

Appendix 3.22

Powered Mechanical Equipment (PME) for the Different Construction Tasks

Project: KTD Construction Noise (Package A)

Title: Calculation Sound Power Level

Scenario:

Unmitigated ▼

Package A - Cruise Terminal Development and related advance works

A.1 Phase 1 Berth

(WorkSite ID = 101)

(1/6/09 - 1/6/10)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Grab dredger	2	CNP 063	112	100%	0	115
Derrick barge	2	CNP 061	104	100%	0	107
Tug boat	2	CNP 221	110	100%	0	113
Total SWL						118

A.2 Road TD3, TD4, L14 and minor roadworks in Kowloon Bay

(WorkSite ID = 102 - 103)

(3/1/11-28/2/12)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	2	CNP 067	117	65%	0	118
Excavator	2	CNP 081	112	65%	0	113
Grader	2	CNP 104	113	50%	0	113
Loader	2	CNP 081	112	50%	0	112
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	2	CNP 004	109	50%	0	109
Planer	2	CNP 184	111	65%	0	112
Total SWL						122

A.3 Modification off Taxiway Bridge

(WorkSite ID = 104)

(14/3/09-29/2/12)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	2	CNP 067	117	65%	0	118
Excavator	2	CNP 081	112	65%	0	113
Grader	2	CNP 104	113	50%	0	113
Loader	2	CNP 081	112	50%	0	112
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	2	CNP 004	109	50%	0	109
Planer	2	CNP 184	111	65%	0	112
Total SWL						122

A.4 Pumping Station PS6

(WorkSite ID = 105)

(16/3/09-29/2/12)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	1	CNP 048	94	65%	0	92
Concrete Pump	2	CNP 047	106	100%	0	109
Concrete Lorry Mixer	4	CNP 044	96	100%	0	102
Poker Vibrator	2	CNP 170	98	70%	0	99
Bar Bender	1	CNP 021	90	100%	0	90
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						111

A.5 Fireboat Berth

A.5a Dredging

(WorkSite ID = 106)

(16/3/09-29/2/12)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Grab Dredger	2	CNP 063	112	100%	0	115
Tug Boat	2	CNP 221	110	100%	0	113
Barges	4	CNP 061	104	100%	0	110
Total SWL						118

A.5b Seawall Construction

(WorkSite ID = 107)

(16/3/09-29/2/12)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Derrick Barge	2	CNP 061	104	100%	0	107
Tug Boat	1	CNP 221	110	100%	0	110
Crane	2	CNP 048	112	65%	0	113
Barges	2	CNP 061	104	100%	0	107
Total SWL						116

A.5c Filling behind seawall

(WorkSite ID = 108)

(16/3/09-29/2/12)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Derrick Barge	2	CNP 061	104	100%	0	107
Barges	2	CNP 061	104	100%	0	107
Tug Boat	2	CNP 221	110	100%	0	113
Bulldozer	2	CNP 030	115	100%	0	118
Total SWL						120

Project: KTD Construction Noise (Package A)

Title: Calculation Sound Power Level

Scenario: Unmitigated 

(WorkSite ID = 109 - 110)							(16/3/09 - 2/6/11)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	1	CNP 048	112	65%	0	110	
Breaker, excavator mounted	1	CNP 027	122	80%	0	121	
Excavator	1	CNP 081	112	65%	0	110	
Dump Truck	2	CNP 067	117	65%	0	118	
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109	
Poker Vibrator	2	CNP 170	113	70%	0	114	
Compactor, vibratory	1	CNP 050	105	70%	0	103	
Air compressor	1	CNP 002	102	100%	0	102	
Total SWL						124	

(WorkSite ID = 111)							(13/3/12 - 11/3/13)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Grab dredger	2	CNP 063	112	100%	0	115	
Derrick barge	2	CNP 061	104	100%	0	107	
Tug boat	2	CNP 221	110	100%	0	113	
Total SWL						118	

(WorkSite ID = 112 - 113)							(15/5/08 - 31/3/10)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Backhoe	2	CNP 081	112	100%	0	115	
Breaker, excavator mounted	2	CNP 027	122	80%	0	124	
Hand-held Breaker	2	CNP 024	108	80%	0	110	
Dump Truck	4	CNP 067	117	65%	0	121	
Crane	1	CNP 048	112	65%	0	110	
Total SWL						126	

(WorkSite ID = 112 - 114)							(15/3/09-31/12/10)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Backhoe	1	CNP 081	112	100%	0	112	
Breaker, excavator mounted	1	CNP 027	122	80%	0	121	
Hand-held Breaker	1	CNP 024	108	80%	0	107	
Dump Truck	1	CNP 067	117	65%	0	115	
Crane	1	CNP 048	112	65%	0	110	
Total SWL						123	

(WorkSite ID = 115)							(15/4/15-31/12/16)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	1	CNP 048	112	65%	0	110	
Concrete Pump	2	CNP 047	109	100%	0	112	
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115	
Poker Vibrator	2	CNP 170	113	70%	0	114	
Bar Bender	1	CNP 021	90	100%	0	90	
Air Compressor	2	CNP 002	102	100%	0	105	
Total SWL						120	

Project: KTD Construction Noise (Package B)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

Package B - Infrastructure works at North Apron, Phase 1 - Housing Sites and Government Offices

1 Infrastructure works to serve Key Development in 2012

B.1 Construction of Road D1 (part) (WorkSite ID = 201)						(30/9/09 - 1/4/10)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(Group 1 PME)						
Dump Truck	2	CNP 067	117	65%	0	118
Excavator	2	CNP 081	112	65%	0	113
(Group 2 PME)						
Grader	2	CNP 104	113	50%	0	113
Loader	2	CNP 081	112	50%	0	112
(Group 3 PME)						
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	2	CNP 004	109	50%	0	109
Planer	2	CNP 184	111	65%	0	112
Max. Total SWL						119

B.2 Local Roads L2, L3, L15 and associated footpaths at North Apron (WorkSite ID = 202 - 204)						(2/5/11 - 28/9/12)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(Group 1 PME)						
Dump Truck	2	CNP 067	117	65%	0	118
Excavator	2	CNP 081	112	65%	0	113
(Group 2 PME)						
Grader	2	CNP 104	113	50%	0	113
Loader	2	CNP 081	112	50%	0	112
(Group 3 PME)						
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	2	CNP 004	109	50%	0	109
Planer	2	CNP 184	111	65%	0	112
Max. Total SWL						119

B.3 Local Roads L4 (WorkSite ID = 205)						(2/5/11 - 30/4/13)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(Group 1 PME)						
Dump Truck	1	CNP 067	117	65%	0	115
Excavator	1	CNP 081	112	65%	0	110
(Group 2 PME)						
Grader	1	CNP 104	113	50%	0	110
Loader	1	CNP 081	112	50%	0	109
(Group 3 PME)						
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	1	CNP 004	109	50%	0	106
Planer	1	CNP 184	111	65%	0	109
Max. Total SWL						116

B.4 Construction of Subway SB-06 (WorkSite ID = 206 - 207)						(28/6/11 - 28/9/12)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	1	CNP 067	117	65%	0	115
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109
Excavator	1	CNP 081	112	65%	0	110
Poker Vibrator	2	CNP 170	113	70%	0	114
Bulldozer	1	CNP 030	115	100%	0	115
Roller	1	CNP 186	108	100%	0	108
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						121

B.5 Construction of Subway SB-07 (WorkSite ID = 208 - 209)						(28/6/11 - 28/9/12)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	1	CNP 067	117	65%	0	115
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109
Excavator	1	CNP 081	112	65%	0	110
Poker Vibrator	2	CNP 170	113	70%	0	114
Bulldozer	1	CNP 030	115	100%	0	115
Roller	1	CNP 186	108	100%	0	108
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						121

Project: KTD Construction Noise (Package B)

Title: Calculation Sound Power Level

Scenario: Unmitigated 

B.6 Construction of Subway SB-08		(WorkSite ID = 210 - 211)				(1/7/09 - 30/4/13)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	1	CNP 067	117	65%	0	115
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109
Excavator	1	CNP 081	112	65%	0	110
Poker Vibrator	2	CNP 170	113	70%	0	114
Bulldozer	1	CNP 030	115	100%	0	115
Roller	1	CNP 186	108	100%	0	108
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						121

B.7 Construction of Subway SB-09		(WorkSite ID = 212 - 213)				(28/9/11 - 28/9/12)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	1	CNP 067	117	65%	0	115
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109
Excavator	1	CNP 081	112	65%	0	110
Poker Vibrator	2	CNP 170	113	70%	0	114
Bulldozer	1	CNP 030	115	100%	0	115
Roller	1	CNP 186	108	100%	0	108
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						121

B.8 Construction of Box Culvert (2.5m x 2.5m)		(WorkSite ID = 214)				(1/7/09 - 3/1/12)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	2	CNP 067	117	65%	0	118
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109
Excavator	1	CNP 081	112	65%	0	110
Poker Vibrator	2	CNP 170	113	70%	0	114
Bulldozer	1	CNP 030	115	100%	0	115
Roller	1	CNP 186	108	100%	0	108
Bar Bender	1	CNP 021	90	100%	0	90
Air Compressor	1	CNP 002	102	100%	0	102
Total SWL						122

B.9 Construction of Box Culvert (3m x 2.8m)		(WorkSite ID = 215)				(1/7/09 - 3/1/12)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	2	CNP 067	117	65%	0	118
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109
Excavator	1	CNP 081	112	65%	0	110
Poker Vibrator	2	CNP 170	113	70%	0	114
Bulldozer	1	CNP 030	115	100%	0	115
Roller	1	CNP 186	108	100%	0	108
Bar Bender	1	CNP 021	90	100%	0	90
Air Compressor	1	CNP 002	102	100%	0	102
Total SWL						122

B.10 Construction of Pumping Station PS1A		(WorkSite ID = 216)				(3/7/12 - 30/6/13)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	1	CNP 048	94	65%	0	92
Concrete Pump	2	CNP 047	106	100%	0	109
Concrete Lorry Mixer	4	CNP 044	96	100%	0	102
Poker Vibrator	2	CNP 170	98	70%	0	99
Bar Bender	1	CNP 021	90	100%	0	90
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						111

B.10b Rising mains (PS1A)		(WorkSite ID = 217)				(2/7/13 - 31/12/15)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	1	CNP 048	94	65%	0	92
Breaker, excavator mounted	1	CNP 027	110	80%	0	109
Excavator	1	CNP 081	106	65%	0	104
Dump Truck	2	CNP 067	104	65%	0	105
Concrete Lorry Mixer	1	CNP 044	96	100%	0	96
Poker Vibrator	2	CNP 170	98	70%	0	99
Compactor, vibratory	1	CNP 050	105	70%	0	103
Air compressor	1	CNP 002	102	100%	0	102
Total SWL						113

Project: KTD Construction Noise (Package B)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

(WorkSite ID = 218 - 219)							(30/6/09 - 4/1/12)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction		Sub-total SWL
Crane	1	CNP 048	112	65%	0		110
Breaker, excavator mounted	1	CNP 027	122	80%	0		121
Excavator	1	CNP 081	112	65%	0		110
Dump Truck	2	CNP 067	117	65%	0		118
Concrete Lorry Mixer	1	CNP 044	109	100%	0		109
Poker Vibrator	2	CNP 170	113	70%	0		114
Compactor, vibratory	1	CNP 050	105	70%	0		103
Air compressor	1	CNP 002	102	100%	0		102
Total SWL							124

(WorkSite ID = 220)							(27/6/13 - 31/12/15)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction		Sub-total SWL
(Group 1 PME)							
Dump Truck	2	CNP 067	117	65%	0		118
Excavator	2	CNP 081	112	65%	0		113
(Group 2 PME)							
Grader	2	CNP 104	113	50%	0		113
Loader	2	CNP 081	112	50%	0		112
(Group 3 PME)							
Vibratory Roller	1	CNP 186	108	80%	0		107
Road Roller	1	CNP 185	108	80%	0		107
Asphalt Paver	2	CNP 004	109	50%	0		109
Planer	2	CNP 184	111	65%	0		112
Max. Total SWL							119

(WorkSite ID = 221)							(27/6/14 - 31/12/15)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction		Sub-total SWL
(Group 1 PME)							
Dump Truck	2	CNP 067	117	65%	0		118
Excavator	2	CNP 081	112	65%	0		113
(Group 2 PME)							
Grader	2	CNP 104	113	50%	0		113
Loader	2	CNP 081	112	50%	0		112
(Group 3 PME)							
Vibratory Roller	1	CNP 186	108	80%	0		107
Road Roller	1	CNP 185	108	80%	0		107
Asphalt Paver	2	CNP 004	109	50%	0		109
Planer	2	CNP 184	111	65%	0		112
Max. Total SWL							119

(WorkSite ID = 222 - 223)							(3/7/12 - 31/12/15)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction		Sub-total SWL
(Group 1 PME)							
Dump Truck	2	CNP 067	117	65%	0		118
Excavator	2	CNP 081	112	65%	0		113
(Group 2 PME)							
Grader	2	CNP 104	113	50%	0		113
Loader	2	CNP 081	112	50%	0		112
(Group 3 PME)							
Vibratory Roller	1	CNP 186	108	80%	0		107
Road Roller	1	CNP 185	108	80%	0		107
Asphalt Paver	2	CNP 004	109	50%	0		109
Planer	2	CNP 184	111	65%	0		112
Max. Total SWL							119

(WorkSite ID = 224 - 226)							(27/6/14 - 31/12/15)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction		Sub-total SWL
(Group 1 PME)							
Dump Truck	2	CNP 067	117	65%	0		118
Excavator	2	CNP 081	112	65%	0		113
(Group 2 PME)							
Grader	2	CNP 104	113	50%	0		113
Loader	2	CNP 081	112	50%	0		112
(Group 3 PME)							
Vibratory Roller	1	CNP 186	108	80%	0		107
Road Roller	1	CNP 185	108	80%	0		107
Asphalt Paver	2	CNP 004	109	50%	0		109
Planer	2	CNP 184	111	65%	0		112
Max. Total SWL							119

Project: KTD Construction Noise (Package B)

Title: Calculation Sound Power Level

Scenario: Unmitigated 

B.16 Construction of Road L4 (Part) & L5		(WorkSite ID = 227)			(27/6/14 - 31/12/15)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(Group 1 PME)						
Dump Truck	2	CNP 067	117	65%	0	118
Excavator	2	CNP 081	112	65%	0	113
(Group 2 PME)						
Grader	2	CNP 104	113	50%	0	113
Loader	2	CNP 081	112	50%	0	112
(Group 3 PME)						
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	2	CNP 004	109	50%	0	109
Planer	2	CNP 184	111	65%	0	112
Max. Total SWL						119

B.17 Construction of Slip Road S7 & S8 of CKR/T2 Interchange		(WorkSite ID = 228)			(27/6/14 - 31/12/15)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(Group 1 PME)						
Dump Truck	2	CNP 067	117	65%	0	118
Excavator	2	CNP 081	112	65%	0	113
(Group 2 PME)						
Grader	2	CNP 104	113	50%	0	113
Loader	2	CNP 081	112	50%	0	112
(Group 3 PME)						
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	2	CNP 004	109	50%	0	109
Planer	2	CNP 184	111	65%	0	112
Max. Total SWL						119

B.18 Construction of Footbridge at Rhythm Garden (LW-04)		(WorkSite ID = 229 - 230)			(3/7/12 - 31/12/14)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Pilling Rig	2	CNP 167	114	65%	0	115
Generator	2	CNP 102	100	100%	0	103
Water Pump	2	CNP 282	103	100%	0	106
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						121

B.18b Superstructure works (LW-04)		(WorkSite ID = 231 - 232)			(1/1/15-31/12/15)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						119

B.19 Construction of Subway SB-02		(WorkSite ID = 233 - 234)			(3/7/12 - 31/12/15)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	1	CNP 067	117	65%	0	115
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109
Excavator	1	CNP 081	112	65%	0	110
Poker Vibrator	2	CNP 170	113	70%	0	114
Bulldozer	1	CNP 030	115	100%	0	115
Roller	1	CNP 186	108	100%	0	108
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						121

Project: KTD Construction Noise (Package B)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

B.20 Construction of Box Culvert (5m x 2.5m)		(WorkSite ID = 235 - 237)				(3/7/12 - 31/12/14)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	2	CNP 067	117	65%	0	118
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109
Excavator	1	CNP 081	112	65%	0	110
Poker Vibrator	2	CNP 170	113	70%	0	114
Bulldozer	1	CNP 030	115	100%	0	115
Roller	1	CNP 186	108	100%	0	108
Bar Bender	1	CNP 021	90	100%	0	90
Air Compressor	1	CNP 002	102	100%	0	102
Total SWL						122

B.21 Drainage, Sewerage & Watermain		(WorkSite ID = 238 - 239)				(3/7/12 - 1/8/14)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	1	CNP 048	112	65%	0	110
Breaker, excavator mounted	1	CNP 027	122	80%	0	121
Excavator	1	CNP 081	112	65%	0	110
Dump Truck	2	CNP 067	117	65%	0	118
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109
Poker Vibrator	2	CNP 170	113	70%	0	114
Compactor, vibratory	1	CNP 050	105	70%	0	103
Air compressor	1	CNP 002	102	100%	0	102
Total SWL						124

B.22 Upgrading of Pumping Station PS1		(WorkSite ID = 240)				(4/7/12 - 1/1/16)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	1	CNP 048	94	65%	0	92
Concrete Pump	2	CNP 047	106	100%	0	109
Concrete Lorry Mixer	4	CNP 044	96	100%	0	102
Poker Vibrator	2	CNP 170	98	70%	0	99
Bar Bender	1	CNP 021	90	100%	0	90
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						111

B.23 Construct Footbridge (FB-01)		(WorkSite ID = 241)				(1/7/09 - 30/9/11)
B.23a Construction Bridge Foundation						
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Piling Rig	2	CNP 167	114	65%	0	115
Generator	2	CNP 102	100	100%	0	103
Water Pump	2	CNP 282	103	100%	0	106
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						121

B.23b Tower/ Bridge Deck						(1/10/11 - 1/10/12)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						119

Project: KTD Construction Noise (Package C)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

Package C - Kai Tak Approach Channel improvement works

C.1 Bio-remediation treatment of sediment at Kai Tak Approach Channel				(WorkSite ID = 301)		(2/9/10 - 30/9/14)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Grab Dredger	2	CNP 063	112	100%	0	115	
Tug Boat	2	CNP 221	110	100%	0	113	
Barges	4	CNP 061	104	100%	0	110	
Crane	2	CNP 048	112	65%	0	113	
Total SWL						119	

C.2 Improvement work/sediment treatment for Kwun Tong Typhoon Shelter				(WorkSite ID = 302)		(2/9/10 - 30/9/14)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Grab Dredger	2	CNP 063	112	100%	0	115	
Tug Boat	2	CNP 221	110	100%	0	113	
Barges	4	CNP 061	104	100%	0	110	
Crane	2	CNP 048	112	65%	0	113	
Total SWL						119	

Project: KTD Construction Noise (Package D)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

Package D - Kai Tak Nullah modification works

D.1 Rebuild Kai Tak Nullah (Section 1) (WorkSite ID = 401) (2/9/10 - 31/8/11)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	4	CNP 067	117	65%	0	121
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Excavator	2	CNP 081	112	65%	0	113
Poker Vibrator	4	CNP 170	113	70%	0	117
Bulldozer	2	CNP 030	115	100%	0	118
Roller	2	CNP 186	108	100%	0	111
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						125

D.1 Rebuild Kai Tak Nullah (Section 2) (WorkSite ID = 402) (1/9/11 - 31/8/12)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	4	CNP 067	117	65%	0	121
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Excavator	2	CNP 081	112	65%	0	113
Poker Vibrator	4	CNP 170	113	70%	0	117
Bulldozer	2	CNP 030	115	100%	0	118
Roller	2	CNP 186	108	100%	0	111
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						125

D.1 Rebuild Kai Tak Nullah (Section 3) (WorkSite ID = 403) (1/9/12 - 31/8/13)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	4	CNP 067	117	65%	0	121
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Excavator	2	CNP 081	112	65%	0	113
Poker Vibrator	4	CNP 170	113	70%	0	117
Bulldozer	2	CNP 030	115	100%	0	118
Roller	2	CNP 186	108	100%	0	111
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						125

D.1 Rebuild Kai Tak Nullah (Section 4) (WorkSite ID = 404) (1/9/13 - 30/9/14)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	4	CNP 067	117	65%	0	121
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Excavator	2	CNP 081	112	65%	0	113
Poker Vibrator	4	CNP 170	113	70%	0	117
Bulldozer	2	CNP 030	115	100%	0	118
Roller	2	CNP 186	108	100%	0	111
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						125

D.2 Construction of DSD's Desilting Compounds at Kai Tak Nullah (WorkSite ID = 405) (1/9/13 - 30/9/14)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	4	CNP 047	109	100%	0	115
Concrete Lorry Mixer	8	CNP 044	109	100%	0	118
Poker Vibrator	4	CNP 170	113	70%	0	117
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						123

Project: KTD Construction Noise (Package E)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

Package E - Infrastructure works at runway and Metro Park

E.1 600m Wide Opening in Runway

E.1a Demolition of Structure

		(WorkSite ID = 501)					(2/9/10 - 30/12/11)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Breaker	2	CNP 027	122	80%	0	124	
Excavator	2	CNP 081	112	65%	0	113	
Bulldozer	2	CNP 030	115	100%	0	118	
Hand-held Breaker	6	CNP 024	108	80%	0	115	
Dump Truck	4	CNP 067	117	65%	0	121	
Barges	2	CNP 061	104	100%	0	107	
Crane	1	CNP 048	112	65%	0	110	
Grab Dredger	2	CNP 063	112	100%	0	115	
Tug Boat	2	CNP 221	110	100%	0	113	
Barges	4	CNP 061	104	100%	0	110	
Total SWL						128	

E.1b Construction of piled deck to cover up the gap for Metro Park

		(WorkSite ID = 502)					(2/9/11 - 30/9/14)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Piling Rig	1	CNP 167	114	65%	0	112	
Generator	1	CNP 102	100	100%	0	100	
Water Pump	1	CNP 282	103	100%	0	103	
Crane	1	CNP 048	112	65%	0	110	
Concrete Pump	2	CNP 047	109	100%	0	112	
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115	
Barges	1	CNP 061	104	100%	0	104	
Poker Vibrator	2	CNP 170	113	70%	0	114	
Bar Bender	1	CNP 021	90	100%	0	90	
Air Compressor	2	CNP 002	102	100%	0	105	
Total SWL						120	

E.2 Construction of Road D3 (near at Metro Park)

		(WorkSite ID = 503 - 504)					(1/1/14 - 31/12/15)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Dump Truck	2	CNP 067	117	65%	0	118	
Excavator	2	CNP 081	112	65%	0	113	
Grader	2	CNP 104	113	50%	0	113	
Loader	2	CNP 081	112	50%	0	112	
Vibratory Roller	1	CNP 186	108	80%	0	107	
Road Roller	1	CNP 185	108	80%	0	107	
Asphalt Paver	2	CNP 004	109	50%	0	109	
Planer	2	CNP 184	111	65%	0	112	
Total SWL						122	

E.3 Construction of Road L12 & L13

		(WorkSite ID = 505)					(1/1/14 - 31/12/15)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Dump Truck	2	CNP 067	117	65%	0	118	
Excavator	2	CNP 081	112	65%	0	113	
Grader	2	CNP 104	113	50%	0	113	
Loader	2	CNP 081	112	50%	0	112	
Vibratory Roller	1	CNP 186	108	80%	0	107	
Road Roller	1	CNP 185	108	80%	0	107	
Asphalt Paver	2	CNP 004	109	50%	0	109	
Planer	2	CNP 184	111	65%	0	112	
Total SWL						122	

E.4 Construct Footbridge "A" (FB-03)

E.4a Construction Bridge Foundation

		(WorkSite ID = 506 - 507)					(15/6/12 - 31/12/14)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Piling Rig	2	CNP 167	114	65%	0	115	
Generator	2	CNP 102	100	100%	0	103	
Water Pump	2	CNP 282	103	100%	0	106	
Crane	2	CNP 048	112	65%	0	113	
Concrete Pump	4	CNP 047	109	100%	0	115	
Concrete Lorry Mixer	8	CNP 044	109	100%	0	118	
Poker Vibrator	4	CNP 170	113	70%	0	117	
Bar Bender	2	CNP 021	90	100%	0	93	
Air Compressor	4	CNP 002	102	100%	0	108	
Total SWL						123	

Project: KTD Construction Noise (Package E)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

E.4b Tower/ Bridge Deck / Cable Stays Construction

		(WorkSite ID = 508 - 509)		(1/1/15 - 31/12/15)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Sub-total SWL
Crane	2	CNP 048	112	65%	113
Concrete Pump	4	CNP 047	109	100%	115
Concrete Lorry Mixer	8	CNP 044	109	100%	118
Poker Vibrator	4	CNP 170	113	70%	117
Bar Bender	2	CNP 021	90	100%	93
Air Compressor	4	CNP 002	102	100%	108
Total SWL					123

E.5 Construct Footbridge "C" (FB-04)

E.5a Construction Bridge Foundation

		(WorkSite ID = 510 - 511)		(15/6/12 - 31/12/14)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Sub-total SWL
Pilling Rig	2	CNP 167	114	65%	115
Generator	2	CNP 102	100	100%	103
Water Pump	2	CNP 282	103	100%	106
Crane	2	CNP 048	112	65%	113
Concrete Pump	4	CNP 047	109	100%	115
Concrete Lorry Mixer	8	CNP 044	109	100%	118
Poker Vibrator	4	CNP 170	113	70%	117
Bar Bender	2	CNP 021	90	100%	93
Air Compressor	4	CNP 002	102	100%	108
Total SWL					123

E.5b Tower/ Bridge Deck / Cable Stays Construction

		(WorkSite ID = 512 - 513)		(1/1/15 - 31/12/15)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Sub-total SWL
Crane	2	CNP 048	112	65%	113
Concrete Pump	4	CNP 047	109	100%	115
Concrete Lorry Mixer	8	CNP 044	109	100%	118
Poker Vibrator	4	CNP 170	113	70%	117
Bar Bender	2	CNP 021	90	100%	93
Air Compressor	4	CNP 002	102	100%	108
Total SWL					123

E.6 Drainage, Sewerage & Watermain

		(WorkSite ID = 514 - 516)		(15/6/12 - 31/12/13)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Sub-total SWL
Crane	1	CNP 048	112	65%	110
Breaker, excavator mounted	1	CNP 027	122	80%	121
Excavator	1	CNP 081	112	65%	110
Dump Truck	2	CNP 067	117	65%	118
Concrete Lorry Mixer	1	CNP 044	109	100%	109
Poker Vibrator	2	CNP 170	113	70%	114
Compactor, vibratory	1	CNP 050	105	70%	103
Air compressor	1	CNP 002	102	100%	102
Total SWL					124

E.7 Conversion of TD3 into D3 with Street Lighting/ Landscaping Works(include Road L14)

		(WorkSite ID = 517 - 522)		(15/6/12 - 31/12/15)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Sub-total SWL
Dump Truck	2	CNP 067	117	65%	118
Excavator	2	CNP 081	112	65%	113
Grader	2	CNP 104	113	50%	113
Loader	2	CNP 081	112	50%	112
Vibratory Roller	1	CNP 186	108	80%	107
Road Roller	1	CNP 185	108	80%	107
Asphalt Paver	2	CNP 004	109	50%	109
Planer	2	CNP 184	111	65%	112
Total SWL					122

E.8 Conversion of TD4 into D4

		(WorkSite ID = 523)		(31/12/14-31/12/15)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Sub-total SWL
Dump Truck	2	CNP 067	117	65%	118
Excavator	2	CNP 081	112	65%	113
Grader	2	CNP 104	113	50%	113
Loader	2	CNP 081	112	50%	112
Vibratory Roller	1	CNP 186	108	80%	107
Road Roller	1	CNP 185	108	80%	107
Asphalt Paver	2	CNP 004	109	50%	109
Planer	2	CNP 184	111	65%	112
Total SWL					122

Project: KTD Construction Noise (Package E)

Title: Calculation Sound Power Level

Scenario: Unmitigated 

E.9 Elevated Landscape Deck above Road D3

E.9a Substructure works

(WorkSite ID = 524 - 528)

(15/6/12-31/12/15)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Pilling Rig	2	CNP 167	114	65%	0	115
Generator	2	CNP 102	100	100%	0	103
Water Pump	2	CNP 282	103	100%	0	106
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						122

E.9b Superstructure works

(WorkSite ID = 529 - 533)

(15/6/12-31/12/15)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						120

Project: KTD Construction Noise (Package F)

Title: Calculation Sound Power Level

Scenario: Unmitigated 

Package F - Infrastructure works at North Apron, Phase 2

F.1 Infrastructure works to serve Key Development before 2016 (Phase 1)

F.1 Construction of Road D1, L7, L8, L9 & L16 (WorkSite ID = 601) (2/7/14 - 31/12/15)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(Group 1 PME)						
Dump Truck	2	CNP 067	117	65%	0	118
Excavator	2	CNP 081	112	65%	0	113
(Group 2 PME)						
Grader	2	CNP 104	113	50%	0	113
Loader	2	CNP 081	112	50%	0	112
(Group 3 PME)						
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	2	CNP 004	109	50%	0	109
Planer	2	CNP 184	111	65%	0	112
Max. Total SWL						119

F.2 Construction of Landscape Walkway LW-02

F.2a Substructure works

(WorkSite ID = 602 - 603)

(1/7/12 - 31/12/14)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Pilling Rig	2	CNP 167	114	65%	0	115
Generator	2	CNP 102	100	100%	0	103
Water Pump	2	CNP 282	103	100%	0	106
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						122

F.2b Superstructure works

(WorkSite ID = 604 - 605)

(1/1/15 - 31/12/15)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						120

F.3 Construction of Landscape Walkway LW-03

F.3a Substructure works

(WorkSite ID = 606)

(3/7/12 - 31/12/14)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Pilling Rig	2	CNP 167	114	65%	0	115
Generator	2	CNP 102	100	100%	0	103
Water Pump	2	CNP 282	103	100%	0	106
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						122

F.3b Superstructure works

(WorkSite ID = 607)

(1/1/15 - 31/12/15)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						120

Project: KTD Construction Noise (Package F)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

F.4 Underground Shopping Street (SB-01) (WorkSite ID = 608 - 609) (3/7/12 - 31/12/14)

F.4a Worksite inside KTD

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	4	CNP 067	117	65%	0	121
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Excavator	2	CNP 081	112	65%	0	113
Poker Vibrator	4	CNP 170	113	70%	0	117
Bulldozer	2	CNP 030	115	100%	0	118
Roller	2	CNP 186	108	100%	0	111
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						125

F.4b Worksite outside KTD

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(2/1/15 - 31/12/15)						
Group 1						
Lorry	1	CNP 141	112	65%	0	110
Bar Bender	1	CNP 021	90	100%	0	90
Air Compressor	1	CNP 002	102	100%	0	102
Mini Excavator	1	BS Table C3 REF 108	97	100%	0	97
Total SWL						111
Group 2						
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109
Poker Vibrator	1	CNP 170	113	70%	0	111
Total SWL						113
Group 3						
Roller	1	CNP 186	108	100%	0	108
Total SWL						108
Max. SWL						113

F.5 Enhanced Existing Subway (SB-04)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(WorkSite ID = 610 - 611) (3/7/12 - 31/12/15)						
Group 1						
Lorry	1	CNP 141	112	65%	0	110
Bulldozer	1	CNP 030	115	100%	0	115
Mini Excavator	1	BS Table C3 REF 108	97	100%	0	97
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						117
Group 2						
Concrete Lorry Mixer	1	BS Table C6 REF 33	96	100%	0	96
Poker Vibrator	2	BS Table No. C6 REF 40	98	70%	0	99
Total SWL						101
Group 3						
Roller	1	CNP 186	108	100%	0	108
Total SWL						108
Max. SWL						117

F.6 Enhanced Existing Subway (SB-05)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(WorkSite ID = 612 - 613) (3/7/12 - 31/12/15)						
Dump Truck	1	CNP 067	117	65%	0	115
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109
Excavator	1	CNP 081	112	65%	0	110
Poker Vibrator	2	CNP 170	113	70%	0	114
Bulldozer	1	CNP 030	115	100%	0	115
Roller	1	CNP 186	108	100%	0	108
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						121

Project: KTD Construction Noise (Package F)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

F.7 Construction of Drainage Culvert (2.5x2.5m) (WorkSite ID = 614)						(3/7/12 - 31/12/14)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	4	CNP 067	117	65%	0	121
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Excavator	2	CNP 081	112	65%	0	113
Poker Vibrator	4	CNP 170	113	70%	0	117
Bulldozer	2	CNP 030	115	100%	0	118
Roller	2	CNP 186	108	100%	0	111
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						125

F.8 Construction of Drainage Culvert (4x3m) (WorkSite ID = 615 - 618)						(3/7/12 - 31/12/14)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	4	CNP 067	117	65%	0	121
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Excavator	2	CNP 081	112	65%	0	113
Poker Vibrator	4	CNP 170	113	70%	0	117
Bulldozer	2	CNP 030	115	100%	0	118
Roller	2	CNP 186	108	100%	0	111
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						125

F.9 Construction of Drainage Culvert (5x4m) (WorkSite ID = 619)						(3/7/12 - 31/12/14)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	4	CNP 067	117	65%	0	121
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Excavator	2	CNP 081	112	65%	0	113
Poker Vibrator	4	CNP 170	113	70%	0	117
Bulldozer	2	CNP 030	115	100%	0	118
Roller	2	CNP 186	108	100%	0	111
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	2	CNP 002	102	100%	0	105
Total SWL						125

F.10 Drainage, Sewerage & Watermain (WorkSite ID = 620)						(3/7/12 - 1/7/14)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	1	CNP 048	112	65%	0	110
Breaker, excavator mounted	1	CNP 027	122	80%	0	121
Excavator	1	CNP 081	112	65%	0	110
Dump Truck	2	CNP 067	117	65%	0	118
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109
Poker Vibrator	2	CNP 170	113	70%	0	114
Compactor, vibratory	1	CNP 050	105	70%	0	103
Air compressor	1	CNP 002	102	100%	0	102
Total SWL						124

2 Infrastructure Works to serve Key Development before 2016 (Phase 2)						
F.11 Construction of Road D2, D3 & L6 and Sung Wong Toi Road Footpath (WorkSite ID = 621)						(2/1/15 - 31/12/16)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(Group 1 PME)						
Dump Truck	2	CNP 067	117	65%	0	118
Excavator	2	CNP 081	112	65%	0	113
(Group 2 PME)						
Grader	2	CNP 104	113	50%	0	113
Loader	2	CNP 081	112	50%	0	112
(Group 3 PME)						
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	2	CNP 004	109	50%	0	109
Planer	2	CNP 184	111	65%	0	112
Max. Total SWL						119

Project: KTD Construction Noise (Package F)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

F.12 Construction of Landscape Elevated Walkway (Road D2)

F.12a Substructure works (WorkSite ID = 622)						(2/1/15 - 31/12/16)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Pilling Rig	2	CNP 167	114	65%	0	115
Generator	2	CNP 102	100	100%	0	103
Water Pump	2	CNP 282	103	100%	0	106
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						122

F.12b Superstructure works (WorkSite ID = 623)						(2/1/15 - 31/12/16)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						120

F.13 Construction of Local Road L17 (WorkSite ID = 624)						(2/1/15 - 31/12/16)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(Group 1 PME)						
Dump Truck	1	CNP 067	117	65%	0	115
Excavator	1	CNP 081	112	65%	0	110
(Group 2 PME)						
Grader	1	CNP 104	113	50%	0	110
Loader	1	CNP 081	112	50%	0	109
(Group 3 PME)						
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	1	CNP 004	109	50%	0	106
Planer	1	CNP 184	111	65%	0	109
Max. Total SWL						116

F.14 Construction of Local Road L19 (WorkSite ID = 625 - 627)						(2/1/15 - 31/12/16)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(Group 1 PME)						
Dump Truck	1	CNP 067	117	65%	0	115
Excavator	2	CNP 081	112	65%	0	113
(Group 2 PME)						
Grader	1	CNP 104	113	50%	0	110
Loader	1	CNP 081	112	50%	0	109
(Group 3 PME)						
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	2	CNP 004	109	50%	0	109
Planer	1	CNP 184	111	65%	0	109
Max. Total SWL						117

F.15 Construction of Landscape Walkway LW-05

F.15a Substructure works (WorkSite ID = 628)						(4/7/15 - 31/12/16)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Pilling Rig	2	CNP 167	114	65%	0	115
Generator	2	CNP 102	100	100%	0	103
Water Pump	2	CNP 282	103	100%	0	106
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						122

Project: KTD Construction Noise (Package F)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

F.15b Superstructure works		(WorkSite ID = 629)				(4/7/15 - 31/12/16)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	2	CNP 048	112	65%	0	113	
Concrete Pump	2	CNP 047	109	100%	0	112	
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115	
Poker Vibrator	2	CNP 170	113	70%	0	114	
Bar Bender	2	CNP 021	90	100%	0	93	
Air Compressor	4	CNP 002	102	100%	0	108	
Total SWL						120	

F.16 Pumping Station PS2		(WorkSite ID = 630)				(2/1/14 - 31/12/16)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	1	CNP 048	94	65%	0	92	
Concrete Pump	2	CNP 047	106	100%	0	109	
Concrete Lorry Mixer	4	CNP 044	96	100%	0	102	
Poker Vibrator	2	CNP 170	98	70%	0	99	
Bar Bender	1	CNP 021	90	100%	0	90	
Air Compressor	2	CNP 002	102	100%	0	105	
Total SWL						111	

F.17 Pumping Station NPS		(WorkSite ID = 631)				(2/1/14 - 31/12/16)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	1	CNP 048	94	65%	0	92	
Concrete Pump	2	CNP 047	106	100%	0	109	
Concrete Lorry Mixer	4	CNP 044	96	100%	0	102	
Poker Vibrator	2	CNP 170	98	70%	0	99	
Bar Bender	1	CNP 021	90	100%	0	90	
Air Compressor	2	CNP 002	102	100%	0	105	
Total SWL						111	

F.18 Drainage, Sewerage & Watermain		(WorkSite ID = 632)				(2/1/14 - 31/12/15)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	1	CNP 048	112	65%	0	110	
Breaker, excavator mounted	1	CNP 027	122	80%	0	121	
Excavator	1	CNP 081	112	65%	0	110	
Dump Truck	2	CNP 067	117	65%	0	118	
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109	
Poker Vibrator	2	CNP 170	113	70%	0	114	
Compactor, vibratory	1	CNP 050	105	70%	0	103	
Air compressor	1	CNP 002	102	100%	0	102	
Total SWL						124	

F.19 Upgrading of Pumping Station PS3		(WorkSite ID = 633 - 634)				(3/1/12 - 31/12/14)	
F.19a Pumping Station							
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	1	CNP 048	94	65%	0	92	
Concrete Pump	2	CNP 047	106	100%	0	109	
Concrete Lorry Mixer	4	CNP 044	96	100%	0	102	
Poker Vibrator	2	CNP 170	98	70%	0	99	
Bar Bender	1	CNP 021	90	100%	0	90	
Air Compressor	2	CNP 002	102	100%	0	105	
Total SWL						111	

F.19b Laying of associated pipe						(1/1/15 - 31/12/15)	
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	1	CNP 048	94	65%	0	92	
Breaker, excavator mounted	1	CNP 027	110	80%	0	109	
Excavator	1	CNP 081	106	65%	0	104	
Dump Truck	2	CNP 067	104	65%	0	105	
Concrete Lorry Mixer	1	CNP 044	96	100%	0	96	
Poker Vibrator	2	CNP 170	98	70%	0	99	
Compactor, vibratory	1	CNP 050	105	70%	0	103	
Air compressor	1	CNP 002	102	100%	0	102	
Total SWL						113	

Project: KTD Construction Noise (Package F)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

F.20 Construction of Sung Wong Toi Road Footpath			(WorkSite ID = 635 - 636)			(2/1/14 - 2/7/15)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
(Group 1 PME)						
Dump Truck	2	CNP 067	117	65%	0	118
Excavator	2	CNP 081	112	65%	0	113
(Group 2 PME)						
Grader	2	CNP 104	113	50%	0	113
Loader	2	CNP 081	112	50%	0	112
(Group 3 PME)						
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	2	CNP 004	109	50%	0	109
Planer	2	CNP 184	111	65%	0	112
Max. Total SWL						119

Project: KTD Construction Noise (Package G)

Title: Calculation Sound Power Level

Scenario:

Unmitigated ▼

Package G - Trunk Road T2 and infrastructure works at South Apron

1 Trunk Road T2 between South Apron Area and CKL PCWA

G.1 Construction of Trunk Road T2, Local Roads L10, L18 and associated footpaths at South Apron

(WorkSite ID = 701 - 702)

(4/1/12 - 30/12/16)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Dump Truck	2	CNP 067	117	65%	0	118
Excavator	2	CNP 081	112	65%	0	113
Grader	2	CNP 104	113	50%	0	113
Loader	2	CNP 081	112	50%	0	112
Vibratory Roller	1	CNP 186	108	80%	0	107
Road Roller	1	CNP 185	108	80%	0	107
Asphalt Paver	2	CNP 004	109	50%	0	109
Planer	2	CNP 184	111	65%	0	112
Total SWL						122

G.2 Cut and Cover Section of T2

G.2a Diaphragm Wall

(WorkSite ID = 703 - 704)

(4/1/12 - 30/12/15)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	4	CNP 048	112	65%	0	116
Excavator	2	CNP 081	112	65%	0	113
Dump Truck	4	CNP 067	117	65%	0	121
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	2	CNP 044	109	100%	0	112
Bentonite Plants	4	CNP 162	105	100%	0	111
Bar Bender	2	CNP 021	90	100%	0	93
Diaphragm Wall Rigs	4	CNP 164	115	65%	0	119
Total SWL						125

G.2b Excavation

(WorkSite ID = 705 - 706)

(4/1/12 - 30/12/15)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Excavator	2	CNP 081	112	65%	0	113
Dump Truck	6	CNP 067	117	65%	0	123
Total SWL						123

G.2c Construction of Slabs

(WorkSite ID = 707 - 708)

(4/1/12 - 30/12/15)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						120

G.2d Backfill

(WorkSite ID = 709 - 710)

(4/1/12 - 30/12/15)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Excavator	4	CNP 081	112	65%	0	116
Bulldozer	2	CNP 030	115	100%	0	118
Roller	2	CNP 186	108	100%	0	111
Dump Truck	4	CNP 067	117	65%	0	121
Total SWL						124

G.3 Immersed Tunnel Section of T2

G.3a Dredging and Preparation of Seabed

(WorkSite ID = 711 - 712)

(4/1/12 - 31/12/15)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Grab Dredger	2	CNP 063	112	100%	0	115
Tug Boat	2	CNP 221	110	100%	0	113
Barges	4	CNP 061	104	100%	0	110
Total SWL						118

G.3b Placement of Immersed Tunnels

(WorkSite ID = 713 - 714)

(3/9/12 - 30/12/16)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	6	CNP 048	112	65%	0	118
Tug Boat	3	CNP 221	110	100%	0	115
Barges	6	CNP 061	104	100%	0	112
Total SWL						120

Project: KTD Construction Noise (Package G)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

G.4 Construction of Subway SB-03		(WorkSite ID = 715)					(2/1/14 - 30/12/16)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Dump Truck	1	CNP 067	117	65%	0	115	
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109	
Excavator	1	CNP 081	112	65%	0	110	
Poker Vibrator	2	CNP 170	113	70%	0	114	
Bulldozer	1	CNP 030	115	100%	0	115	
Roller	1	CNP 186	108	100%	0	108	
Bar Bender	2	CNP 021	90	100%	0	93	
Air Compressor	2	CNP 002	102	100%	0	105	
Total SWL						121	

G.5 Construct Footbridge (FB-02)		(WorkSite ID = 716)					(2/1/14 - 31/12/15)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Pilling Rig	2	CNP 167	114	65%	0	115	
Generator	2	CNP 102	100	100%	0	103	
Water Pump	2	CNP 282	103	100%	0	106	
Crane	2	CNP 048	112	65%	0	113	
Concrete Pump	4	CNP 047	109	100%	0	115	
Concrete Lorry Mixer	8	CNP 044	109	100%	0	118	
Poker Vibrator	4	CNP 170	113	70%	0	117	
Bar Bender	2	CNP 021	90	100%	0	93	
Air Compressor	4	CNP 002	102	100%	0	108	
Total SWL						123	

G.5b Tower/ Bridge Deck / Cable Stays Construction		(WorkSite ID = 717)					(2/1/15 - 30/12/16)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	2	CNP 048	112	65%	0	113	
Concrete Pump	4	CNP 047	109	100%	0	115	
Concrete Lorry Mixer	8	CNP 044	109	100%	0	118	
Poker Vibrator	4	CNP 170	113	70%	0	117	
Bar Bender	2	CNP 021	90	100%	0	93	
Air Compressor	4	CNP 002	102	100%	0	108	
Total SWL						123	

G.6 Construction of ventilation shaft inside KTD site		(WorkSite ID = 718)					(2/1/13 - 30/12/16)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	2	CNP 048	112	65%	0	113	
Concrete Pump	4	CNP 047	109	100%	0	115	
Concrete Lorry Mixer	8	CNP 044	109	100%	0	118	
Poker Vibrator	4	CNP 170	113	70%	0	117	
Bar Bender	2	CNP 021	90	100%	0	93	
Air Compressor	4	CNP 002	102	100%	0	108	
Total SWL						123	

G.7 Construction of ventilation shaft and administration building for T2		(WorkSite ID = 719)					(2/1/13 - 30/12/16)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	2	CNP 048	112	65%	0	113	
Concrete Pump	4	CNP 047	109	100%	0	115	
Concrete Lorry Mixer	8	CNP 044	109	100%	0	118	
Poker Vibrator	4	CNP 170	113	70%	0	117	
Bar Bender	2	CNP 021	90	100%	0	93	
Air Compressor	4	CNP 002	102	100%	0	108	
Total SWL						123	

G.8 Drainage, Sewerage & Watermain		(WorkSite ID = 720 - 721)					(5/1/12 - 30/6/14)
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	1	CNP 048	112	65%	0	110	
Breaker, excavator mounted	1	CNP 027	122	80%	0	121	
Excavator	1	CNP 081	112	65%	0	110	
Dump Truck	2	CNP 067	117	65%	0	118	
Concrete Lorry Mixer	1	CNP 044	109	100%	0	109	
Poker Vibrator	2	CNP 170	113	70%	0	114	
Compactor, vibratory	1	CNP 050	105	70%	0	103	
Air compressor	1	CNP 002	102	100%	0	102	
Total SWL						124	

Project: KTD Construction Noise (Package G)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

G.9 Kwun Tong Transportation Link

G.9a Construction Bridge Foundation (WorkSite ID = 722 - 723)

(1/1/13 - 31/12/16)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Pilling Rig	2	CNP 167	114	65%	0	115
Generator	2	CNP 102	100	100%	0	103
Water Pump	2	CNP 282	103	100%	0	106
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						122

G.9b Tower/ Bridge Deck Construction

(WorkSite ID = 724 - 725)

(1/1/13 - 31/12/16)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	2	CNP 048	112	65%	0	113
Concrete Pump	2	CNP 047	109	100%	0	112
Concrete Lorry Mixer	4	CNP 044	109	100%	0	115
Poker Vibrator	2	CNP 170	113	70%	0	114
Bar Bender	2	CNP 021	90	100%	0	93
Air Compressor	4	CNP 002	102	100%	0	108
Total SWL						120

Project: KTD Construction Noise (SCL)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

SCL Construction

(1/7/10 - 31/12/15)

S.1 Tunnel Construction C&C Tunnels between KTA and Launching Shaft

(WorkSite ID = 801)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crawler Crane	4	CNP 048	112	30%	0	113
Hydraulic Hammer	2	BS5228 P4 T1/53	118	65%	0	119
Cranes (Excavation)	2	CNP 048	112	30%	0	110
Backhoe	4	CNP 081	112	65%	0	116
Dump Truck	12	CNP 067	117	35%	0	123
Cranes (Services)	1	CNP 048	112	30%	0	107
Generator, standard	1	CNP 101	108	100%	0	108
Concrete Mixer Truck	6	CNP 044	109	100%	0	117
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Bar Bender and Cutter	1	CNP 021	90	100%	0	90
Poker Vibratory Hammer	6	CNP 170	113	100%	0	121
Total SWL						126

S.2 Tunnel Construction

(WorkSite ID = 803)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crawler Crane	4	CNP 048	112	30%	0	113
Hydraulic Hammer	2	BS5228 P4 T1/53	118	65%	0	119
Cranes (Excavation)	2	CNP 048	112	30%	0	110
Backhoe	4	CNP 081	112	65%	0	116
Dump Truck	12	CNP 067	117	35%	0	123
Cranes (Services)	1	CNP 048	112	30%	0	107
Generator, standard	1	CNP 101	108	100%	0	108
Concrete Mixer Truck	6	CNP 044	109	100%	0	117
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Bar Bender and Cutter	1	CNP 021	90	100%	0	90
Poker Vibratory Hammer	6	CNP 170	113	100%	0	121
Total SWL						126

S.3 Construction of Launching Shaft

(WorkSite ID = 802, 804)

Group 1 - Install 38 deep d.walls

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Bentonite Plant	1	CNP 162	105	100%	0	105
Bar Bender and Cutter	1	CNP 021	90	100%	0	90
Crane (Grab & Service)	2	CNP 048	112	30%	0	110
Dump Truck	3	CNP 067	117	65%	0	120
Concrete Mixer Truck	6	CNP 044	109	100%	0	117
Generator, standard	1	CNP 101	108	100%	0	108
Total SWL						122

Group 2 - Excavate, brace to -19mPD / -15mPD

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Backhoe	4	CNP 081	112	65%	0	116
Dump Truck (on & off site)	12	CNP 067	117	65%	0	126
Crane	2	CNP 048	112	30%	0	110
Generator, standard	1	CNP 101	108	100%	0	108
Total SWL						127

Group 3 - Structure at bottom of shaft

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	1	CNP 048	112	30%	0	107
Generator, standard	1	CNP 101	108	100%	0	108
Concrete Mixer Truck	6	CNP 044	109	100%	0	117
Concrete Pump Truck	1	CNP 047	109	100%	0	109
Bar Bender and Cutter	1	CNP 021	90	100%	0	90
Poker Vibratory Hammer	6	CNP 170	113	100%	0	121
Total SWL						123
Max. SWL						127

S.4 Deliver and Assemble TBM

(WorkSite ID = 802, 804)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	1	CNP 048	112	30%	0	107
Truck	2	CNP 141	112	65%	0	113
Generator, standard	1	CNP 101	108	100%	0	108
Total SWL						115

Project: KTD Construction Noise (SCL)

Title: Calculation Sound Power Level

Scenario:

Unmitigated



S.5 TBM to To Kwa Wan Station		(WorkSite ID = 802, 804)			(4/1/12 - 30/12/16)		
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
TBM	1	TBM	103	100%	0	103	
Conveyer/Muck Car system	1	CNP 041	90	100%	0	90	
Dump Truck (on & off site)	15	CNP 067	117	65%	0	127	
Backhoe	2	CNP 081	112	65%	0	113	
Ganty Crane	1	CNP 049	95	30%	0	90	
Grout Plant	1	BS5228 C6 Ref 13	108	100%	0	108	
Material Delivery Truck	1	CNP 141	112	65%	0	110	
Segment Delivery Truck	1	CNP 141	112	65%	0	110	
Forklifes	2	BS5228 C7 Ref 93	104	65%	0	105	
Pumps	2	CNP 282	103	100%	0	106	
Generator, standard	1	CNP 101	108	100%	0	108	
Mobile Crane	1	CNP 048	112	30%	0	107	
					Total SWL	127	
S.6 TBM Removal		(WorkSite ID = 802, 804)					
PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL	
Crane	1	CNP 048	112	30%	0	107	
Truck	2	CNP 141	112	65%	0	113	
Generator, standard	1	CNP 101	108	100%	0	108	
					Total SWL	115	
S.7 Kai Tak Station		(WorkSite ID = 805)					
Group 1 - Install 24m FSP4 sheet piles as water cutoff							
Backhoe	4	CNP 081	112	100%	0	118	
Drill Rig	2	BS5228 C10 Ref 2	112	100%	0	115	
Vibratory Hammer	4	BS5228 P4 T1/53	118	100%	0	124	
					Total SWL	125	
Group 2 - Excavate down to -11.0mPD							
Backhoe	10	CNP 081	112	100%	0	122	
Dump Truck	14	CNP 067	117	100%	0	128	
Crane	2	CNP 048	112	100%	0	115	
Piling Rig	6	CNP 167	114	100%	0	122	
					Total SWL	130	
Group 3 - Drive 400 Nos tension H-piles							
Drill Rig	2	BS5228 C10 Ref 2	112	100%	0	115	
Piling Rig	6	CNP 167	114	100%	0	122	
Crane	2	CNP 048	112	100%	0	115	
					Total SWL	123	
Group 4 - Test tension piles							
Crane	2	CNP 048	112	100%	0	115	
					Total SWL	115	
Group 5 - BS-Fix reinforcement bar							
Bar Bender and Cutter	2	CNP 021	90	100%	0	93	
Crane	2	CNP 048	112	100%	0	115	
					Total SWL	115	
Group 6 - Concrete base slab (BS)							
Concrete Mixer Truck	10	CNP 044	109	100%	0	119	
Concrete Pump Truck	4	CNP 047	109	100%	0	115	
Crane	2	CNP 048	112	100%	0	115	
Poker Vibratory Hammer	4	CNP 170	113	100%	0	119	
					Total SWL	123	
Group 7 - W&C to ML - Lower section of walls and columns							
Concrete Mixer Truck	2	CNP 044	109	100%	0	112	
Concrete Pump Truck	2	CNP 047	109	100%	0	112	
Crane	1	CNP 048	112	100%	0	112	
Poker Vibratory Hammer	2	CNP 170	113	100%	0	116	
					Total SWL	119	

Project: KTD Construction Noise (SCL)

Title: Calculation Sound Power Level

Scenario: Unmitigated 

Group 8 - W&C to ML - Upper section of walls and columns

Concrete Mixer Truck	2	CNP 044	109	100%	0	112
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Crane	1	CNP 048	112	100%	0	112
Poker Vibratory Hammer	2	CNP 170	113	100%	0	116
Bulldozer	2	CNP 030	115	100%	0	118
Total SWL						122

Group 9 - MS - Case PSD hanger walls

Concrete Mixer Truck	2	CNP 044	109	100%	0	112
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Crane	1	CNP 048	112	100%	0	112
Poker Vibratory Hammer	2	CNP 170	113	100%	0	116
Total SWL						119

Group 10 - MS - Case bottom slab of OHE duct

Concrete Mixer Truck	2	CNP 044	109	100%	0	112
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Crane	1	CNP 048	112	100%	0	112
Poker Vibratory Hammer	2	CNP 170	113	100%	0	116
Total SWL						119

Group 11 - MS - Case mezzanine slab (MS)

Concrete Mixer Truck	6	CNP 044	109	100%	0	117
Concrete Pump Truck	3	CNP 047	109	100%	0	114
Crane	2	CNP 048	112	100%	0	115
Poker Vibratory Hammer	4	CNP 170	113	100%	0	119
Total SWL						123

Group 12 - W&C to CL-Cast walls and columns

Concrete Mixer Truck	2	CNP 044	109	100%	0	112
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Crane	1	CNP 048	112	100%	0	112
Poker Vibratory Hammer	2	CNP 170	113	100%	0	116
Total SWL						119

Group 13 - W&C to CL-waterproofing behind walls

Crane	1	CNP 048	112	100%	0	112
Total SWL						112

Group 14 - W&C to CL-Concourse slab (CS)

Concrete Mixer Truck	6	CNP 044	109	100%	0	117
Concrete Pump Truck	3	CNP 047	109	100%	0	114
Crane	2	CNP 048	112	100%	0	115
Poker Vibratory Hammer	4	CNP 170	113	100%	0	119
Total SWL						123

Group 15 - Platform slab (PS)

Concrete Mixer Truck	2	CNP 044	109	100%	0	112
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Crane	1	CNP 048	112	100%	0	112
Poker Vibratory Hammer	2	CNP 170	113	100%	0	116
Total SWL						119

Group 16 - Backfilling around station box

Bulldozer	3	CNP 030	115	100%	0	120
Vibratory Hammary Roller	4	CNP 186	108	100%	0	114
Total SWL						121

Group 17 - Backfill around station box up from -2mPD to -5mPD

Bulldozer	3	CNP 030	115	100%	0	120
Vibratory Hammary Roller	4	CNP 186	108	100%	0	114
Total SWL						121

Group 18 - Remove sheet piles

Crane	2	CNP 048	112	100%	0	115
Dump Truck	2	CNP 067	117	100%	0	120
Backhoe	2	CNP 081	112	100%	0	115
Vibratory Hammer	2	BS5228 P4 T1/53	118	100%	0	121
Total SWL						125

Project: KTD Construction Noise (SCL)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

Group 19 - Install steel works						
Crane	4	CNP 048	112	100%	0	118
					Total SWL	118
Group 20 - Install main components						
Crane	4	CNP 048	112	100%	0	118
					Total SWL	118
Group 21 - Structural works						
Concrete Mixer Truck	3	CNP 044	109	100%	0	114
Concrete Pump Truck	3	CNP 047	109	100%	0	114
Bar Bender and Cutter	3	CNP 021	90	100%	0	95
Crawler Crane	2	CNP 048	112	100%	0	115
					Total SWL	119
					Max. SWL	130
S 8 Tok Kwa Wan Station (WorkSite ID = 806)						
Group 1 - Demolition of ESMD blocks						
Crane	2	CNP 048	112	100%	0	115
Backhoe	4	CNP 081	112	100%	0	118
Dump Truck	4	CNP 067	117	100%	0	123
Bulldozer	2	CNP 030	115	100%	0	118
Hydraulic Breaker	2	CNP 028	122	100%	0	125
					Total SWL	128
Group 2 - Build dia 1350 sewer main in Sung Wong Toi Road						
Crane	1	CNP 048	112	100%	0	112
Backhoe	1	CNP 081	112	100%	0	112
					Total SWL	115
Group 3 - Build dia 1350 sewer main across station						
Crane	1	CNP 048	112	100%	0	112
Backhoe	1	CNP 081	112	100%	0	112
					Total SWL	115
Group 4 - Divert traffic south of Entrance C						
Crane	1	CNP 048	112	100%	0	112
Backhoe	1	CNP 081	112	100%	0	112
					Total SWL	115
Group 5 - Expose HV CLP cables that affect d wall construction						
Crane	1	CNP 048	112	100%	0	112
Backhoe	1	CNP 081	112	100%	0	112
					Total SWL	115
Group 6 - Build dia 1350 sewer main south of Entrance C						
Crane	1	CNP 048	112	100%	0	112
Backhoe	1	CNP 081	112	100%	0	112
					Total SWL	115
Group 7 - Build dia 1350 sewer main south of Entrance C						
Crane	1	CNP 048	112	100%	0	112
Backhoe	2	CNP 081	112	100%	0	115
					Total SWL	117
Group 8 - Dig trench along Northern D-wall, clear utilities						
Crane	1	CNP 048	112	100%	0	112
Dump Truck	2	CNP 067	117	100%	0	120
Backhoe	2	CNP 081	112	100%	0	115
					Total SWL	122
Group 9 - Build guide walls of D-wall along TKW Road						
Crane	2	CNP 048	112	100%	0	115
Drill Rig	3	BS5228 C10 Ref 2	112	100%	0	117
Backhoe	2	CNP 081	112	100%	0	115
					Total SWL	120

Project: KTD Construction Noise (SCL)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

Group 10 - Construct guide walls

Crane	2	CNP 048	112	100%	0	115
Drill Rig	3	BS5228 C10 Ref 2	112	100%	0	117
Backhoe	2	CNP 081	112	100%	0	115
Total SWL						120

Group 11 - Build 70 No. D-wall panels 6.2m long each

Bentonite Plant	1	CNP 162	105	100%	0	105
Crane	2	CNP 048	112	100%	0	115
Backhoe	6	CNP 081	112	100%	0	120
Dump Truck	1	CNP 067	117	100%	0	117
Drill Rig	6	BS5228 C10 Ref 2	112	100%	0	120
Total SWL						124

Group 12 - Install king post

Crawler Crane	2	CNP 048	112	100%	0	115
Backhoe	2	CNP 081	112	100%	0	115
Total SWL						118

Group 13 - Install shear pins and grout at toe of D-walls

Crawler Crane	2	CNP 048	112	100%	0	115
Grouting machine	1		94	100%	0	94
Bar Bender and Cutter	2	CNP 021	90	100%	0	93
Concrete Mixer Truck	2	CNP 044	109	100%	0	112
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Backhoe	2	CNP 081	112	100%	0	115
Total SWL						120

Group 14 - Build dia. 1350 sewer div. over completed panels

Backhoe	2	CNP 081	112	100%	0	115
Crane	1	CNP 048	112	100%	0	112
Total SWL						117

Group 15 - Build Rd decking & shift Sun Wong Toi Traffic

Backhoe	1	CNP 081	112	100%	0	112
Drill Rig	3	BS5228 C10 Ref 2	112	100%	0	117
Crane	2	CNP 048	112	100%	0	115
Total SWL						120

Group 16 - Construct guide walls

Crane	1	CNP 048	112	100%	0	112
Drill Rig	3	BS5228 C10 Ref 2	112	100%	0	117
Backhoe	2	CNP 081	112	100%	0	115
Total SWL						120

Group 17 - Build 6.4m panel not affected by u/g service

Bentonite Plant	1	CNP 162	105	100%	0	105
Backhoe	6	CNP 081	112	100%	0	120
Total SWL						120

Group 18 - Install supports to road decking and struts

Backhoe	1	CNP 081	112	100%	0	112
Total SWL						112

Group 19 - Remove abandoned sewer pipes & overflow chamber

Dump Truck	2	CNP 067	117	100%	0	120
Hydraulic Breaker	1	CNP 028	122	100%	0	122
Backhoe	2	CNP 081	112	100%	0	115
Total SWL						125

Group 20 - Shift CLP HV cables


Backhoe	1	CNP 081	112	100%	0	112
Total SWL						112

Group 21 - Complete D-wall construction (7 panels)

Bentonite Plant	1	CNP 162	105	100%	0	105
Crane	3	CNP 048	112	100%	0	117
Backhoe	6	CNP 081	112	100%	0	120
Drill Rig	3	BS5228 C10 Ref 2	112	100%	0	117
Total SWL						123

Project: KTD Construction Noise (SCL)

Title: Calculation Sound Power Level

Scenario: Unmitigated 

Group 22 - Support utilities across station

Crane	1	CNP 048	112	100%	0	112
Backhoe	2	CNP 081	112	100%	0	115
Total SWL						117

Group 23 - Build road decking over northern half of station

Crane	1	CNP 048	112	100%	0	112
Backhoe	2	CNP 081	112	100%	0	115
Total SWL						117

Group 24 - Excavate to from 1.5mPD to

Backhoe	5	CNP 081	112	100%	0	119
Dump Truck	8	CNP 067	117	100%	0	126
Crawler Crane	2	CNP 048	112	100%	0	115
Total SWL						127

Group 25 - Install struts at 2.0mPD

Crawler Crane	2	CNP 048	112	100%	0	115
Total SWL						115

Group 26 - Excavate from -5.5mPD to -32.5mPD

Backhoe	7	CNP 081	112	100%	0	120
Dump Truck	12	CNP 067	117	100%	0	128
Crawler Crane	2	CNP 048	112	100%	0	115
Total SWL						129

Group 27 - Install struts

Crawler Crane	2	CNP 048	112	100%	0	115
Total SWL						115

Group 28 - Rock excavation at eastern end

Backhoe	2	CNP 081	112	100%	0	115
Dump Truck	2	CNP 067	117	100%	0	120
Crawler Crane	2	CNP 048	112	100%	0	115
Total SWL						122

Group 29 - Grouting work (break in, break out)

Grouting machine	1	-	94	100%	0	94
Total SWL						94

Group 30 - TS-Fix, UTS-fix, MS-fix, CS-fix, RF-fix reinforcement bars

Bar Bender and Cutter	2	CNP 021	90	100%	0	93
Poker Vibratory Hammer	2	CNP 170	113	100%	0	116
Total SWL						116

Group 31 - TS-Cast, UTS-Cast, MS-Cast, CS-Cast, CS Form, RF-Cast concrete bays, UTS-Install falsework, form slab soffit

Poker Vibratory Hammer	2	CNP 170	113	100%	0	116
Bar Bender and Cutter	2	CNP 021	90	100%	0	93
Concrete Mixer Truck	2	CNP 044	109	100%	0	112
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Crawler Crane	1	CNP 048	112	100%	0	112
Total SWL						119

Group 32 - Removal of TBM plant & services in lower tunnel

Crawler Crane	1	CNP 048	112	100%	0	112
Dump Truck	2	CNP 067	117	100%	0	120
Hydraulic Breaker	1	CNP 028	122	100%	0	122
Total SWL						124

Group 33 - Complete upper track slab, MS-form mezzanine slab

Poker Vibratory Hammer	2	CNP 170	113	100%	0	116
Bar Bender and Cutter	2	CNP 021	90	100%	0	93
Concrete Mixer Truck	2	CNP 044	109	100%	0	112
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Crawler Crane	1	CNP 048	112	100%	0	112
Total SWL						119

Project: KTD Construction Noise (SCL)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

Group 34 - LTS, UTS-Cast PSd and OHE walls and LTS, LTS-cast lower platform slab & UTS-cast upper platform slab

Poker Vibratory Hammer	2	CNP 170	113	100%	0	116
Bar Bender and Cutter	2	CNP 021	90	100%	0	93
Concrete Mixer Truck	2	CNP 044	109	100%	0	112
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Crawler Crane	1	CNP 048	112	100%	0	112
Total SWL						119

Group 35 - Insstail sheet pile wall

Drill Rig	2	BS5228 C10 Ref 2	112	100%	0	115
Backhoe	2	CNP 081	112	100%	0	115
Total SWL						118

Group 36 - Structural works and Build structure above ground level

Poker Vibratory Hammer	4	CNP 170	113	100%	0	119
Bar Bender and Cutter	4	CNP 021	90	100%	0	96
Concrete Mixer Truck	4	CNP 044	109	100%	0	115
Concrete Pump Truck	4	CNP 047	109	100%	0	115
Crawler Crane	2	CNP 048	112	100%	0	115
Total SWL						122
Max. SWL						129

Project: KTD Construction Noise (CKR)

Title: Calculation Sound Power Level

Scenario: Unmitigated ▼

CKR Construction

(2012 - 2016)

CKR.1 CKR inside KTD

(WorkSite ID = 901 - 903)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crawler Crane	2	CNP 048	112	30%	0	110
Hydraulic Hammer	2	BS5228 P4 T1/53	118	65%	0	119
Cranes (Excavation)	2	CNP 048	112	30%	0	110
Backhoe	2	CNP 081	112	65%	0	113
Dump Truck	6	CNP 067	117	35%	0	120
Cranes (Services)	2	CNP 048	112	30%	0	110
Generator, standard	1	CNP 101	108	100%	0	108
Concrete Mixer Truck	2	CNP 044	109	100%	0	112
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Bar Bender and Cutter	4	CNP 021	90	100%	0	96
Poker Vibratory Hammer	4	CNP 170	113	100%	0	119
Total SWL						124

CKR.2 CKR near Grand Waterfront

(WorkSite ID = 904)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crawler Crane	2	CNP 048	112	30%	0	110
Hydraulic Hammer	2	BS5228 P4 T1/53	118	65%	0	119
Cranes (Excavation)	2	CNP 048	112	30%	0	110
Backhoe	2	CNP 081	112	65%	0	113
Dump Truck	6	CNP 067	117	35%	0	120
Cranes (Services)	2	CNP 048	112	30%	0	110
Generator, standard	1	CNP 101	108	100%	0	108
Concrete Mixer Truck	2	CNP 044	109	100%	0	112
Concrete Pump Truck	2	CNP 047	109	100%	0	112
Bar Bender and Cutter	4	CNP 021	90	100%	0	96
Poker Vibratory Hammer	4	CNP 170	113	100%	0	119
Total SWL						124

CKR.3 CKR Placement of Immersed Tunnels

(WorkSite ID = 905)

PME	Unit	TM Identification	SWL/unit	Utilisation Rate	Barrier Correction	Sub-total SWL
Crane	3	CNP 048	112	65%	0	115
Tug Boat	2	CNP 221	110	100%	0	113
Barges	3	CNP 061	104	100%	0	109
Total SWL						118

