

Appendix 4.5.2
Construction Plant Inventory

Area	Construction Activity	PME Group [1]	Unmitigated Scenario							Mitigated Scenario																			
			Equipment	Reference Code [2]	No. of Item	% on-time in 30 min	PME SWL, dB(A)	Unmitigated Sub-total SWL, dB(A)	Total SWL, dB(A)	Max Activity SWL, dB(A)	Equipment	Reference Code [3][4][5]	No. of Item	% on-time in 30 min	QPME SWL, dB(A)	Mitigated Sub-total SWL, dB(A)	Enclosure, dB(A)	Barrier, dB(A)	Noise Insulating fabric, dB(A)	Total Reduction, dB(A)	Mitigated Sub-total SWL, dB(A)	Total SWL, dB(A)	Max Activity SWL, dB(A)						
A. Public Housing Development in Sub-Area 1	A1. Site Clearance	1. Pavement Breaking	Generator, standard	CNP 101	2	100%	108	111	115	122	Generator, DENOYO Model: DCA-45L SK	EPD-10735	2	100%	87	90	-10				-10	80	94	103					
			Breaker, hand-held, mass > 10kg and <= 20kg	CNP 024	2	100%	108	111			Soundless Chemical Demolition Agent	IN1	2	100%	90	93									0	93			
			Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109			Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	1	50%	91	88									-5	-5	83		
			Water pump (electric)	CNP 281	1	100%	88	88			-	-	-	-	88	-10									-10	78			
		2. Demolition	Generator, standard	CNP 101	1	30%	108	103	122	Generator, DENOYO Model: DCA-45L SK	EPD-10735	1	30%	87	82	-10					-10	72	100						
			Breaker, excavator mounted (hydraulic)	CNP 028	1	100%	122	122		Soundless Chemical Demolition Agent	IN1	1	100%	90	90										0	90			
	Crane, mobile/ barge mounted (diesel)		CNP 048	1	30%	112	107	Crane, mobile Maeda, Model: CC98SS-1		EPD-05797	1	30%	91	86	-5										-5	81			
	Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne		OCUPME-038	1	30%	105	100	-		-	-	-	100	-	0										100				
	2. Site Clearance	Bulldozer	CNP 030	2	40%	115	114	115	Bulldozer, tracked SHANTUI, Model: DH13K	EPD-07836	2	40%	105	104	-5						-5	99	103						
			Crane, mobile/ barge mounted (diesel)	CNP 048	1	30%	112		107	Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	1	30%	91											86	-5	-5	81	
			Compactor, vibratory	CNP 050	1	40%	105		101	-	-	-	-	101											-5	-5	96		
			Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	2	40%	105		104	-	-	-	-	104											-5	-5	99		
		Water pump (electric)	CNP 281	1	30%	88	83	-	-	-	-	83	-10	-10	73														
	A2. Land Decontamination (Method 1 - Biopile)	1. Excavation	Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	2	30%	105	103	116	116	Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	2	80%	87	89	-5					-5	84	101	101				
				Excavator/loader, wheeled/ tracked	CNP 081	2	80%	112			114	Generator, DENOYO Model: DCA-45L SK	EPD-10735	1	100%	87										87	-10	-10	77
				Generator, standard	CNP 101	1	100%	108			108	-	-	-	-	88										-10	-10	78	
				Water pump (electric)	CNP 281	1	100%	88			88	-	-	-	-	103										-5	-5	98	
Saw, circular, wood			CNP 201	1	30%	108	103	-	-	-	-	78	-5	-5	73														
Welding Plant		EIA ref 1	1	100%	78	78	-	-	-	-	78	-5	-5	73															
2. Biodegradation		Generator, standard	CNP 101	1	100%	108	108	111	Generator, DENOYO Model: DCA-45L SK	EPD-10735	1	100%	87	87	-10					-10	77	98							
			Ventilation fan	CNP 241	1	100%	108		108	-	-	-	-	108										-10	-10	98			
		Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	2	50%	105	105	115	-	-	-	-	105	-5	-5	100													
			Excavator/loader, wheeled/ tracked	CNP 081	2	80%	112		114	Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	2	80%	87	89	-5	-5	84											
			Generator, standard	CNP 101	1	100%	108		108	Generator, DENOYO Model: DCA-45L SK	EPD-10735	1	100%	87	87	-10	-10	77											
			Water pump (electric)	CNP 281	1	100%	88		88	-	-	-	-	88	-10	-10	78												
Saw, circular, wood		CNP 201	1	30%	108	103	-	-	-	-	103	-5	-5	98															
Method 2 - Excavation & Cement Solidification		1. Sheet Piling	Excavator/loader, wheeled/ tracked	CNP 081	2	80%	112	114	116	117	Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	2	80%	87	89	-5					-5	84	101	103				
				Piling, vibrating hammer	OCUPME-018	1	30%	115			110	Silent Piling by Press-in Method	IN2	1	30%	94										89	-5	-5	84
	Excavator/loader, wheeled/ tracked			CNP 081	2	80%	112	114			Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	2	80%	87	89										-5	-5	84	
	Welding Plant			EIA ref 1	1	60%	78	76			-	-	-	-	76	-5										-5	71		
	Water pump (electric)		CNP 281	1	60%	88	86	-	-	-	-	86	-10	-10	76														
	Saw, circular, wood	CNP 201	1	30%	108	103	-	-	-	-	103	-5	-5	98															
	Generator, standard	CNP 101	1	60%	108	106	115	Generator, DENOYO Model: DCA-45L SK	EPD-10735	1	60%	87	85	-10					-10	75	101	103							
		Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	50%	105		102	-	-	-	-	102										-5	-5	97				
	2. Excavation	Piling, large diameter bored, grab and chisel	CNP 164	1	30%	115	110	117	117	Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	2	80%	87	89	-5					-10	100	103						
			Excavator/loader, wheeled/ tracked	CNP 081	2	80%	112			114	-	-	-	-	78										-5	-5	73		
			Welding Plant	EIA ref 1	1	100%	78			78	-	-	-	-	88										-10	-10	78		
			Water pump (electric)	CNP 281	1	100%	88			88	-	-	-	-	103										-5	-5	98		
		Saw, circular, wood	CNP 201	1	30%	108	103	-	-	-	-	103	-5	-5	98														
	Generator, standard	CNP 101	1	100%	108	108	115	Generator, DENOYO Model: DCA-45L SK	EPD-10735	1	100%	87	87	-10					-10	77	103								
		Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	50%	105		102	-	-	-	-	102										-5	-5	97				
3. Mixing	Piling, large diameter bored, oscillator	CNP 165	1	30%	115	110	115	115	Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	1	80%	87	86	-5					-10	100	103							
		Excavator/loader, wheeled/ tracked	CNP 081	1	80%	112			111	-	-	-	-	76										-5	-5	71			
		Welding Plant	EIA ref 1	1	60%	78			76	-	-	-	-	86										-10	-10	76			
		Water pump (electric)	CNP 281	1	60%	88			86	-	-	-	-	103										-5	-5	98			
	Saw, circular, wood	CNP 201	1	30%	108	103	-	-	-	-	103	-5	-5	98															
Generator, standard	CNP 101	1	100%	108	108	115	Generator, DENOYO Model: DCA-45L SK	EPD-10735	1	100%	87	87	-10					-10	77	103									
	Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	30%	105		100	-	-	-	-	100										-5	-5	95					
4. Backfilling	Piling, earth auger, auger	CNP 167	1	30%	114	109	116	116	Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	2	80%	87	89	-5					-10	100	103							
		Excavator/loader, wheeled/ tracked	CNP 081	2	80%	112			114	-	-	-	-	78										-5	-5	73			
		Welding Plant	EIA ref 1	1	100%	78			78	-	-	-	-	88										-10	-10	78			
		Water pump (electric)	CNP 281	1	100%	88			88	-	-	-	-	104										-5	-5	99			
	Saw, circular, wood	CNP 201	1	40%	108	104	-	-	-	-	104	-5	-5	99															
Generator, standard	CNP 101	1	100%	108	108	116	Generator, DENOYO Model: DCA-45L SK	EPD-10735	1	100%	87	87	-10					-10	77	103									
	Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	30%	105		100	-	-	-	-	100										-5	-5	95					
A3. Site Formation (including Construction of Retaining Structure & Stopework)	1. Pavement Breaking / Excavation	Excavator/loader, wheeled/ tracked	CNP 081	3	80%	112	116	118	118	Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	3	80%	87	91	-5					-5	86	102	106					
			Generator, standard	CNP 101	1	100%	108			108	Generator, DENOYO Model: DCA-45L SK	EPD-10735	1	100%	87										87	-10	-10	77	
			Breaker, hand-held, mass > 10kg and <= 20kg	CNP 024	2	100%	108			111	Soundless Chemical Demolition Agent	IN1	2	100%	90										93	0	93		
			Crane, mobile/ barge mounted (diesel)	CNP 048	1	30%	112			107	Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	1	30%	91										86	-5	-5	81	
		Water pump (electric)	CNP 281	1	30%	88	83	-	-	-	-	83	-10	-10	73														
	Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	3	50%	105	107	111	-	-	-	-	107	-5	-5	102														
		Road roller	CNP 185	2	70%	108		109	Road roller, Kanto, Model: KV40DS	EPD-10665	2	70%	94	95	-5	-5	90												
	2. Compacting	Compactor, vibratory	CNP 050	2	70%	105	106	117	117	-	-	-	-	106	-5	-5	101												
			Poker, vibratory, hand-held (electric)	OCUPME-019	2	30%	102			100	-	-	-	-	100	-5	-5	95											
			Compactor, vibratory	CNP 050	1	60%	105			103	-	-	-	-	103	-5	-5	98											
			Piling, vibrating hammer	OCUPME-018	2	30%	115			113	Silent Piling by Press-in Method	IN2	2	30%	94	92	-5	-5	87										
		Bar bender and cutter (electric)	CNP 021	2	50%	90	90	-	-	-	-	90	-10	-10	80														
	Lorry, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-033	2	40%	105	104	117	-	-	-	-	104	-5	-5	99														
		Concrete pump, stationary/ lorry mounted	CNP 047	2	50%	109		109	-	-	-	-	109	-10	-10	99													
	Air compressor, air flow <= 10m3/min	CNP 001	1	100%	100	100	117	Air Compressor, DENOYO CO LTD / DENOYO Model: DAS180L B	EPD-10517	1	100%	94	94	-10					-10	84	106	104							
		Generator, standard	CNP 101	2	1																								

Area	Construction Activity	PME Group [1]	Unmitigated Scenario							Mitigated Scenario																														
			Equipment	Reference Code [2]	No. of Item	% on-time in 30 min	PME SWL, dB(A)	Unmitigated Sub-total SWL, dB(A)	Total SWL, dB(A)	Max Activity SWL, dB(A)	Equipment	Reference Code [3][4][5]	No. of Item	% on-time in 30 min	QPME SWL, dB(A)	Mitigated Sub-total SWL, dB(A)	Enclosure, dB(A)	Barrier, dB(A)	Noise Insulating fabric, dB(A)	Total Reduction, dB(A)	Mitigated Sub-total SWL, dB(A)	Total SWL, dB(A)	Max Activity SWL, dB(A)																	
B. School Site in Sub-Area 1	B1. Site Clearance	1. Pavement Breaking/Excavation	Crane, mobile/ barge mounted (diesel)	CNP 048	2	40%	112	111	116	122	Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	2	40%	91	90	-10	-5	-5	85	109	106																		
			Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	50%	105	102			-	-	-	102	-	-							-	-	-	-	-	97												
			Crane, tower (electric)	CNP 049	3	50%	95	97			-	-	-	97	-	-							-	-	-	-	-	-	97											
			Bar bender and cutter (electric)	CNP 021	2	50%	90	90			-	-	-	90	-	-							-	-	-	-	-	-	-	80										
			Water pump (electric)	CNP 281	3	100%	88	93			-	-	-	93	-	-							-	-	-	-	-	-	-	83										
			Generator, standard	CNP 101	3	100%	108	113			-	-	-	108	-	-							-	-	-	-	-	-	-	82										
			Concrete lorry mixer	CNP 044	3	50%	109	111			-	-	-	111	-	-							-	-	-	-	-	-	-	106										
			Air compressor, air flow <= 10m3/min	CNP 001	3	70%	100	103			-	-	-	100	-	-							-	-	-	-	-	-	-	87										
			Concrete pump, stationary/ lorry mounted	CNP 047	2	60%	109	110			-	-	-	110	-	-							-	-	-	-	-	-	-	100										
			Compactor, vibratory	CNP 050	3	30%	105	105			-	-	-	105	-	-							-	-	-	-	-	-	-	100										
			Poker, vibratory, hand-held (electric)	OCUPME-019	3	30%	102	102			-	-	-	102	-	-							-	-	-	-	-	-	-	97										
			B2. Land Decontamination (Method 1 - Biopile)	1. Excavation	1. Excavation	Generator, standard	CNP 101	1			100%	108	108	113	122	Generator, DENOYO Model: DCA-4SLSK							EPD-10735	1	100%	87	87	-10	-10	-10	77	91	106							
						Breaker, hand-held, mass > 10kg and <= 20kg	CNP 024	1			100%	108	108			Soundless Chemical Demolition Agent							IN1	1	100%	90	90							0	90					
						Crane, mobile/ barge mounted (diesel)	CNP 048	1			50%	112	109			Crane, mobile Maeda, Model: CC98SS-1							EPD-05797	1	50%	91	88							-5	-5	83				
Water pump (electric)	CNP 281	1				100%	88	88	-	-	-	88	-			-	-	-	-	-	-	-	78																	
Generator, standard	CNP 101	1				30%	108	103	Generator, DENOYO Model: DCA-4SLSK	EPD-10735	1	30%	87			82	-10	-10	72																					
Breaker, excavator mounted (hydraulic)	CNP 028	1				100%	122	122	Soundless Chemical Demolition Agent	IN1	1	100%	90			90	0	90																						
Crane, mobile/ barge mounted (diesel)	CNP 048	1				30%	112	107	Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	1	30%	91			86	-5	-5	81																					
Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1				30%	105	100	-	-	-	100	-			-	-	-	-	-	-	-	100																	
Water pump (electric)	CNP 281	1				30%	88	83	-	-	-	83	-			-	-	-	-	-	-	-	73																	
B3. Site Formation (Construction of Retaining Structure & Slope work)	1. Excavation	1. Excavation				Bulldozer	CNP 030	1	80%	115	114	116	122			Bulldozer, tracked SHANTUI, Model: DH13K	EPD-07836	1	80%	105	104	-10	-5	-5	104	106														
						Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109					Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	1	50%	91	88						-5							-5	83					
						Compactor, vibratory	CNP 050	1	60%	105	103					-	-	-	103	-	-						-							-	-	-	-	98		
						Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	50%	105	102					-	-	-	102	-	-						-							-	-	-	-	-	97	
						Excavator/ loader, wheeled/ tracked	CNP 081	1	80%	112	111					Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	1	80%	87	86						-5							-5	81					
			Generator, standard	CNP 101	1	100%	108	108	Generator, DENOYO Model: DCA-4SLSK	EPD-10735	1			100%	87	87	-10	-10	77																					
			Water pump (electric)	CNP 281	1	100%	88	88	-	-	-			88	-	-	-	-	-	-	-						78													
			Saw, circular, wood	CNP 201	1	50%	108	105	-	-	-			105	-	-	-	-	-	-	-						-	100												
			Welding Plant	EIA ref 1	1	100%	78	78	-	-	-			78	-	-	-	-	-	-	-						-	73												
			B4. Infrastructure Works (Pipe Laying & Reinstatement)	1. Excavation	1. Excavation	Generator, standard	CNP 101	1	100%	108	108			111	117	Generator, DENOYO Model: DCA-4SLSK	EPD-10735	1	100%	87	87						-10	-10	-10	77	98	102								
						Ventilation fan	CNP 241	1	100%	108	108					-	-	-	108	-	-												-	-	-	-	-	98		
						Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	50%	105	102					-	-	-	102	-	-												-	-	-	-	-	-	97	
						Excavator/ loader, wheeled/ tracked	CNP 081	1	80%	112	111					Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	1	80%	87	86												-5	-5	81					
						Generator, standard	CNP 101	1	100%	108	108					Generator, DENOYO Model: DCA-4SLSK	EPD-10735	1	100%	87	87												-10	-10	77					
Water pump (electric)	CNP 281	1				100%	88	88	-	-	-	88	-			-	-	-	-	-	-	-	78																	
Saw, circular, wood	CNP 201	1				50%	108	105	-	-	-	105	-			-	-	-	-	-	-	-	100																	
Welding Plant	EIA ref 1	1				100%	78	78	-	-	-	78	-			-	-	-	-	-	-	-	73																	
B5. Sub-structure and Superstructure Construction	1. Excavation	1. Excavation				Generator, standard	CNP 101	1	100%	108	108	116	117			Generator, DENOYO Model: DCA-4SLSK	EPD-10735	1	100%	87	87	-10	-10	-10	77	102							104							
						Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	50%	105	102					-	-	-	102	-	-													-	-	-	-	-	-	97
						Excavator/ loader, wheeled/ tracked	CNP 081	1	80%	112	111					Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	1	80%	87	86													-5	-5	81				
						Generator, standard	CNP 101	1	100%	108	108					Generator, DENOYO Model: DCA-4SLSK	EPD-10735	1	100%	87	87													-10	-10	77				
						Water pump (electric)	CNP 281	1	100%	88	88					-	-	-	88	-	-													-	-	-	-	-	-	78
						Saw, circular, wood	CNP 201	1	50%	108	105					-	-	-	105	-	-													-	-	-	-	-	-	100
			Generator, standard	CNP 101	1	60%	108	106	-	-	-			106	-	-	-	-	-	-	-						-	75												
			Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	50%	105	102	-	-	-			102	-	-	-	-	-	-	-						-	97												
			Piling, large diameter bored, grab and chisel	CNP 164	1	30%	115	110	-	-	-			110	-	-	-	-	-	-	-						-	100												
			Excavator/ loader, wheeled/ tracked	CNP 081	2	80%	112	114	Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	2			80%	87	89	-5	-5	84																					
			Welding Plant	EIA ref 1	1	100%	78	78	-	-	-			78	-	-	-	-	-	-	-						-	73												
			Water pump (electric)	CNP 281	1	100%	88	88	-	-	-			88	-	-	-	-	-	-	-						-	78												
			Saw, circular, wood	CNP 201	1	50%	108	105	-	-	-			105	-	-	-	-	-	-	-						-	100												
			Generator, standard	CNP 101	1	100%	108	108	Generator, DENOYO Model: DCA-4SLSK	EPD-10735	1			100%	87	87	-10	-10	77																					
C. Landscaping Works in Sub-Area 2 to Sub-Area 4	1. Excavation and transplanting	1. Excavation and transplanting	Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	50%	105	102	115	115	Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A	EPD-10406	1	80%	87	86	-10	-5	-5	81	98	99																		
			Excavator/ loader, wheeled/ tracked	CNP 081	1	80%	112	111			Generator, DENOYO Model: DCA-4SLSK	EPD-10735	1	100%	87	87							-10	-10	77															
			Breaker, hand-held, mass > 10kg and <= 20kg	CNP 024	1	100%	108	108			Soundless Chemical Demolition Agent	IN1	1	100%	90	90							0	90																
			Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109			Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	1	50%	91	88							-5	-5	83															
			Water pump (electric)	CNP 281	1	100%	88	88			-	-	-	88	-	-							-	-	-	-	-	-	78											
			Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	50%	105	102			-	-	-	102	-	-							-	-	-	-	-	-	97											
			Road roller	CNP 185	1	70%	108	106			Road roller, Kanto, Model: KV40DS	EPD-10665	1	70%	94	92							-5	-5	87															
			Compactor, vibratory	CNP 050	1	70%	105	103			-	-	-	103	-	-							-	-	-	-	-	-	98											
			C1. Landscaping/Transplanting - Sub-Area 2	1. Excavation and transplanting	1. Excavation and transplanting	Excavator/ loader, wheeled/ tracked	CNP 081	1			40%	112	108	114	114	Excavator, wheeled/tracked, YANMAR Model: VIQ12-2A							EPD-10406	1	40%	87	83	-5	-5	-5	78	100	104							
						Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	1			100%	111	111			Generator, DENOYO Model: DCA-4SLSK							EPD-10735	1	100%	87	87							-10	-10	77				
						Compactor, vibratory	CNP 050	1			30%	105	100			-							-	-	100	-	-							-	-	-	-	-	95	
						Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1			50%	105	102			-							-	-	102	-	-							-	-	-	-	-	-	97
						Water pump (electric)	CNP 281	1			100%	88	88			-							-	-	88	-	-							-	-	-	-	-	-	78
						Generator, standard	CNP 101	1			100%	108	108			Generator, DENOYO Model: DCA-4SLSK							EPD-10735	1	100%	87	87							-10	-10	77				
Concrete lorry mixer	CNP 044	1				50%	109	106	-	-	-	106	-			-	-	-	-	-	-	-	101																	
Air compressor, air flow <= 10m3/min	CNP 001	1				100%	100	100	Air Compressor, DENOYO CO LTD / DENOYO Model: DAS180LB	EPD-10517	1	100%	94			94	-10	-10	84																					
Poker, vibratory, hand-held (electric)	OCUPME-019	1				50%	102	99	-	-	-	99	-			-	-	-	-	-	-	-	94																	
Saw, circular, wood	CNP 201	1				50%	108	105	-	-	-	105	-			-	-	-	-	-	-	-	100																	
Bar bender and cutter (electric)	CNP 021	1				50%	90	87	-	-	-	87	-			-	-	-	-	-	-	-	77																	
Water pump (electric)	CNP 281	1				100%	88	88	-	-	-	88	-			-	-	-	-	-	-	-	78																	
C2. Landscaping/Transplanting - Sub-Area 3	1. Excavation and transplanting	1. Excavation and transplanting				Generator, standard	CNP 101	1	100%	108	108	111	111			Generator, DENOYO Model: DCA-4SLSK	EPD-10735	1	100%	87	87	-10	-10	-10	77															

Area	Construction Activity	PME Group [1]	Unmitigated Scenario							Mitigated Scenario																	
			Equipment	Reference Code [2]	No. of Item	% on-time in 30 min	PME SWL, dB(A)	Unmitigated Sub-total SWL, dB(A)	Total SWL, dB(A)	Max Activity SWL, dB(A)	Equipment	Reference Code [3][4][5]	No. of Item	% on-time in 30 min	QPME SWL, dB(A)	Mitigated Sub-total SWL, dB(A)	Enclosure, dB(A)	Barrier, dB(A)	Noise Insulating fabric, dB(A)	Total Reduction, dB(A)	Mitigated Sub-total SWL, dB(A)	Total SWL, dB(A)	Max Activity SWL, dB(A)				
C3. Landscaping/Transplanting - Sub-Area 4	1. Excavation and transplanting		Compactor, vibratory	CNP 050	2	50%	105	105	116	116	-	-	-	105	-10	-5	-5	100	-10	80	102	102					
			Generator, standard	CNP 101	2	100%	108	111			Generator, DENYO Model: DCA-45LSK	EPD-10735	2	100%									87	90	-10	-10	80
			Excavator/loader, wheeled/tracked	CNP 081	1	70%	112	110			Excavator, wheeled/tracked, YANMAR Model: VIO12-2A	EPD-10406	1	70%									87	85	-5	-5	80
			Crane, mobile/ barge mounted (diesel)	CNP 048	1	100%	112	112			Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	1	100%									91	91	-5	-5	86
			Lorry, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-033	1	100%	105	105			-	-	-	-									105	-5	-5	100	
			Compactor, vibratory	CNP 050	1	50%	105	102			-	-	-	-									102	-5	-5	97	
	2. Pavement Breaking			Generator, standard	CNP 101	1	100%	108	108	Generator, DENYO Model: DCA-45LSK	EPD-10735	1	100%	87	87	-10	-10	77									
				Generator, standard	CNP 101	2	100%	108	111	Generator, DENYO Model: DCA-45LSK	EPD-10735	2	100%	87	90	-10	-10	80									
				Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	100%	108	111	Soundless Chemical Demolition Agent	IN1	2	100%	90	93	0	93										
				Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109	Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	1	50%	91	88	-5	-5	83									
				Water pump (electric)	CNP 281	1	100%	88	88	-	-	-	-	88	-10	-10	78										
				Water pump (electric)	CNP 281	1	100%	88	88	-	-	-	-	88	-10	-10	78										
2. Site Clearance			Bulldozer	CNP 030	2	40%	115	114	Bulldozer, tracked SHANTUI, Model: DH13K	EPD-07836	2	40%	105	104	-5	-5	99										
			Crane, mobile/ barge mounted (diesel)	CNP 048	1	30%	112	107	Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	1	30%	91	86	-5	-5	81										
			Compactor, vibratory	CNP 050	1	40%	105	101	-	-	-	-	101	-5	-5	96											
			Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	2	40%	105	104	-	-	-	-	104	-5	-5	99											
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
C4. Site Formation	1. Pavement Breaking / Excavation		Excavator/loader, wheeled/tracked	CNP 081	3	80%	112	116	Excavator, wheeled/tracked, YANMAR Model: VIO12-2A	EPD-10406	3	80%	87	91	-5	-5	86										
			Generator, standard	CNP 101	1	100%	108	108	Generator, DENYO Model: DCA-45LSK	EPD-10735	1	100%	87	87	-10	-10	77										
			Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	2	100%	108	111	Soundless Chemical Demolition Agent	IN1	2	100%	90	93	0	93											
			Crane, mobile/ barge mounted (diesel)	CNP 048	1	30%	112	107	Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	1	30%	91	86	-5	-5	81										
			Water pump (electric)	CNP 281	1	30%	88	83	-	-	-	-	83	-10	-10	73											
			Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	3	50%	105	107	-	-	-	-	107	-5	-5	102											
	2. Compacting			Road roller	CNP 185	2	70%	108	109	Road roller, Kanto, Model: KV40DS	EPD-10665	2	70%	94	95	-5	-5	90									
				Compactor, vibratory	CNP 050	2	70%	105	106	-	-	-	-	106	-5	-5	101										
	C4. Infrastructure Works (Pipe Laying & Reinstatement, internal road)	1. Earthwork		Excavator/loader, wheeled/tracked	CNP 081	1	80%	112	111	Excavator, wheeled/tracked, YANMAR Model: VIO12-2A	EPD-10406	1	80%	87	86	-5	-5	81									
				Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	1	100%	111	111	Soundless Chemical Demolition Agent	IN1	1	100%	90	90	0	90										
				Compactor, vibratory	CNP 050	1	30%	105	100	-	-	-	-	100	-5	-5	95										
				Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	50%	105	102	-	-	-	-	102	-5	-5	97										
Water pump (electric)				CNP 281	1	100%	88	88	-	-	-	-	88	-10	-10	78											
Generator, standard				CNP 101	1	100%	108	108	Generator, DENYO Model: DCA-45LSK	EPD-10735	1	100%	87	87	-10	-10	77										
2. Pipe Laying				Generator, standard	CNP 101	1	100%	108	108	Generator, DENYO Model: DCA-45LSK	EPD-10735	1	100%	87	87	-10	-10	77									
				Concrete lorry mixer	CNP 044	1	50%	109	106	-	-	-	-	106	-5	-5	101										
				Air compressor, air flow <= 10m3/min	CNP 001	1	100%	100	100	Air Compressor, DENYO CO LTD / DENYO, Model: DAS180L B	EPD-10517	1	100%	94	94	-10	-10	84									
				Poker, vibratory, hand-held (electric)	OCUPME-019	1	50%	102	99	-	-	-	-	99	-5	-5	94										
				Saw, circular, wood	CNP 201	1	50%	108	105	-	-	-	-	105	-5	-5	100										
				Bar bender and cutter (electric)	CNP 021	1	50%	90	87	-	-	-	-	87	-10	-10	77										
3. Reinstatement (Asphalt)			Water pump (electric)	CNP 281	1	100%	88	88	-	-	-	-	88	-10	-10	78											
			Generator, standard	CNP 101	1	100%	108	108	Generator, DENYO Model: DCA-45LSK	EPD-10735	1	100%	87	87	-10	-10	77										
			Road roller	CNP 185	1	50%	108	105	Road roller, Kanto, Model: KV40DS	EPD-10665	1	50%	94	91	-5	-5	86										
			Asphalt paver	CNP 004	1	50%	109	106	-	-	-	-	106	-5	-5	101											
			Compactor, vibratory	CNP 050	1	50%	105	102	-	-	-	-	102	-5	-5	97											
			Concrete lorry mixer	CNP 044	1	50%	109	106	-	-	-	-	106	-5	-5	101											
4. Reinstatement (Concrete)			Compactor, vibratory	CNP 050	1	50%	105	102	-	-	-	-	102	-5	-5	97											
			Generator, standard	CNP 101	1	100%	108	108	Generator, DENYO Model: DCA-45LSK	EPD-10735	1	100%	87	87	-10	-10	77										
			Concrete lorry mixer	CNP 044	1	50%	109	106	-	-	-	-	106	-5	-5	101											
			-	-	-	-	-	-	-	-	-	-	-	-	-	-											
			-	-	-	-	-	-	-	-	-	-	-	-	-	-											
			-	-	-	-	-	-	-	-	-	-	-	-	-	-											
C4. Sub-structure and Superstructure Construction	1. Excavation		Lorry, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-033	2	50%	105	105	-	-	-	-	105	-5	-5	100											
			Welding Plant	EIA ref 1	1	60%	78	76	-	-	-	-	76	-5	-5	71											
			Saw, circular, wood	CNP 201	1	60%	108	106	-	-	-	-	106	-5	-5	101											
			Compactor, vibratory	CNP 050	1	60%	105	103	-	-	-	-	103	-5	-5	98											
			Generator, standard	CNP 101	2	100%	108	111	Generator, DENYO Model: DCA-45LSK	EPD-10735	2	100%	87	90	-10	-10	80										
			Excavator/loader, wheeled/tracked	CNP 081	2	60%	112	113	Excavator, wheeled/tracked, YANMAR Model: VIO12-2A	EPD-10406	2	60%	87	88	-5	-5	83										
	2. Substructure works			Water pump (electric)	CNP 281	2	50%	88	88	-	-	-	-	88	-10	-10	78										
				Generator, standard	CNP 101	2	100%	108	111	Generator, DENYO Model: DCA-45LSK	EPD-10735	2	100%	87	90	-10	-10	80									
				Concrete lorry mixer	CNP 044	2	30%	109	107	-	-	-	-	107	-5	-5	102										
				Air compressor, air flow <= 10m3/min	CNP 001	1	100%	100	100	Air Compressor, DENYO CO LTD / DENYO, Model: DAS180L B	EPD-10517	1	100%	94	94	-10	-10	84									
				Piling, diaphragm wall, bentonite filtering plant	CNP 162	1	50%	105	102	-	-	-	-	102	0	102											
				Concrete pump, stationary/ lorry mounted	CNP 047	2	50%	109	109	-	-	-	-	109	-10	-10	99										
	3. Superstructure Works			Crane, mobile/ barge mounted (diesel)	CNP 048	2	40%	112	111	Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	2	40%	91	90	-5	-5	85									
				Dump truck, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-038	1	50%	105	102	-	-	-	-	102	-5	-5	97										
				Crane, tower (electric)	CNP 049	3	50%	95	97	-	-	-	-	97	0	97											
				Bar bender and cutter (electric)	CNP 021	2	50%	90	90	-	-	-	-	90	-10	-10	80										
				Water pump (electric)	CNP 281	3	100%	88	93	-	-	-	-	93	-10	-10	83										
				Generator, standard	CNP 101	3	100%	108	113	Generator, DENYO Model: DCA-45LSK	EPD-10735	3	100%	87	92	-10	-10	82									
4. Reinstatement (Concrete)			Concrete lorry mixer	CNP 044	3	50%	109	111	-	-	-	-	111	-5	-5	106											
			Air compressor, air flow <= 10m3/min	CNP 001	3	70%	100	103	Air Compressor, DENYO CO LTD / DENYO, Model: DAS180L B	EPD-10517	3	70%	94	97	-10	-10	87										
			Concrete pump, stationary/ lorry mounted	CNP 047	2	60%	109	110	-	-	-	-	110	-10	-10	100											
			Compactor, vibratory	CNP 050	3	30%	105	105	-	-	-	-	105	-5	-5	100											
			Poker, vibratory, hand-held (electric)	OCUPME-019	3	30%	102	102	-	-	-	-	102	-5	-5	97											
			-	-	-	-	-	-	-	-	-	-	-	-	-	-											
D. Other Associated Road Works outside PDA	D1. Action improvement at Po Kin Road & Ping Kong Road and Utilities Works		Excavator/loader, wheeled/tracked	CNP 081	2	80%	112	114	Excavator, wheeled/tracked, YANMAR Model: VIO12-2A	EPD-10406	2	80%	87	89	-5	-5	84										
			Generator, standard	CNP 101	1	100%	108	108	Generator, DENYO Model: DCA-45LSK	EPD-10735	1	100%	87	87	-10	-10	77										
			Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	100%	108	108	Soundless Chemical Demolition Agent	IN1	1	100%	90	90	0	90											
			Crane, mobile/ barge mounted (diesel)	CNP 048	1	30%	112	107	Crane, mobile Maeda, Model: CC98SS-1	EPD-05797	1	30%	91	86	-5	-5	81										
			Water pump (electric)	CNP 281	1	100%	88	88	-	-	-	-	88	-10	-10	78											
			Lorry, 5.5 tonne < gross vehicle weight <= 38 tonne	OCUPME-033	1	100%	105	105	-	-	-	-	105	-5	-5	100											
	2. Road Paving (Asphalt)			Generator, standard	CNP 101	1	100%	108	108	Generator, DENYO Model: DCA-45LSK	EPD-10735	1	100%	87	87	-10	-10	77									
				Road roller	CNP 185	1	50%	108	105	Road roller, Kanto, Model: KV40DS	EPD-10665	1	50%	94	91	-5	-5	86									
				Asphalt paver	CNP 004	1	50%	109	106	-	-	-	-	106	-5	-5	101										
				Compactor, vibratory	CNP 050	1	50%	105	102	-	-	-	-	102	-5	-5	97										
				Generator, standard	CNP 101	1	100%	108	108	Generator, DENYO Model: DCA-45LSK	EPD-10735	1	100%	87	87	-10	-10	77									
				Concrete lorry mixer	CNP 044	1																					

