
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%				114		
			Welding Plant	EIA ref 1	1	78	100%				78		
				Water Pump (electric)	CNP 281	1	88				100%	88	
	4. Backfilling	Saw, circular, wood	CNP 201	1	108	50%	105				115		
			Generator, standard	CNP 101	1	108	100%						
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102						
			Piling, earth auger, auger	CNP 167	1	114	40%						

Construction Plant Inventory (Unmitigated Scenario)

Site	Activities	PME Group ⁽¹⁾	PME	TM or other ref.	No. of PME	SWL dB(A)/unit	% on time	Sub-total SWL dB(A)	Total SWL dB(A)	Max Activity SWL dB(A)
F. Hong Po Road Site (SF: 36 months)	E3. Site Formation (Construction of retaining structures)		Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115	115
			Welding Plant	EIA ref 1	1	78	100%	78		
			Water Pump (electric)	CNP 281	1	88	100%	88		
			Saw, circular, wood	CNP 201	1	108	50%	105		
			Generator, standard	CNP 101	1	108	100%	108		
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102			
		1. Pavement Breaking / Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114		
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102		
			Water Pump (electric)	CNP 281	1	88	100%	88		
			Generator, standard	CNP 101	1	108	100%	108		
	Water Pump (electric)		CNP 281	1	88	100%	88			
	2. Compacting	Generator, standard	CNP 101	1	108	100%	108			
		Water Pump (electric)	CNP 281	1	88	100%	88			
		Roller	CNP 185	2	108	100%	111			
		Water Pump (electric)	CNP 281	1	88	100%	88			
		Roller	CNP 185	2	108	100%	111			
	E4. Infrastructure Works	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115	115
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105		
			Water Pump (electric)	CNP 281	1	88	100%	88		
			Generator, standard	CNP 101	1	108	100%	108		
			Generator, standard	CNP 101	1	108	100%	108		
		2. Pipe Laying	Concrete Lorry Mixer	CNP 044	1	109	40%	105		
			Air Compressor	CNP 001	1	100	100%	100		
			Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99		
			Bar Bender and Cutter (electric)	CNP 021	1	90	50%	87		
			Water Pump (electric)	CNP 281	1	88	70%	86		
			Generator, standard	CNP 101	1	108	100%	108		
			Air Compressor	CNP 001	1	100	100%	100		
		3. Reinstatement	Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99		
			Compactor, Vibratory	CNP 050	1	105	30%	100		
			Bar Bender and Cutter (electric)	CNP 021	1	90	50%	87		
			Water Pump (electric)	CNP 281	1	88	70%	86		
			Generator, standard	CNP 101	1	108	100%	108		
			Air Compressor	CNP 001	1	100	100%	100		
			Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99		
			Compactor, Vibratory	CNP 050	1	105	30%	100		
	E5. Roadworks	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115	115
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102		
			Water Pump (electric)	CNP 281	1	88	100%	88		
			Generator, standard	CNP 101	1	108	100%	108		
			Generator, standard	CNP 101	1	108	100%	108		
		2. Road Modification	Water Pump (electric)	CNP 281	1	88	100%	88		
			Roller	CNP 185	1	108	100%	108		
			Compactor, vibratory	CNP 050	1	105	40%	101		
			Concrete Lorry Mixer	CNP 044	1	109	30%	104		
			Generator, standard	CNP 101	1	108	50%	105		
		3. Road Paving	Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99		
			Asphalt paver	CNP 004	1	109	60%	107		
			Roller	CNP 185	1	108	60%	106		
			Generator, standard	CNP 101	1	108	60%	106		
			Compactor, vibratory	CNP 050	1	105	40%	101		
		4. Road Compacting	Generator, standard	CNP 101	1	108	60%	106		
			Compactor, vibratory	CNP 050	1	105	40%	101		
			Water Pump (electric)	CNP 281	1	88	100%	88		
			Generator, standard	CNP 101	1	108	100%	108		
			Generator, standard	CNP 101	1	108	100%	108		
	E6. PTI Structure	1. Superstructure Works	Compactor, vibratory	CNP 050	1	105	100%	105	115	115
			Concrete Lorry Mixer	CNP 044	1	109	100%	109		
			Generator, standard	CNP 101	1	108	100%	108		
			Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	100%	102		
			Asphalt paver	CNP 004	1	109	100%	109		
			Roller	CNP 185	1	108	100%	108		
			Compactor, vibratory	CNP 050	1	105	100%	105		
			Concrete Lorry Mixer	CNP 044	1	109	100%	109		
			Generator, standard	CNP 101	1	108	100%	108		
			Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	100%	102		
	E7. Piling and Building Works	1. Excavation, piling and superstructure works	Mobile Crane	CNP 048	2	112	100%	115	119	119
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114		
			Piling, Large Bored Pile	CNP 166	2	100	100%	103		
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	60%	103		
			Water Pump (electric)	CNP 281	1	88	100%	88		
			Generator, standard	CNP 101	1	108	100%	108		
			Concrete Lorry Mixer	CNP 044	1	109	50%	106		
			Air Compressor	CNP 001	1	100	70%	98		
			Concrete Pump	CNP 047	2	109	60%	110		
			Mobile Crane	CNP 048	2	112	100%	115		
		2. Substructure Works	Lorry with Grab, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-036	1	105	50%	102		
			Water Pump (electric)	CNP 281	1	88	100%	88		
			Generator, standard	CNP 101	1	108	100%	108		
			Concrete Lorry Mixer	CNP 044	1	109	50%	106		
			Air Compressor	CNP 001	1	100	100%	100		
			Concrete Pump	CNP 047	2	109	60%	110		
			Bar Bender and Cutter (electric)	CNP 021	1	90	100%	90		
			Compactor, Vibratory	CNP 050	1	105	60%	103		
			Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	100%	102		
			Generator, standard	CNP 101	1	108	100%	108		
	F1. Site Clearance	1. Pavement Breaking / Excavation	Hand Held Breaker	CNP 025	2	111	100%	114	118	118
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114		
			Generator, standard	CNP 101	1	108	100%	108		
			Water Pump (electric)	CNP 281	1	88	100%	88		
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105		
		2. Site Clearance	Compactor, Vibratory	CNP 050	1	105	60%	103		
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114		
			Generator, standard	CNP 101	1	108	100%	108		
			Water Pump (electric)	CNP 281	1	88	100%	88		
			Saw, circular, wood	CNP 201	1	108	50%	105		
	F2. Land Decontamination Method 1 - Biopile	1. Excavation	Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105	116	117
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114		
			Generator, standard	CNP 101	1	108	100%	108		
			Water Pump (electric)	CNP 281	1	88	100%	88		
Saw, circular, wood			CNP 201	1	108	50%	105			
2. Biodegradation		Welding Plant	EIA ref 1	1	78	100%	78			
		Generator, standard	CNP 101	1	108	100%	108			
		Ventilation Fan	CNP 241	1	108	100%	108			
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105			
		Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
Method 2 - Excavation & Cement Solidification	1. Sheet Piling	Piling, vibrating hammer	OCUPME-018	1	115	30%	110	116	117	
		Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
		Welding Plant	EIA ref 1	1	78	60%	76			
		Water Pump (electric)	CNP 281	1	88	100%	88			
		Saw, circular, wood	CNP 201	1	108	50%	105			
	2. Excavation	Generator, standard	CNP 101	1	108	60%	106			
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102			
		Piling, grab and chisel	CNP 164	1	115	30%	110			
		Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
		Welding Plant	EIA ref 1	1	78	100%	78			
3. Mixing	Water Pump (electric)	CNP 281	1	88	100%	88	115	117		
		Saw, circular, wood	CNP 201	1	108	50%			105	
		Generator, standard	CNP 101	1	108	100%			108	
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%			102	
		Piling, oscillator	CNP 165	1	115	30%			110	
	Excavator/ Loader, wheeled/ tracked	CNP 081	1	112	80%	111				
		Welding Plant	EIA ref 1	1	78	60%			76	
		Water Pump (electric)	CNP 281	1	88	60%			86	
		Saw, circular, wood	CNP 201	1	108	50%			105	
		Generator, standard	CNP 101	1	108	100%			108	
4. Backfilling	Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
	Piling, earth auger, auger	CNP 167	1	114	40%	110				
	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
	Welding Plant	EIA ref 1	1	78	100%	78				
	Water Pump (electric)	CNP 281	1	88	100%	88				
F3. Site Formation (Construction of retaining structures)	1. Pavement Breaking / Excavation	Saw, circular, wood	CNP 201	1	108	50%	105	115	119	
		Generator, standard	CNP 101	1	108	100%	108			
		Water Pump (electric)	CNP 281	1	88	100%	88			
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102			
		Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
	2. Compacting	Generator, standard	CNP 101	1	108	100%	108			
		Water Pump (electric)	CNP 281	1	88	100%	88			
		Roller	CNP 185	2	108	100%	111			
		Generator, standard	CNP 101	1	108	100%	108			
		Water Pump (electric)	CNP 281	1	88	100%	88			

Construction Plant Inventory (Unmitigated Scenario)

Site	Activities	PME Group ⁽¹⁾	PME	TM or other ref.	No. of PME	SWL dB(A)/unit	% on time	Sub-total SWL dB(A)	Total SWL dB(A)	Max Activity SWL dB(A)		
		3. Excavation	Mobile Crane	CNP 048	2	112	100%	115	119			
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
			Piling, Large Bored Pile	CNP 166	2	100	100%	103				
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	60%	103				
			Water Pump (electric)	CNP 281	1	88	100%	88				
			Generator, standard	CNP 101	1	108	100%	108				
			Concrete Lorry Mixer	CNP 044	1	109	50%	106				
			Air Compressor	CNP 001	1	100	70%	98				
			Concrete Pump	CNP 047	2	109	60%	110				
		4. Substructure Works	Mobile Crane	CNP 048	2	112	100%	115	118			
			Lorry with Grab, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-036	1	105	50%	102				
			Water Pump (electric)	CNP 281	1	88	100%	88				
			Generator, standard	CNP 101	1	108	100%	108				
			Concrete Lorry Mixer	CNP 044	1	109	50%	106				
			Air Compressor	CNP 001	1	100	100%	100				
			Concrete Pump	CNP 047	2	109	60%	110				
			Bar Bender and Cutter (electric)	CNP 021	1	90	100%	90				
			Compactor, Vibratory	CNP 050	1	105	60%	103				
Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	100%	102							
F4. Infrastructure Works	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115	115			
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105					
		Water Pump (electric)	CNP 281	1	88	100%	88					
		Generator, standard	CNP 101	1	108	100%	108					
		2. Pipe Laying	Generator, standard	CNP 101	1	108	100%			108	111	
			Concrete Lorry Mixer	CNP 044	1	109	40%			105		
			Air Compressor	CNP 001	1	100	100%			100		
		3. Reinstatement	Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%			99	110	
			Bar Bender and Cutter (electric)	CNP 021	1	90	50%			87		
	Water Pump (electric)		CNP 281	1	88	70%	86					
	Generator, standard		CNP 101	1	108	100%	108					
	Air Compressor		CNP 001	1	100	100%	100					
	Poker, vibratory, hand-held (electric)		OCUPME-019	1	102	50%	99					
	F5. Roadworks	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114		115	115	
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
			Water Pump (electric)	CNP 281	1	88	100%	88				
			Generator, standard	CNP 101	1	108	100%	108				
		2. Road Modification	Generator, standard	CNP 101	1	108	100%	108		111		
Water Pump (electric)			CNP 281	1	88	100%	88					
Roller			CNP 185	1	108	100%	108					
3. Road Paving		Compactor, vibratory	CNP 050	1	105	40%	101	108				
		Concrete Lorry Mixer	CNP 044	1	109	30%	104					
		Generator, standard	CNP 101	1	108	50%	105					
4. Road Compacting		Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99	111				
		Asphalt paver	CNP 004	1	109	60%	107					
		Roller	CNP 185	1	108	60%	106					
		Generator, standard	CNP 101	1	108	60%	106					
F6. Natural Terrain Hazard Mitigation Measures		1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	118	118		
			Drill Rig, rotary type (Diesel)	OCUPME-012	2	110	100%	113				
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	100%	108				
			Water Pump (electric)	CNP 281	1	88	100%	88				
	Generator, standard		CNP 101	1	108	100%	108					
	2. Construction of Rigid Barrier	Lorry with Grab, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-036	2	105	100%	108	114				
		Concrete Lorry Mixer	CNP 044	1	109	100%	109					
		Grout Pump	OCUPME-015	2	105	100%	108					
		Grout Mixer	OCUPME-014	1	90	100%	90					
		Air Compressor	CNP 001	1	100	100%	100					
		Generator, standard	CNP 101	1	108	100%	108					
		Bar Bender and Cutter (electric)	CNP 021	1	90	100%	90					
		Compactor, vibratory	CNP 050	1	105	100%	105					
	F7. Water Services Reservoirs	1. Superstructure Works	Compactor, vibratory	CNP 050	1	105	100%	105	115		115	
			Concrete Lorry Mixer	CNP 044	1	109	100%	109				
			Generator, standard	CNP 101	1	108	100%	108				
			Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	100%	102				
			Asphalt paver	CNP 004	1	109	100%	109				
F8. PTI Structure	1. Superstructure Works	Roller	CNP 185	1	108	100%	108	115	115			
		Compactor, vibratory	CNP 050	1	105	100%	105					
		Concrete Lorry Mixer	CNP 044	1	109	100%	109					
		Generator, standard	CNP 101	1	108	100%	108					
		Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	100%	102					
F9. Piling and Building Works	1. Excavation, piling and superstructure works	Mobile Crane	CNP 048	2	112	100%	115	119	119			
		Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114					
		Piling, Large Bored Pile	CNP 166	2	100	100%	103					
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	60%	103					
		Water Pump (electric)	CNP 281	1	88	100%	88					
		Generator, standard	CNP 101	1	108	100%	108					
		Concrete Lorry Mixer	CNP 044	1	109	50%	106					
		Air Compressor	CNP 001	1	100	70%	98					
		Concrete Pump	CNP 047	2	109	60%	110					
	2. Substructure Works	Mobile Crane	CNP 048	2	112	100%	115	118				
		Lorry with Grab, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-036	1	105	50%	102					
		Water Pump (electric)	CNP 281	1	88	100%	88					
		Generator, standard	CNP 101	1	108	100%	108					
		Concrete Lorry Mixer	CNP 044	1	109	50%	106					
		Air Compressor	CNP 001	1	100	100%	100					
		Concrete Pump	CNP 047	2	109	60%	110					
		Bar Bender and Cutter (electric)	CNP 021	1	90	100%	90					
		Compactor, Vibratory	CNP 050	1	105	60%	103					
Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	100%	102							
G1. School Sites at SHR Site & G2. School Sites at SHR Site Extension	G1. Site Clearance	1. Pavement Breaking / Excavation	Hand Held Breaker	CNP 025	2	111	100%	114	118	118		
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
			Generator, standard	CNP 101	1	108	100%	108				
		2. Site Clearance	Water Pump (electric)	CNP 281	1	88	100%	88			107	
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105				
			Compactor, Vibratory	CNP 050	1	105	60%	103				
	G2. Land Decontamination Method 1 - Biopile	1. Excavation	Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105	116		116	
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
			Generator, standard	CNP 101	1	108	100%	108				
			Water Pump (electric)	CNP 281	1	88	100%	88				
			Saw, circular, wood	CNP 201	1	108	50%	105				
		2. Biodegradation	Welding Plant	EIA ref 1	1	78	100%	78	111			
			Generator, standard	CNP 101	1	108	100%	108				
			Ventilation Fan	CNP 241	1	108	100%	108				
		Method 2 - Excavation & Cement Solidification	3. Site Clearance	Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105			115
				Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			
				Piling, vibrating hammer	OCUPME-018	1	115	30%	110			
			1. Sheet Piling	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	70%	113			116
Welding Plant	EIA ref 1			1	78	60%	76					
Water Pump (electric)	CNP 281			1	88	100%	88					
Saw, circular, wood	CNP 201			1	108	40%	104					
2. Excavation	Generator, standard	CNP 101	1	108	60%	106	116					
	Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102						
	Piling, grab and chisel	CNP 164	1	115	30%	110						
	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	70%	113						
	Welding Plant	EIA ref 1	1	78	100%	78						
Water Pump (electric)	CNP 281	1	88	100%	88							

Construction Plant Inventory (Unmitigated Scenario)

Site	Activities	PME Group ⁽¹⁾	PME	TM or other ref.	No. of PME	SWL dB(A)/unit	% on time	Sub-total SWL dB(A)	Total SWL dB(A)	Max Activity SWL dB(A)		
		3. Mixing	Saw, circular, wood	CNP 201	1	108	40%	104	115			
			Generator, standard	CNP 101	1	108	100%	108				
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
			Piling, oscillator	CNP 165	1	115	30%	110				
			Excavator/ Loader, wheeled/ tracked	CNP 081	1	112	80%	111				
			Welding Plant	EIA ref 1	1	78	60%	76				
			Water Pump (electric)	CNP 281	1	88	60%	86				
			Saw, circular, wood	CNP 201	1	108	50%	105				
			Generator, standard	CNP 101	1	108	100%	108				
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
			Piling, earth auger, auger	CNP 167	1	114	30%	109				
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
			Welding Plant	EIA ref 1	1	78	100%	78				
			Water Pump (electric)	CNP 281	1	88	100%	88				
		4. Backfilling	Saw, circular, wood	CNP 201	1	108	50%	105				
			Generator, standard	CNP 101	1	108	100%	108				
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
			Piling, earth auger, auger	CNP 167	1	114	30%	109				
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
			Welding Plant	EIA ref 1	1	78	100%	78				
		G3. Site Formation (Construction of retaining structures)	1. Pavement Breaking / Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114		115	115
				Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102			
				Water Pump (electric)	CNP 281	1	88	100%	88			
				Generator, standard	CNP 101	1	108	100%	108			
			2. Compacting	Generator, standard	CNP 101	1	108	100%	108		113	
				Water Pump (electric)	CNP 281	1	88	100%	88			
				Roller	CNP 185	2	108	100%	111			
			G4. Infrastructure Works	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%		114	
Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038				2	105	50%	105				
Water Pump (electric)	CNP 281				1	88	100%	88				
Generator, standard	CNP 101				1	108	100%	108				
2. Pipe Laying	Generator, standard			CNP 101	1	108	100%	108	111			
	Concrete Lorry Mixer			CNP 044	1	109	40%	105				
	Air Compressor			CNP 001	1	100	100%	100				
	Poker, vibratory, hand-held (electric)	OCUPME-019		1	102	50%	99					
	Bar Bender and Cutter (electric)	CNP 021		1	90	50%	87					
	Water Pump (electric)	CNP 281		1	88	70%	86					
3. Reinstatement	Generator, standard	CNP 101		1	108	100%	108	110				
	Air Compressor	CNP 001		1	100	100%	100					
	Poker, vibratory, hand-held (electric)	OCUPME-019		1	102	50%	99					
	Compactor, Vibratory	CNP 050		1	105	30%	100					
	Bar Bender and Cutter (electric)	CNP 021		1	90	50%	87					
	Water Pump (electric)	CNP 281		1	88	70%	86					
G5. Roadworks	1. Excavation	Excavator/ Loader, wheeled/ tracked		CNP 081	2	112	80%	114	115	115		
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne		OCUPME-038	1	105	50%	102				
		Water Pump (electric)		CNP 281	1	88	100%	88				
		Generator, standard		CNP 101	1	108	100%	108				
	2. Road Modification	Generator, standard	CNP 101	1	108	100%	108	111				
		Water Pump (electric)	CNP 281	1	88	100%	88					
		Roller	CNP 185	1	108	100%	108					
		Compactor, vibratory	CNP 050	1	105	40%	101					
	3. Road Paving	Concrete Lorry Mixer	CNP 044	1	109	30%	104	108				
		Generator, standard	CNP 101	1	108	50%	105					
		Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99					
		Asphalt paver	CNP 004	1	109	60%	107					
	4. Road Compacting	Roller	CNP 185	1	108	60%	106	111				
		Generator, standard	CNP 101	1	108	60%	106					
	G6. Piling and Building Works	1. Excavation, piling and superstructure works	Mobile Crane	CNP 048	2	112	100%	115	119		119	
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114				
			Piling, Large Bored Pile	CNP 166	2	100	100%	103				
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	60%	103				
			Water Pump (electric)	CNP 281	1	88	100%	88				
			Generator, standard	CNP 101	1	108	100%	108				
Concrete Lorry Mixer			CNP 044	1	109	50%	106					
Air Compressor			CNP 001	1	100	70%	98					
Concrete Pump			CNP 047	2	109	60%	110					
2. Substructure Works			Mobile Crane	CNP 048	2	112	100%	115		118		
		Lorry with Grab, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-036	1	105	50%	102					
		Water Pump (electric)	CNP 281	1	88	100%	88					
		Generator, standard	CNP 101	1	108	100%	108					
		Concrete Lorry Mixer	CNP 044	1	109	50%	106					
		Air Compressor	CNP 001	1	100	100%	100					
		Concrete Pump	CNP 047	2	109	60%	110					
		Bar Bender and Cutter (electric)	CNP 021	1	90	100%	90					
		Compactor, Vibratory	CNP 050	1	105	60%	103					
		Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	100%	102					
H. Other Associated Infrastructural Works outside Development Area		H1. Construction of Proposed Footbridge	1. Substructure Works	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115		115
	Dump Truck, 5.5 tonne < GVW ≤ 38 tonne			OCUPME-038	2	105	50%	105				
	Water Pump (electric)			CNP 281	1	88	100%	88				
	Generator, standard			CNP 101	1	108	100%	108				
	2. Superstructure Works		Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	100%	102	113			
			Compactor, vibratory	CNP 050	1	105	100%	105				
			Bar Bender and Cutter (electric)	CNP 021	1	90	100%	90				
			Concrete Lorry Mixer	CNP 044	2	109	60%	110				
			Generator, standard	CNP 101	1	108	100%	108				
			Air compressor	CNP 001	1	100	70%	98				
	H2. Road Improvement Works at Lam Tei Interchange (J1)	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115	115		
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
			Water Pump (electric)	CNP 281	1	88	100%	88				
			Generator, standard	CNP 101	1	108	100%	108				
		2. Road Modification	Generator, standard	CNP 101	1	108	100%	108	111			
			Water Pump (electric)	CNP 281	1	88	100%	88				
			Roller	CNP 185	1	108	100%	108				
			Compactor, vibratory	CNP 050	1	105	40%	101				
		3. Road Paving	Concrete Lorry Mixer	CNP 044	1	109	30%	104	108			
			Generator, standard	CNP 101	1	108	50%	105				
			Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99				
			Asphalt paver	CNP 004	1	109	60%	107				
		4. Road Compacting	Roller	CNP 185	1	108	60%	106	111			
			Generator, standard	CNP 101	1	108	60%	106				
H3. Road Improvement Works at J/O Hing Kwai Street & Tsun Wen Road (J12 & J13)	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115	115			
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102					
		Water Pump (electric)	CNP 281	1	88	100%	88					
		Generator, standard	CNP 101	1	108	100%	108					
	2. Road Modification	Generator, standard	CNP 101	1	108	100%	108	111				
		Water Pump (electric)	CNP 281	1	88	100%	88					
		Roller	CNP 185	1	108	100%	108					
		Compactor, vibratory	CNP 050	1	105	40%	101					
	3. Road Paving	Concrete Lorry Mixer	CNP 044	1	109	30%	104	108				
		Generator, standard	CNP 101	1	108	50%	105					
		Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99					
		Asphalt paver	CNP 004	1	109	60%	107					
	4. Road Compacting	Roller	CNP 185	1	108	60%	106	111				
		Generator, standard	CNP 101	1	108	60%	106					
H4. Road Improvement Works at J/O Road L54B & Tsing Lun Road (J6)	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115	115			
		Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102					
		Water Pump (electric)	CNP 281	1	88	100%	88					
		Generator, standard	CNP 101	1	108	100%	108					
	2. Road Modification	Generator, standard	CNP 101	1	108	100%	108	111				
		Water Pump (electric)	CNP 281	1	88	100%	88					
		Roller	CNP 185	1	108	100%	108					
		Compactor, vibratory	CNP 050	1	105	40%	101					
		Concrete Lorry Mixer	CNP 044	1	109	30%	104					
		Generator, standard	CNP 101	1	108	50%	105					

Construction Plant Inventory (Unmitigated Scenario)

Site	Activities	PME Group ^[1]	PME	TM or other ref.	No. of PME	SWL dB(A)/unit	% on time	Sub-total SWL dB(A)	Total SWL dB(A)	Max Activity SWL dB(A)		
H5. Road Improvement Works at J/O Tin King Road & Ming Kum Road (J21)	3. Road Paving	3. Road Paving	Concrete Lorry Mixer	CNP 044	1	109	30%	104	108			
			Generator, standard	CNP 101	1	108	50%	105				
			Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99				
			Asphalt paver	CNP 004	1	109	60%	107				
	4. Road Compacting	4. Road Compacting	Roller	CNP 185	1	108	60%	106	109			
			Generator, standard	CNP 101	1	108	60%	106				
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			115	115
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	1	105	50%	102				
	Water Pump (electric)	CNP 281	1	88	100%	88						
	Generator, standard	CNP 101	1	108	100%	108						
	2. Road Modification	2. Road Modification	Generator, standard	CNP 101	1	108	100%	108	111			
			Water Pump (electric)	CNP 281	1	88	100%	88				
			Roller	CNP 185	1	108	100%	108				
			Compactor, vibratory	CNP 050	1	105	40%	101				
	3. Road Paving	3. Road Paving	Concrete Lorry Mixer	CNP 044	1	109	30%	104	108			
			Generator, standard	CNP 101	1	108	50%	105				
			Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99				
			Asphalt paver	CNP 004	1	109	60%	107				
	4. Road Compacting	4. Road Compacting	Roller	CNP 185	1	108	60%	106	111			
			Generator, standard	CNP 101	1	108	60%	106				
			Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114			115	115
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105				
	Water Pump (electric)	CNP 281	1	88	100%	88						
	Generator, standard	CNP 101	1	108	100%	108						
	2a. Pipe Laying (Open-cut method method)	2a. Pipe Laying (Open-cut method method)	Generator, standard	CNP 101	1	108	100%	108	110			
			Concrete Lorry Mixer	CNP 044	1	109	30%	104				
			Air Compressor	CNP 001	1	100	100%	100				
Poker, vibratory, hand-held (electric)			OCUPME-019	1	102	30%	97					
Bar Bender and Cutter (electric)			CNP 021	1	90	50%	87					
Water Pump (electric)			CNP 281	1	88	70%	86					
Tunnel Boring Machine			EIA ref 2	1	88	60%	86	111				
Piling, diaphragm wall, bentonite filtering plant			CNP 162	1	105	60%	103					
Generator, standard			CNP 101	1	108	60%	106					
Dump Truck, 5.5 tonne < GVW ≤ 38 tonne			OCUPME-038	1	105	40%	101					
Hoist (electric)			CNP 122	1	95	60%	93					
Ventilation Fan			CNP 241	1	108	60%	106					
Grout Mixer	OCUPME-014	1	90	60%	88							
Grout Pump	OCUPME-015	1	105	60%	103							
Generator, standard	CNP 101	1	108	100%	108	110						
Air Compressor	CNP 001	1	100	100%	100							
Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99							
Compactor, Vibratory	CNP 050	1	105	30%	100							
Bar Bender and Cutter (electric)	CNP 021	1	90	50%	87							
Water Pump (electric)	CNP 281	1	88	70%	86							
Generator, standard	CNP 101	1	108	50%	105			106				
Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	70%	100							
Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114					115	115	
Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105							
Water Pump (electric)	CNP 281	1	88	100%	88							
Generator, standard	CNP 101	1	108	100%	108							
2. Pipe Laying	2. Pipe Laying	Generator, standard	CNP 101	1	108	100%	108	111				
		Concrete Lorry Mixer	CNP 044	1	109	40%	105					
		Air Compressor	CNP 001	1	100	100%	100					
		Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99					
3. Reinstatement	3. Reinstatement	Bar Bender and Cutter (electric)	CNP 021	1	90	50%	87	110				
		Water Pump (electric)	CNP 281	1	88	70%	86					
		Generator, standard	CNP 101	1	108	100%	108					
		Air Compressor	CNP 001	1	100	100%	100					
Poker, vibratory, hand-held (electric)	Poker, vibratory, hand-held (electric)	OCUPME-019	OCUPME-019	1	102	50%	99	110				
		Compactor, Vibratory	CNP 050	1	105	30%	100					
		Bar Bender and Cutter (electric)	CNP 021	1	90	50%	87					
		Water Pump (electric)	CNP 281	1	88	70%	86					
H8. Infrastructure Works near Lam Tei Interchange	1. Excavation	1. Excavation	Excavator/ Loader, wheeled/ tracked	CNP 081	2	112	80%	114	115	115		
			Dump Truck, 5.5 tonne < GVW ≤ 38 tonne	OCUPME-038	2	105	50%	105				
			Water Pump (electric)	CNP 281	1	88	100%	88				
			Generator, standard	CNP 101	1	108	100%	108				
	2. Pipe Laying	2. Pipe Laying	Generator, standard	CNP 101	1	108	100%	108	111			
			Concrete Lorry Mixer	CNP 044	1	109	40%	105				
			Air Compressor	CNP 001	1	100	100%	100				
			Poker, vibratory, hand-held (electric)	OCUPME-019	1	102	50%	99				
	3. Reinstatement	3. Reinstatement	Bar Bender and Cutter (electric)	CNP 021	1	90	50%	87	110			
			Water Pump (electric)	CNP 281	1	88	70%	86				
			Generator, standard	CNP 101	1	108	100%	108				
			Air Compressor	CNP 001	1	100	100%	100				
Poker, vibratory, hand-held (electric)	Poker, vibratory, hand-held (electric)	OCUPME-019	OCUPME-019	1	102	50%	99	110				
		Compactor, Vibratory	CNP 050	1	105	30%	100					
		Bar Bender and Cutter (electric)	CNP 021	1	90	50%	87					
		Water Pump (electric)	CNP 281	1	88	70%	86					

Remarks:

[1] Only one PME group will be operating at the same time for each activity.

[2] Only one construction activity will be conducted at the same time at the same workforce.

[3] EIA ref 1 - SWL of Welding Plant refers to the approved EIA Report of Sheung Shui to Lok Ma Chau Spur Line (AEIAR-052/2002).

EIA ref 2 - SWL of Tunnel Boring Machine refers to the approved EIA Report of Drainage Improvement in Tsuen Wan, Kwai Chung and Tsing Yi, Tsuen Wan Drainage Tunnel (AEIAR-088/2005).