

Appendix 4.2A

**Unmitigated Powered
Mechanical Equipment**

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)
1	SCHEME H (HOI PO ROAD TO WEST KOWLOON HIGHWAY)					
	Stage 1 - Site Preparation and Utility Diversion					
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Lorry	CNP 141	112	1	50%	109
	Total SWL, dB(A)					112
	Stage 2 - Shifting of WKH and Lin Cheung Road					
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Lorry	CNP 141	112	2	50%	112
	Asphalt paver	CNP 004	109	1	50%	106
	Road roller	CNP 185	108	1	50%	105
	Power rammer (petrol)	CNP 169	108	2	50%	108
	Total SWL, dB(A)					116
	Stage 3 - Pilling					
	Pilling, large diameter bored, reverse circulation drill	CNP 166	100	2	70%	101
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	2	70%	96
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	2	70%	103
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Lorry	CNP 141	112	2	50%	112
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
	Concrete lorry mixer	CNP 044	109	3	50%	111
	Total SWL, dB(A)					117
	Stage 4 - Pile Caps					
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	60%	93
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	60%	100
	Concrete lorry mixer	CNP 044	109	3	50%	111
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Poker, vibratory, hand-held	CNP 170	113	4	50%	116
	Lorry	CNP 141	112	3	50%	114
	Bar bender and cutter (electric)	CNP 021	90	1	50%	87
	Total SWL, dB(A)					120
	Stage 5 - Piers					
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	60%	93
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	60%	100
	Concrete lorry mixer	CNP 044	109	3	50%	111
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Poker, vibratory, hand-held	CNP 170	113	3	50%	115
	Bar bender and cutter (electric)	CNP 021	90	1	50%	87
	Total SWL, dB(A)					117

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)
Stage 6 - Bridge Decks						
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	60%	93
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	60%	100
	Concrete lorry mixer	CNP 044	109	5	50%	113
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Poker, vibratory, hand-held	CNP 170	113	4	50%	116
	Lorry	CNP 141	112	1	50%	109
	Bar bender and cutter (electric)	CNP 021	90	1	50%	87
Total SWL, dB(A)						119
Stage 7 - Excavation for Retaining Walls						
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	90%	112
	Lorry	CNP 141	112	3	90%	116
Total SWL, dB(A)						118
Stage 8 - Construction of Retaining Walls						
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	50%	92
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	50%	99
	Concrete lorry mixer	CNP 044	109	3	50%	111
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Poker, vibratory, hand-held	CNP 170	113	3	50%	115
	Lorry	CNP 141	112	1	50%	109
	Bar bender and cutter (electric)	CNP 021	90	1	50%	87
Total SWL, dB(A)						118
Stage 9 - Backfilling Retaining Walls						
	Lorry	CNP 141	112	2	60%	113
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	60%	110
	Road roller	CNP 185	108	1	50%	105
	Power rammer (petrol)	CNP 169	108	1	50%	105
Total SWL, dB(A)						115
Stage 10 - Road Works						
	Lorry	CNP 141	112	2	50%	112
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	50%	99
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	50%	92
	Asphalt paver	CNP 004	109	1	50%	106
	Road roller	CNP 185	108	1	50%	105
	Power rammer (petrol)	CNP 169	108	2	50%	108
Total SWL, dB(A)						115

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)
2	SCHEME H (WIDENING OF ELEVATED NGA CHEUNG ROAD)					
	Stage 1 - Site Preparation and Utility Diversion					
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Lorry	CNP 141	112	2	50%	112
	Total SWL, dB(A)					114
	Stage 2 - Pilling					
	Pilling, large diameter bored, reverse circulation drill	CNP 166	100	2	70%	101
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	2	70%	96
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	2	70%	103
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Lorry	CNP 141	112	2	50%	112
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
	Concrete lorry mixer	CNP 044	109	3	50%	111
	Total SWL, dB(A)					117
	Stage 3 - Pile Caps					
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	60%	93
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	60%	100
	Concrete lorry mixer	CNP 044	109	3	50%	111
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Poker, vibratory, hand-held	CNP 170	113	4	50%	116
	Lorry	CNP 141	112	3	50%	114
	Bar bender and cutter (electric)	CNP 021	90	1	50%	87
	Total SWL, dB(A)					120
	Stage 4 - Piers					
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	60%	93
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	60%	100
	Concrete lorry mixer	CNP 044	109	3	50%	111
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Poker, vibratory, hand-held	CNP 170	113	3	50%	115
	Bar bender and cutter (electric)	CNP 021	90	1	50%	87
	Total SWL, dB(A)					117
	Stage 5 - Bridge Decks					
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	60%	93
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	60%	100
	Concrete lorry mixer	CNP 044	109	3	50%	111
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Poker, vibratory, hand-held	CNP 170	113	3	50%	115
	Bar bender and cutter (electric)	CNP 021	90	1	50%	87
	Total SWL, dB(A)					117

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)
	Stage 6 - Road Works					
	Lorry	CNP 141	112	2	50%	112
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	50%	99
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	50%	92
	Asphalt paver	CNP 004	109	1	50%	106
	Road roller	CNP 185	108	1	50%	105
	Power rammer (petrol)	CNP 169	108	2	50%	108
	Total SWL, dB(A)					115

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)
3	SCHEME I (U TURN TO WEST HARBOUR CROSSING)					
	Stage 1 - Site Preparation and Utility Diversion					
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Lorry	CNP 141	112	2	50%	112
	Total SWL, dB(A)					114
	Stage 2 - Shifting the Approach Roads and Close the Fast Lane of WHC					
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Lorry	CNP 141	112	2	50%	112
	Asphalt paver	CNP 004	109	1	50%	106
	Road roller	CNP 185	108	1	50%	105
	Power rammer (petrol)	CNP 169	108	2	50%	108
	Total SWL, dB(A)					116
	Stage 3 - Pilling					
	Pilling, large diameter bored, reverse circulation drill	CNP 166	100	1	70%	98
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	70%	93
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	70%	100
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Lorry	CNP 141	112	2	50%	112
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
	Concrete lorry mixer	CNP 044	109	2	50%	109
	Total SWL, dB(A)					117
	Stage 4 - Pile Caps					
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	60%	93
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	60%	100
	Concrete lorry mixer	CNP 044	109	2	50%	109
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Poker, vibratory, hand-held	CNP 170	113	3	50%	115
	Lorry	CNP 141	112	2	50%	112
	Bar bender and cutter (electric)	CNP 021	90	1	50%	87
	Total SWL, dB(A)					119
	Stage 5 - Piers					
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	60%	93
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	60%	100
	Concrete lorry mixer	CNP 044	109	3	50%	111
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Poker, vibratory, hand-held	CNP 170	113	3	50%	115
	Bar bender and cutter (electric)	CNP 021	90	1	50%	87
	Total SWL, dB(A)					117

Stage 6 - Bridge Decks					
Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	60%	93
Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	60%	100
Concrete lorry mixer	CNP 044	109	3	50%	111
Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
Poker, vibratory, hand-held	CNP 170	113	3	50%	115
Bar bender and cutter (electric)	CNP 021	90	1	50%	87
Total SWL, dB(A)					117
Stage 7 - Road Works					
Lorry	CNP 141	112	2	50%	112
Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	50%	99
Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	50%	92
Asphalt paver	CNP 004	109	1	50%	106
Road roller	CNP 185	108	1	50%	105
Power rammer (petrol)	CNP 169	108	2	50%	108
Total SWL, dB(A)					115

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)
4	SCHEME J (LIN CHEUNG ROAD TO NGA CHEUNG ROAD)					
	Stage 1 - Site Preparation and Utility Diversion					
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Lorry	CNP 141	112	2	50%	112
	Total SWL, dB(A)					114
	Stage 2 - Modification of Lin Cheung Road Slip Roads					
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Lorry	CNP 141	112	2	50%	112
	Asphalt paver	CNP 004	109	1	50%	106
	Road roller	CNP 185	108	1	50%	105
	Power rammer (petrol)	CNP 169	108	2	50%	108
	Total SWL, dB(A)					116
	Stage 3 - U Structures					
	Water pump (electric)	CNP 281	88	4	50%	91
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	60%	93
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	60%	100
	Concrete lorry mixer	CNP 044	109	2	50%	109
	Concrete pump, stationary/ lorry mounted	CNP 047	109	1	50%	106
	Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	50%	109
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	50%	109
	Poker, vibratory, hand-held	CNP 170	113	3	50%	115
	Lorry	CNP 141	112	2	50%	112
	Bar bender and cutter (electric)	CNP 021	90	1	50%	87
	Total SWL, dB(A)					119
	Stage 4 - Road Works					
	Lorry	CNP 141	112	2	50%	112
	Air compressor, air flow > 10m ³ /min and ≤ 30m ³ /min	CNP 002	102	1	50%	99
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	50%	92
	Asphalt paver	CNP 004	109	1	50%	106
	Road roller	CNP 185	108	1	50%	105
	Power rammer (petrol)	CNP 169	108	2	50%	108
	Total SWL, dB(A)					115

Item	PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)
5	SCHEME Q and Improvement Works at the Junction of CR/FS/JR					
	Stage 1 - Road Surface Removal					
	Excavator/ loader, wheeled/tracked	CNP 081	112	1	70%	110
	Generator, super silenced, 70 dB(A) at 7m	CNP 103	95	1	100%	95
	Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	108	1	50%	105
	Total SWL, dB(A)					112
	Stage 2 - Road Surface Cleaning					
	Road Sweeper	@	107	1	100%	107
	Total SWL, dB(A)					107
	Stage 3 - Road Surface Paving					
	Asphalt paver	CNP 004	109	1	100%	109
	Total SWL, dB(A)					109
	Stage 4 - Road Surface Compaction					
	Road roller	CNP 185	108	1	100%	108
	Total SWL, dB(A)					108

@ The SWL is referred to "Sound power levels of other commonly used PME" in EPD website