

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Hung Hom Station Sub-Location Area

Modification/ Enabling Works/ Utilities Diversions

Hung Hom Station

Project Office Construction (1/10/2012 - 31/12/2012)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane		BS D7/101	2	94	50%	0	94
Flat Bed Lorry		BS D9/19	2	102	30%	0	100
Concrete Mixer Truck		BS D6/33	2	96	30%	0	94
Concrete Pump Truck		BS D6/36	1	106	30%	0	101
Bar Bender and Cutter		CNP 021	1	90	30%	0	85
Overall Noise Level, dB(A)							104

Hoarding Erection (1/11/2012 - 31/12/2012)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane		CNP 048	1	112	30%	0	107
Flat Bed Lorry		CNP 141	2	112	30%	0	110
Overall Noise Level, dB(A)							112

Pre-drilling (1/1/2013 - 31/3/2013)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Rig		CNP 163	2	90	50%	0	90
Overall Noise Level, dB(A)							90

Dwall Plants Setting up (1/11/2012 - 31/1/2013)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane		CNP 048	1	112	50%	0	109
Bentonite Plant		CNP 162	1	105	50%	0	102
Flat Bed Lorry		CNP 141	2	112	50%	0	112
Overall Noise Level, dB(A)							114

A&A/ Modification Works

Concourse Level HUH

Stage 1 - Re-construct M/F, ABWF & BS (1/8/2014 - 31/1/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Dump Truck		CNP 067	1	117	50%	0	114
Cutter, Circular, Steel		CNP 056	1	112	30%	0	107
Lorry with Crane/Grab		CNP 145	1	105	30%	0	100
Backhoe with Hydraulic Breaker		CNP 028	2	122	50%	0	122
Overall Noise Level, dB(A)							123

Stage 2 - Re-construct M/F, ABWF & BS (1/8/2015 - 31/12/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Dump Truck		CNP 067	1	117	50%	0	114
Cutter, Circular, Steel		CNP 056	1	112	30%	0	107
Lorry with Crane/Grab		CNP 145	1	105	30%	0	100
Backhoe with Hydraulic Breaker		CNP 028	2	122	50%	0	122
Overall Noise Level, dB(A)							123

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H1

Modification/ Enabling Works/ Utilities Diversions

Podium to NOV

Cooling mains diversion

(1/1/2013 - 30/4/2013)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	1	112	50%	0	109
Dump Truck		CNP 067	1	117	50%	0	114
Giken Piler and Power-pack		EIA Ref.	1	94	50%	0	91
Overall Noise Level, dB(A)							115

Dia 1650 Sewer diversion (SCL (MKK - HUH) part)

(1/6/2015 - 31/8/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	1	112	50%	0	109
Dump Truck		CNP 067	2	117	50%	0	117
Giken Piler and Power-pack		EIA Ref.	2	94	50%	0	94
Overall Noise Level, dB(A)							118

Tentative CLP cable tunnels strengthening

(1/7/2014 - 31/12/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane		CNP 048	1	112	50%	0	109
Flat Bed Lorry		CNP 141	1	112	30%	0	107
Overall Noise Level, dB(A)							111

IMC Building & Carpark areas

IMC Hoarding & Catch Fan Erection

(1/6/2015 - 31/7/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane		CNP 048	1	112	50%	0	109
Flat Bed Lorry		CNP 141	2	112	50%	0	112
Overall Noise Level, dB(A)							114

IMC Demolition and site clearance

(1/9/2015 - 30/11/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane		CNP 048	1	112	100%	0	112
Dump Truck		CNP 067	1	117	50%	0	114
Cutter, Circular, Steel		CNP 056	1	112	30%	0	107
Lorry with Crane/Grab		CNP 145	1	105	30%	0	100
Backhoe with Hydraulic Breaker		CNP 028	2	122	50%	0	122
Overall Noise Level, dB(A)							123

Dia 1650 Sewer diversion

(1/6/2015 - 31/12/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Giken Piler and Power-pack		EIA Ref.	2	94	30%	0	92
Backhoe		CNP 081	1	112	30%	0	107
Dump Truck		CNP 067	2	117	30%	0	115
Overall Noise Level, dB(A)							115

Modification to Existing EVA structures

(1/12/2015 - 31/3/2016)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Dump Truck		CNP 067	1	117	30%	0	112
Backhoe with Hydraulic Breaker		CNP 028	1	122	30%	0	117
Concrete Mixer Truck		CNP 044	1	109	30%	0	104
Concrete Pump Truck		CNP 047	1	109	30%	0	104
Concrete Poker Vibrator		CNP 170	1	113	30%	0	108
Bar Bender and Cutter		CNP 021	1	90	30%	0	85
Overall Noise Level, dB(A)							119

Remarks:

EIA Ref. : The SWL of Giken Piler and Power-pack was made reference to the approved EIA Report of "Tsim Sha Tsui Station Northern Subway"

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H1

Temporary Cofferdam

Podium to NOV

Dwall construction (SCL (MKK - HUH)) for sewer diversion

(1/1/2015 - 31/5/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	CNP 081	2	112	50%	0	112
Bar Bender and Cutter	CNP 021	4	90	30%	0	91
Concrete Mixer Truck	CNP 044	6	109	30%	0	112
Concrete Pump Truck	CNP 047	3	109	30%	0	109
Modified Rig	CNP 163	2	90	100%	0	93
Modified Crane	CNP 048	1	112	100%	0	112
Bentonite Plant	CNP 162	1	105	30%	0	100
Dump Truck	CNP 067	2	117	50%	0	117
Grouting Machine	CNP 106	2	105	30%	0	103
Pumping Test	CNP 283	1	85	30%	0	80

Overall Noise Level, dB(A) 120

Dwall construction (SCL (MKK - HUH)) remaining

(1/6/2015 - 31/10/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	CNP 081	2	112	30%	0	110
Bar Bender and Cutter	CNP 021	4	90	30%	0	91
Concrete Mixer Truck	CNP 044	6	109	30%	0	112
Concrete Pump Truck	CNP 047	3	109	30%	0	109
Modified Rig	CNP 163	2	90	100%	0	93
Modified Crane	CNP 048	1	112	100%	0	112
Bentonite Plant	CNP 162	1	105	30%	0	100
Dump Truck	CNP 067	2	117	50%	0	117
Grouting Machine	CNP 106	2	105	30%	0	103
Pumping Test	CNP 283	1	85	30%	0	80

Overall Noise Level, dB(A) 120

IMC Building & Carpark areas

Temporary Cofferdam after demolition

(1/12/2015 - 29/2/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Giken Piler and Power-pack	EIA Ref.	2	94	50%	0	94
Backhoe	CNP 081	1	112	50%	0	109
Dump Truck	CNP 067	2	117	50%	0	117

Overall Noise Level, dB(A) 118

Excavation

Podium to NOV

Excavation & Strutting to SCL (MKK - HUH) roof

(1/11/2015 - 31/12/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	4	106	100%	0	112
Dump Truck	BS D9/24	4	104	100%	0	110
Crane	BS D7/101	1	94	50%	0	91

Overall Noise Level, dB(A) 114

Excavation & Strutting to SCL (MKK - HUH) base

(1/6/2016 - 31/8/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	CNP 081	4	112	100%	0	118
Dump Truck	CNP 067	4	117	100%	0	123
Crane	CNP 048	1	112	50%	0	109
Piling Rig	BS D11/2	1	112	50%	0	109
Grouting Mixer	CNP 105	1	90	30%	0	85
Grouting Pump	CNP 106	1	105	30%	0	100

Overall Noise Level, dB(A) 124

IMC Building & Carpark areas

Pump test, Excavation & Strutting

(1/3/2016 - 31/5/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Pumping Test	CNP 283	1	85	50%	0	82

Overall Noise Level, dB(A) 82

Remarks:

EIA Ref. : The SWL of Giken Piler and Power-pack was made reference to the approved EIA Report of "Tsim Sha Tsui Station Northern Subway"

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H1

Structure Works

Podium to NOV

Concrete Structure SCL (MKK - HUH) roof

(1/1/2016 - 31/1/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	2	112	100%	0	115
Bar Bender and Cutter	CNP 021	4	90	30%	0	91
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	4	113	30%	0	114
Concrete Pump Truck	CNP 047	2	109	30%	0	107
Backhoe	CNP 081	1	112	30%	0	107
Dump Truck	CNP 067	1	117	30%	0	112

Overall Noise Level, dB(A) 120

Concrete Support to CLP Tunnel

(1/2/2016 - 31/5/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Backhoe	CNP 081	1	112	30%	0	107
Dump Truck	CNP 067	1	117	30%	0	112

Overall Noise Level, dB(A) 118

Concrete Structure SCL (MKK - HUH) roof

(1/9/2016 - 30/11/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	4	112	100%	0	118
Bar Bender and Cutter	CNP 021	8	90	30%	0	94
Concrete Mixer Truck	CNP 044	8	109	30%	0	113
Concrete Poker Vibrator	CNP 170	8	113	30%	0	117
Concrete Pump Truck	CNP 047	4	109	30%	0	110
Backhoe	CNP 081	4	112	30%	0	113
Dump Truck	CNP 067	8	117	30%	0	121

Overall Noise Level, dB(A) 124

Waterfront EVA structure (SCL (MKK - HUH))

(1/11/2016 - 28/2/2017)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe with Hydraulic Breaker	CNP 028	1	122	30%	0	117
Roller	CNP 186	1	108	30%	0	103
Concrete Mixer Truck	CNP 044	1	109	30%	0	104
Concrete Poker Vibrator	CNP 170	1	113	30%	0	108
Bar Bender and Cutter	CNP 021	1	90	30%	0	85

Overall Noise Level, dB(A) 118

IMC Building & Carpark areas

Cooling Tower Raft

(1/12/2015 - 31/1/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	50%	0	109
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 115

Cooling Tower Ground Slab

(1/2/2016 - 29/2/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	50%	0	109
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 115

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario:

Mitigated ▼

Area H1

Cooling Tower wall & roof

(1/3/2016 - 30/4/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	50%	0	109
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 115

Waterfront EVA structure (SCL (TAW - HUH))

(1/8/2016 - 31/10/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe with Hydraulic Breaker	CNP 028	1	122	30%	0	117
Roller	CNP 186	1	108	30%	0	103
Concrete Mixer Truck	CNP 044	1	109	30%	0	104
Concrete Poker Vibrator	CNP 170	1	113	30%	0	108
Bar Bender and Cutter	CNP 021	1	90	30%	0	85

Overall Noise Level, dB(A) 118

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario:

Mitigated

Area H2

Modification/ Enabling Works/ Utilities Diversions

Podium to Coliseum

Modification of Traversa

(1/1/2013 - 31/3/2013)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	1	112	100%	0	112
Dump Truck		CNP 067	1	117	50%	0	114
Overall Noise Level, dB(A)							116

Utilities Diversion/ Services relocate (GL 0 - GL 7)

(1/4/2013 - 30/6/2013)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	6	112	100%	0	120
Dump Truck		CNP 067	6	117	50%	0	122
Overall Noise Level, dB(A)							124

Temporary Cofferdam

Podium to Coliseum

Ground Treatment to GL 1 to GL 7

(1/7/2013 - 31/10/2013)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Giken Piler and Power-pack		EIA Ref.	1	94	100%	0	94
Overall Noise Level, dB(A)							94

Dwall & Barrette GL 0 to GL 7

(1/11/2013 - 30/4/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	2	112	30%	0	110
Bar Bender and Cutter		CNP 021	4	90	30%	0	91
Concrete Mixer Truck		CNP 044	6	109	30%	0	112
Concrete Pump Truck		CNP 047	3	109	30%	0	109
Modified Rig		CNP 163	2	90	100%	0	93
Modified Crane		CNP 048	1	112	100%	0	112
Bentonite Plant		CNP 162	1	105	30%	0	100
Dump Truck		CNP 067	2	117	30%	0	115
Grouting Machine		CNP 106	2	105	30%	0	103
Overall Noise Level, dB(A)							119

Pump test GL 0 to GL 7

(1/6/2014 - 31/7/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Pumping Test		CNP 283	1	85	50%	0	82
Overall Noise Level, dB(A)							82

Underpinning beam & columns

(1/6/2014 - 31/10/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Concrete Mixer Truck		CNP 044	2	109	30%	0	107
Concrete Pump Truck		CNP 047	1	109	30%	0	104
Bar Bender and Cutter		CNP 021	2	90	30%	0	88
Crane		CNP 048	1	112	50%	0	109
Backhoe		CNP 081	1	112	50%	0	109
Overall Noise Level, dB(A)							114

Demolish existing columns

(1/11/2014 - 30/11/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe with Hydraulic Breaker		CNP 028	1	122	100%	0	122
Dump Truck		CNP 067	1	117	30%	0	112
Overall Noise Level, dB(A)							122

Excavation

Podium to Coliseum

Excavation & Strutting GL 0 to GL 7

(1/2/2015 - 30/4/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	2	112	100%	0	115
Dump Truck		CNP 067	2	117	100%	0	120
Crane		CNP 048	1	112	50%	0	109
Overall Noise Level, dB(A)							121

Remarks:

EIA Ref. : The SWL of Giken Piler and Power-pack was made reference to the approved EIA Report of "Tsim Sha Tsui Station Northern Subway"

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated

Area H2

Final Excavation & Strutting to NSL base GI 0 to GL 7

(1/8/2016 - 30/9/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	CNP 081	1	112	100%	0	112
Dump Truck	CNP 067	2	117	100%	0	120
Crane	CNP 048	1	112	50%	0	109
Overall Noise Level, dB(A)						121

Structure Works

Podium to Coliseum

SCL (TAW - HUH) Base GL 0 to GL 7

(1/12/2014 - 31/1/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Giken Piler and Power-pack	EIA Ref.	1	94	30%	0	89
Overall Noise Level, dB(A)						116

SCL (MKK - HUH) Slab & props to existing foundation GL 0 to GL 7

(1/5/2015 - 31/7/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Overall Noise Level, dB(A)						116

SCL (MKK - HUH) Base & Wall GL 0 to GL 7

(1/10/2015 - 31/1/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	2	112	50%	0	112
Bar Bender and Cutter	CNP 021	4	90	30%	0	91
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	4	113	30%	0	114
Concrete Pump Truck	CNP 047	2	109	30%	0	107
Backhoe	CNP 081	2	112	30%	0	110
Dump Truck	CNP 067	4	117	50%	0	120
Overall Noise Level, dB(A)						122

SCL (TAW - HUH) & other Structures GL 0 to GL 7

(1/2/2016 - 31/5/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Overall Noise Level, dB(A)						116

Vent Shaft Structures GL 0

(1/9/2016 - 30/11/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
H-Pile Rig	BS D11/2	1	112	50%	0	109
Overall Noise Level, dB(A)						117

Remarks:

EIA Ref. : The SWL of Giken Piler and Power-pack was made reference to the approved EIA Report of "Tsim Sha Tsui Station Northern Subway"

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H3

Modification/ Enabling Works/ Utilities Diversions

Coliseum Area

Utilities Diversion/ Services relocate (GL 7 - GL 15)

(1/4/2013 - 30/6/2013)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	2	112	100%	0	115
Dump Truck		CNP 067	2	117	50%	0	117
Overall Noise Level, dB(A)							119

Temporary Cofferdam

Coliseum Area

Dwall GL 7 to GL 15

(1/5/2013 - 30/11/2013)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	2	112	30%	0	110
Bar Bender and Cutter		CNP 021	4	90	30%	0	91
Concrete Mixer Truck		CNP 044	6	109	30%	0	112
Concrete Pump Truck		CNP 047	3	109	30%	0	109
Modified Rig		CNP 163	2	90	100%	0	93
Modified Crane		CNP 048	1	112	100%	0	112
Bentonite Plant		CNP 162	1	105	30%	0	100
Dump Truck		CNP 067	2	117	30%	0	115
Grouting Machine		CNP 106	2	105	30%	0	103
Overall Noise Level, dB(A)							119

Excavation

Coliseum Area

Pump test GL 7 to GL 15

(1/12/2013 - 31/1/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Pumping Test		CNP 283	1	85	50%	0	82
Overall Noise Level, dB(A)							82

Excavation to SCL (TAW - HUH) slab GI 7 to GL 15

(1/2/2014 - 28/2/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	4	112	100%	0	118
Dump Truck		CNP 067	4	117	100%	0	123
Crane		CNP 048	1	112	50%	0	109
Overall Noise Level, dB(A)							124

Excavation & Strutting to intermediate slab GL 7 to GL 15

(1/7/2014 - 30/9/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	4	112	100%	0	118
Dump Truck		CNP 067	4	117	100%	0	123
Crane		CNP 048	1	112	50%	0	109
Overall Noise Level, dB(A)							124

Excavation & Strutting to SCL (MKK - HUH) base GI 7 to GL 15

(1/1/2015 - 31/3/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	4	112	100%	0	118
Dump Truck		CNP 067	4	117	100%	0	123
Crane		CNP 048	1	112	50%	0	109
Piling Rig		BS D11/2	1	112	30%	0	107
Grouting Mixer		CNP 105	1	90	30%	0	85
Grouting Pump		CNP 106	1	105	30%	0	100
Overall Noise Level, dB(A)							124

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H3

Structure Works

Podium to Coliseum

SCL (TAW - HUH) Track Slab & Structures GL 7 to GL 15

(1/3/2014 - 30/4/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane		CNP 048	1	112	100%	0	112
Bar Bender and Cutter		CNP 021	2	90	30%	0	88
Concrete Mixer Truck		CNP 044	4	109	30%	0	110
Concrete Poker Vibrator		CNP 170	2	113	30%	0	111
Concrete Pump Truck		CNP 047	1	109	30%	0	104
Air Compressor		CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 116

SCL (MKK - HUH) Structures Intermediate Slab & props GL 7 to GL 15

(1/10/2014 - 31/12/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane		CNP 048	1	112	100%	0	112
Bar Bender and Cutter		CNP 021	2	90	30%	0	88
Concrete Mixer Truck		CNP 044	4	109	30%	0	110
Concrete Poker Vibrator		CNP 170	2	113	30%	0	111
Concrete Pump Truck		CNP 047	1	109	30%	0	104
Air Compressor		CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 116

SCL (MKK - HUH) Structure Base & Wall GL 7 to GL 15

(1/4/2015 - 31/7/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane		CNP 048	1	112	100%	0	112
Bar Bender and Cutter		CNP 021	2	90	30%	0	88
Concrete Mixer Truck		CNP 044	4	109	30%	0	110
Concrete Poker Vibrator		CNP 170	2	113	30%	0	111
Concrete Pump Truck		CNP 047	1	109	30%	0	104
Air Compressor		CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 116

SCL (TAW - HUH) Structures Wall & Roof GL 7 to GL 15

(1/8/2015 - 30/9/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane		CNP 048	1	112	100%	0	112
Bar Bender and Cutter		CNP 021	2	90	30%	0	88
Concrete Mixer Truck		CNP 044	4	109	30%	0	110
Concrete Poker Vibrator		CNP 170	2	113	30%	0	111
Concrete Pump Truck		CNP 047	1	109	30%	0	104
Air Compressor		CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 116

SCL (TAW - HUH) & other Structures GL 7 to GL 15

(1/8/2015 - 30/11/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane		CNP 048	1	112	100%	0	112
Bar Bender and Cutter		CNP 021	2	90	30%	0	88
Concrete Mixer Truck		CNP 044	4	109	30%	0	110
Concrete Poker Vibrator		CNP 170	2	113	30%	0	111
Concrete Pump Truck		CNP 047	1	109	30%	0	104
Air Compressor		CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 116

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H4

Modification/ Enabling Works/ Utilities Diversions

Hung Hom Station

Utilities Diversion/ Services relocate (GL 15 - GL 28)

(1/1/2013 - 31/3/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	CNP 081	1	112	100%	0	112
Saw, Concrete	CNP 203	2	115	30%	0	113
Crane Lorry, Mobile	CNP 048	1	112	30%	0	107
Dump Truck	CNP 067	1	117	30%	0	112
Poker, Vibratory, Hand-held	CNP 170	2	113	30%	0	111
Air Compressor	CNP 002	1	102	30%	0	97
Concrete Lorry Mixer	CNP 044	1	109	50%	0	106
Giken Piler and Power-pack	EIA Ref.	1	94	50%	0	91

Overall Noise Level, dB(A) 119

Temporary Cofferdam

Hung Hom Station

Underpinning GL K

(1/2/2013 - 31/7/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Rig	CNP 163	2	90	75%	0	92
Modified Crane	CNP 048	1	112	75%	0	111
Dump Truck	CNP 067	1	117	50%	0	114
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Modified Crane	CNP 048	1	112	50%	0	109
Backhoe	CNP 081	1	112	50%	0	109
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Dump Truck	CNP 067	1	117	30%	0	112
Giken Piler and Power-pack	EIA Ref.	1	94	75%	0	93

Overall Noise Level, dB(A) 119

Dwall GL 15 to GL 31 / GL N

(1/4/2013 - 30/9/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	CNP 081	1	112	30%	0	107
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Modified Rig	CNP 163	2	90	100%	0	93
Modified Crane	CNP 048	1	112	100%	0	112
Bentonite Plant	CNP 162	1	105	50%	0	102
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Dump Truck	CNP 067	2	117	30%	0	115
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Air Compressor	CNP 002	1	102	30%	0	97
Grouting Mixer	CNP 105	1	90	30%	0	85
Grouting Pump	CNP 106	1	105	30%	0	100

Overall Noise Level, dB(A) 118

Dwall GL 15 to GL 31 / GL K1

(1/9/2013 - 28/2/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	CNP 081	1	112	30%	0	107
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Modified Rig	CNP 163	2	90	100%	0	93
Modified Crane	CNP 048	1	112	100%	0	112
Bentonite Plant	CNP 162	1	105	50%	0	102
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Dump Truck	CNP 067	2	117	30%	0	115
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Air Compressor	CNP 002	1	102	30%	0	97
Grouting Mixer	CNP 105	1	90	30%	0	85
Grouting Pump	CNP 106	1	105	30%	0	100

Overall Noise Level, dB(A) 118

Remarks:

EIA Ref. : The SWL of Giken Piler and Power-pack was made reference to the approved EIA Report of "Tsim Sha Tsui Station Northern Subway"

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H4

Excavation

Hung Hom Station

Pump test GL 15 to GL 28

(1/3/2014 - 30/4/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Pumping Test		CNP 283	2	85	50%	0	85
Overall Noise Level, dB(A)							85

Excavation & Strutting 1st Layer GL 15 to GL 28

(1/5/2014 - 31/5/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler / Excavator Loader		CNP 082	2	94	100%	0	97
Dump Truck		CNP 067	4	117	100%	0	123
Modified Crane		CNP 048	1	112	50%	0	109
Modified Crane		CNP 048	1	112	50%	0	109
Flat Bed Lorry		CNP 141	2	112	50%	0	112
Overall Noise Level, dB(A)							124

Excavation & Strutting GL 15 to GL 28

(1/11/2014 - 30/4/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler / Excavator Loader		CNP 082	2	94	100%	0	97
Dump Truck		CNP 067	4	117	100%	0	123
Modified Crane		CNP 048	1	112	50%	0	109
Piling Rig		BS D11/2	1	112	50%	0	109
Grouting Mixer		CNP 105	1	90	30%	0	85
Grouting Pump		CNP 106	1	105	30%	0	100
Overall Noise Level, dB(A)							123

Excavation & Strutting to SCL (MKK - HUH) base GI 7 to GL 15

(1/1/2015 - 31/3/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	4	112	100%	0	118
Dump Truck		CNP 067	4	117	100%	0	123
Crane		CNP 048	1	112	50%	0	109
Piling Rig		BS D11/2	1	112	30%	0	107
Grouting Mixer		CNP 105	1	90	30%	0	85
Grouting Pump		CNP 106	1	105	30%	0	100
Overall Noise Level, dB(A)							124

Structure Works

Hung Hom Station

SCL (TAW - HUH) Track Slab GL 15 to GL 28

(1/6/2014 - 31/8/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane		CNP 048	1	112	100%	0	112
Bar Bender and Cutter		CNP 021	2	90	30%	0	88
Concrete Mixer Truck		CNP 044	5	109	30%	0	111
Concrete Poker Vibrator		CNP 170	2	113	30%	0	111
Concrete Pump Truck		CNP 047	1	109	30%	0	104
Air Compressor		CNP 002	1	102	30%	0	97
Overall Noise Level, dB(A)							116

Install Temporary Steel Tower Column GL 15 to GL 22

(1/9/2014 - 31/10/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane		CNP 048	1	112	100%	0	112
Flat Bed Lorry		CNP 141	1	112	50%	0	109
Overall Noise Level, dB(A)							114

Demolish existing Column & Pier Cap GL 15 to GL 22

(1/11/2014 - 31/12/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe		CNP 081	1	112	100%	0	112
Modified Crane		CNP 048	1	112	50%	0	109
Dump Truck		CNP 067	2	117	30%	0	115
Overall Noise Level, dB(A)							117

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H4

SCL (MKK - HUH) Base Structure GL 15 to GL 28 (1/5/2015 - 31/7/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	5	109	30%	0	111
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 116

SCL (TAW - HUH) & other Structures GL 15 to GL 28 (1/7/2015 - 30/10/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	3	112	100%	0	117
Bar Bender and Cutter	CNP 021	6	90	30%	0	93
Concrete Mixer Truck	CNP 044	12	109	30%	0	115
Concrete Poker Vibrator	CNP 170	6	113	30%	0	116
Concrete Pump Truck	CNP 047	3	109	30%	0	109
Air Compressor	CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 121

SCL (MKK - HUH) Internal Structures GL 15 to GL 28 (1/8/2015 - 30/10/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Concrete Mixer Truck	CNP 044	2	109	100%	0	112
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Modified Crane	CNP 048	1	112	30%	0	107
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Air Compressor	CNP 002	1	102	30%	0	97
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 119

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H5

Modification/ Enabling Works/ Utilities Diversions

Hung Hom Station

Utilities Diversion/ Services relocate (GL 28 - GL 38)

(1/4/2013 - 30/6/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	CNP 081	1	112	100%	0	112
Saw, Concrete	CNP 203	2	115	50%	0	115
Crane Lorry, Mobile	CNP 048	1	112	30%	0	107
Dump Truck	CNP 067	1	117	30%	0	112
Poker, Vibratory, Hand-held	CNP 170	2	113	30%	0	111
Air Compressor	CNP 002	1	102	30%	0	97
Concrete Lorry Mixer	CNP 044	1	109	30%	0	104
Giken Piler and Power-pack	EIA Ref.	1	94	50%	0	91

Overall Noise Level, dB(A) **119**

Temporary Storm Drain@ 1875 Diversion (GL 31)

(1/10/2013 - 31/12/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	CNP 081	1	112	100%	0	112
Modified Crane	CNP 048	1	112	50%	0	109

Overall Noise Level, dB(A) **114**

Redivert Storm Drain@ 1875 Diversion (GL 32)

(1/10/2014 - 30/11/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe with Hydraulic Breaker	CNP 028	2	122	100%	0	125
Modified Crane	CNP 048	1	112	50%	0	109
Dump Truck	CNP 067	1	117	50%	0	114

Overall Noise Level, dB(A) **125**

Temporary Cofferdam

Hung Hom Station

Underpinning GL K & L

(1/7/2013 - 30/11/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Rig	CNP 163	2	90	50%	0	90
Modified Crane	CNP 048	1	112	50%	0	109
Dump Truck	CNP 067	1	117	30%	0	112
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Modified Crane	CNP 048	1	112	50%	0	109
Backhoe	CNP 081	1	112	50%	0	109
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Dump Truck	CNP 067	1	117	30%	0	112
Giken Piler and Power-pack	EIA Ref.	1	94	50%	0	91

Overall Noise Level, dB(A) **119**

Dwall GL 31 to GL 38 / GL K1

(1/12/2013 - 31/3/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	CNP 081	1	112	30%	0	107
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Modified Rig	CNP 163	2	90	100%	0	93
Modified Crane	CNP 048	1	112	100%	0	112
Bentonite Plant	CNP 162	1	105	50%	0	102
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Dump Truck	CNP 067	2	117	30%	0	115
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Air Compressor	CNP 002	1	102	30%	0	97
Grouting Mixer	CNP 105	1	90	30%	0	85
Grouting Pump	CNP 106	1	105	30%	0	100

Overall Noise Level, dB(A) **118**

Remarks:

EIA Ref. : The SWL of Giken Piler and Power-pack was made reference to the approved EIA Report of "Tsim Sha Tsui Station Northern Subway"

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H5

Dwall GL 31 to GL 38 / GL N

(1/1/2014 - 30/4/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	CNP 081	1	112	30%	0	107
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Modified Rig	CNP 163	2	90	100%	0	93
Modified Crane	CNP 048	1	112	100%	0	112
Bentonite Plant	CNP 162	1	105	50%	0	102
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Dump Truck	CNP 067	2	117	30%	0	115
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Air Compressor	CNP 002	1	102	30%	0	97
Grouting Mixer	CNP 105	1	90	30%	0	85
Grouting Pump	CNP 106	1	105	30%	0	100
Overall Noise Level, dB(A)						118

Excavation

Hung Hom Station

Pump test GL 28 to GL 38

(1/5/2014 - 30/6/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Pumping Test	CNP 283	2	85	50%	0	85
Overall Noise Level, dB(A)						85

Excavation & Strutting 1st Layer GL 28 to GL 38

(1/6/2014 - 30/6/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler / Excavator Loader	CNP 082	2	94	100%	0	97
Dump Truck	CNP 067	4	117	100%	0	123
Modified Crane	CNP 048	1	112	50%	0	109
Modified Crane	CNP 048	1	112	50%	0	109
Flat Bed Lorry	CNP 141	2	112	50%	0	112
Overall Noise Level, dB(A)						124

Excavation & Strutting GL 28 to GL 38

(1/9/2014 - 31/3/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler / Excavator Loader	CNP 082	2	94	100%	0	97
Dump Truck	CNP 067	4	117	100%	0	123
Modified Crane	CNP 048	1	112	50%	0	109
Modified Crane	CNP 048	1	112	50%	0	109
Flat Bed Lorry	CNP 141	2	112	50%	0	112
Piling Rig	BS D11/2	1	112	50%	0	109
Grouting Mixer	CNP 105	1	90	50%	0	87
Grouting Pump	CNP 106	1	105	50%	0	102
Overall Noise Level, dB(A)						124

Structure Works

Hung Hom Station

SCL (TAW - HUH) Track Slab GL 28 to GL 38

(1/7/2014 - 30/9/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	5	109	30%	0	111
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Overall Noise Level, dB(A)						116

SCL (MKK - HUH) Base Structure GL 28 to GL 38

(1/4/2015 - 30/6/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	5	109	30%	0	111
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Overall Noise Level, dB(A)						116

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H5

SCL (MKK - HUH) Internal Structures GL 28 to GL 38 (1/7/2015 - 30/9/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Overall Noise Level, dB(A)						116

Underpinning Columns to Podium Soffit GL 28 to GL 38 (1/10/2015 - 30/11/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Modified Crane	CNP 048	1	112	30%	0	107
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Air Compressor	CNP 002	1	102	30%	0	97
Overall Noise Level, dB(A)						114

SCL (TAW - HUH) & other Structures GL 28 to GL 38 (1/10/2015 - 29/2/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	3	112	100%	0	117
Bar Bender and Cutter	CNP 021	6	90	30%	0	93
Concrete Mixer Truck	CNP 044	12	109	30%	0	115
Concrete Poker Vibrator	CNP 170	6	113	30%	0	116
Concrete Pump Truck	CNP 047	3	109	30%	0	109
Air Compressor	CNP 002	1	102	30%	0	97
Overall Noise Level, dB(A)						121

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H6

Modification/ Enabling Works/ Utilities Diversions

Hung Hom Station

Utilities Diversion/ Services relocate (GL 38 - GL 48)

(1/1/2013 - 31/3/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	CNP 081	1	112	100%	0	112
Saw, Concrete	CNP 203	2	115	50%	0	115
Crane Lorry, Mobile	CNP 048	1	112	30%	0	107
Dump Truck	CNP 067	1	117	30%	0	112
Poker, Vibratory, Hand-held	CNP 170	2	113	30%	0	111
Air Compressor	CNP 002	1	102	30%	0	97
Concrete Lorry Mixer	CNP 044	1	109	30%	0	104
Giken Piler and Power-pack	EIA Ref.	1	94	50%	0	91

Overall Noise Level, dB(A) 119

Temporary Cofferdam

Hung Hom Station

Underpinning GL K & L

(1/4/2013 - 31/8/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Rig	CNP 163	2	90	50%	0	90
Modified Crane	CNP 048	1	112	50%	0	109
Dump Truck	CNP 067	1	117	30%	0	112
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Modified Crane	CNP 048	1	112	50%	0	109
Backhoe	CNP 081	1	112	50%	0	109
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Dump Truck	CNP 067	1	117	30%	0	112
Giken Piler and Power-pack	EIA Ref.	1	94	50%	0	91

Overall Noise Level, dB(A) 119

Underpinning Mid-level walkway

(1/4/2013 - 31/8/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	50%	0	109
Dump Truck	CNP 067	1	117	30%	0	112
Flat Bed Lorry	CNP 141	1	112	30%	0	107

Overall Noise Level, dB(A) 114

Dwall GL 38 to GL 48 / Interface / GL N

(1/4/2013 - 31/10/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	CNP 081	1	112	30%	0	107
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Modified Rig	CNP 163	2	90	100%	0	93
Modified Crane	CNP 048	1	112	100%	0	112
Bentonite Plant	CNP 162	1	105	50%	0	102
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Dump Truck	CNP 067	2	117	30%	0	115
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Air Compressor	CNP 002	1	102	30%	0	97
Grouting Mixer	CNP 105	1	90	30%	0	85
Grouting Pump	CNP 106	1	105	30%	0	100

Overall Noise Level, dB(A) 118

Remarks:

EIA Ref. : The SWL of Giken Piler and Power-pack was made reference to the approved EIA Report of "Tsim Sha Tsui Station Northern Subway"

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H6

Dwall GL 38 to GL 48 / Interface / GL K1 (1/9/2013 - 31/12/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	CNP 081	1	112	30%	0	107
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Modified Rig	CNP 163	2	90	100%	0	93
Modified Crane	CNP 048	1	112	100%	0	112
Bentonite Plant	CNP 162	1	105	50%	0	102
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Dump Truck	CNP 067	2	117	30%	0	115
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Air Compressor	CNP 002	1	102	30%	0	97
Grouting Mixer	CNP 105	1	90	30%	0	85
Grouting Pump	CNP 106	1	105	30%	0	100
Overall Noise Level, dB(A)						118

Excavation

Hung Hom Station

Pump test GL 38 to GL 48 / Interface (1/1/2014 - 28/2/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Pumping Test	CNP 283	2	85	50%	0	85
Overall Noise Level, dB(A)						85

Excavation & Strutting 1st Layer GL 38 to GL 48 (1/3/2014 - 30/4/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler / Excavator Loader	CNP 082	2	94	100%	0	97
Dump Truck	CNP 067	4	117	50%	0	120
Modified Crane	CNP 048	1	112	30%	0	107
Modified Crane	CNP 048	1	112	30%	0	107
Flat Bed Lorry	CNP 141	2	112	30%	0	110
Overall Noise Level, dB(A)						121

Excavation & Strutting GL 38 to GL 48 / Interface (1/8/2014 - 31/1/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler / Excavator Loader	CNP 082	2	94	100%	0	97
Dump Truck	CNP 067	4	117	50%	0	120
Modified Crane	CNP 048	1	112	30%	0	107
Modified Crane	CNP 048	1	112	30%	0	107
Flat Bed Lorry	CNP 141	2	112	30%	0	110
Piling Rig	BS D11/2	1	112	30%	0	107
Grouting Mixer	CNP 105	1	90	30%	0	85
Grouting Pump	CNP 106	1	105	30%	0	100
Overall Noise Level, dB(A)						121

Structure Works

Hung Hom Station

SCL (TAW - HUH) Track Slab GL 38 to GL 48 / Interface (1/5/2014 - 31/7/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	5	109	30%	0	111
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97
Backhoe	CNP 081	2	112	100%	0	115
Dump Truck	CNP 067	2	117	50%	0	117
Backhoe	CNP 081	1	112	50%	0	109
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Concrete Mixer Truck	CNP 044	1	109	30%	0	104
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Poker, Vibratory, Hand-held	CNP 170	1	113	30%	0	108
Air Compressor	CNP 002	1	102	30%	0	97
Backhoe	CNP 081	2	112	50%	0	112
Compactor, Vibratory	CNP 050	1	105	30%	0	100
Concrete Lorry Mixer	CNP 044	1	109	30%	0	104
Dump Truck	CNP 067	2	117	30%	0	115
Overall Noise Level, dB(A)						123

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Station, South Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area H6

SCL (MKK - HUH) Base Structure GL 38 to GL 48 (1/2/2015 - 30/4/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	5	109	30%	0	111
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 116

SCL (MKK - HUH) Internal Structures GL 38 to GL 48 (1/5/2015 - 31/7/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	1	112	100%	0	112
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Concrete Mixer Truck	CNP 044	4	109	30%	0	110
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Air Compressor	CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 116

Underpinning Columns to Podium Soffit GL 38 to GL 48 (1/8/2015 - 30/9/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Concrete Mixer Truck	CNP 044	2	109	30%	0	107
Concrete Pump Truck	CNP 047	1	109	30%	0	104
Bar Bender and Cutter	CNP 021	2	90	30%	0	88
Modified Crane	CNP 048	1	112	30%	0	107
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111
Air Compressor	CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 114

SCL (TAW - HUH) & other Structures GL 38 to GL 48 (1/8/2015 - 30/11/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Modified Crane	CNP 048	3	112	100%	0	117
Bar Bender and Cutter	CNP 021	6	90	30%	0	93
Concrete Mixer Truck	CNP 044	12	109	30%	0	115
Concrete Poker Vibrator	CNP 170	6	113	30%	0	116
Concrete Pump Truck	CNP 047	3	109	30%	0	109
Air Compressor	CNP 002	1	102	30%	0	97

Overall Noise Level, dB(A) 121

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated

North Approach Tunnel Sub-Location Area

Reprovisioning Facilities

Reprovisioned at Hung Hom Station Area

Building Works for Intercity Train Crew Facilities

(1/8/2012 - 28/2/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Lorry with crane/grab	CNP 145	1	105	30%	0	100
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Poker, Vibratory, Hand-held	CNP 170	2	113	30%	0	111
Air Compressor	CNP 002	1	102	70%	0	100
Concrete lorry mixer	CNP 044	1	109	30%	0	104
Overall Noise Level, dB(A)						112

Building Works for Signal Equipment Room

(1/10/2012 - 31/10/2012)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Lorry with crane/grab	CNP 145	1	105	30%	0	100
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Poker, Vibratory, Hand-held	CNP 170	1	113	30%	0	108
Air Compressor	CNP 002	1	102	70%	0	100
Concrete lorry mixer	CNP 044	1	109	30%	0	104
Overall Noise Level, dB(A)						110

Building Works for Telecom Equipment Room

(1/11/2012 - 30/11/2012)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Lorry with crane/grab	CNP 145	1	105	30%	0	100
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Poker, Vibratory, Hand-held	CNP 170	1	113	30%	0	108
Air Compressor	CNP 002	1	102	70%	0	100
Concrete lorry mixer	CNP 044	1	109	30%	0	104
Overall Noise Level, dB(A)						110

Building Works for S&C Depot

(1/10/2012 - 30/11/2012)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Lorry with crane/grab	CNP 145	1	105	30%	0	100
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Poker, Vibratory, Hand-held	CNP 170	1	113	30%	0	108
Air Compressor	CNP 002	1	102	70%	0	100
Concrete lorry mixer	CNP 044	1	109	30%	0	104
Overall Noise Level, dB(A)						110

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated

Area C1

Demolish Existing Facilities

Demolish Existing Loco Running Shed (1/9/2013 - 31/10/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe with Hydraulic Breaker	BS D8/13	1	110	70%	0	108
Dump Truck	BS D9/24	1	104	30%	0	99
Overall Noise Level, dB(A)						109

Demolish Existing Ways & Works Workshop (1/1/2014 - 28/2/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe with Hydraulic Breaker	BS D8/13	1	110	70%	0	108
Dump Truck	BS D9/24	1	104	30%	0	99
Overall Noise Level, dB(A)						109

Modification/ Enabling Works/ Utilities Diversions

Cheung Wan Road Viaduct

Site Clearance and Hoarding and Utility diversion (1/9/2012 - 30/10/2012)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	BS D3/35	1	106	60%	0	104
Air Compressor	CNP 002	1	102	70%	0	100
Hand held breaker	CNP 024	1	108	50%	0	105
Lorry with crane/grab	CNP 145	1	105	80%	0	104
Welder/generator	CNP107	1	99	40%	0	95
Overall Noise Level, dB(A)						110

Foundations (1/12/2012 - 31/8/2013)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane, mobile	BS D7/101	1	94	30%	0	89
Rock drill	EIA Ref.	1	108	30%	0	103
Air compressor	CNP 002	1	102	60%	0	100
Poker, Vibratory, Hand-held	BS D6/40	1	98	30%	0	93
Concrete lorry mixer	BS D6/33	1	96	30%	0	91
Piling, large diameterbored, grab and chisel	CNP 164	1	115	50%	0	112
Welder/generator	CNP107	1	99	30%	0	94
Excavator	BS D3/35	1	106	30%	0	101
Overall Noise Level, dB(A)						113

Construction of Substructure and Superstructure for New Diversion Bridge

Stage 1 (1/5/2013 - 31/8/2013)

Stage 2 (1/3/2014 - 31/7/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	BS D3/35	1	106	50%	0	103
Concrete lorry mixer	BS D6/33	2	96	30%	0	94
Poker, Vibratory, Hand-held	BS D6/40	1	98	30%	0	93
Air Compressor	CNP 002	1	102	70%	0	100
Crane, mobile	BS D7/101	1	94	30%	0	89
Overall Noise Level, dB(A)						106

Demolish of Existing Viaduct (1/8/2014 - 30/9/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	BS D3/35	1	106	70%	0	104
Hydraulic breaker	BS D8/13	1	110	70%	0	108
Saw, concrete	CNP 203	1	115	40%	0	111
Air Compressor	CNP 002	1	102	70%	0	100
Lorry with crane/grab	CNP 145	1	105	100%	0	105
Crane, mobile	BS D7/101	1	94	70%	0	92
Welder/generator	CNP107	1	99	40%	0	95
Overall Noise Level, dB(A)						114

Remarks:

EIA Ref. : The SWL of Rock Drill was made reference to the approved EIA Report of "Tsim Sha Tsui Station Northern Subway".

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated

Area C1

DSD Culvert Diversion

Construct New Box Culvert - Loco Shed area

(1/9/2013 - 28/2/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe with hydraulic breaker	BS D8/13	1	110	70%	0	108
Dump Truck	BS D9/24	1	104	30%	0	99
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Concrete pump	BS D6/36	1	106	30%	0	101
Concrete Mixer Truck	BS D6/33	1	96	30%	0	91

Overall Noise Level, dB(A) **110**

Construct New Box Culvert - Ways & Works Workshop area

(1/3/2014 - 30/11/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe with hydraulic breaker	BS D8/13	1	110	70%	0	108
Dump Truck	BS D9/24	1	104	30%	0	99
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Concrete pump	BS D6/36	1	106	30%	0	101
Concrete Mixer Truck	BS D6/33	1	96	30%	0	91

Overall Noise Level, dB(A) **110**

Construct New Box Culvert - above SCL (MKK - HUH) Tunnels

(1/5/2015 - 31/7/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe with hydraulic breaker	BS D8/13	1	110	70%	0	108
Dump Truck	BS D9/24	1	104	30%	0	99
Bar Bender and Cutter	CNP 021	1	90	30%	0	85
Concrete pump	BS D6/36	1	106	30%	0	101
Concrete Mixer Truck	BS D6/33	1	96	30%	0	91

Overall Noise Level, dB(A) **110**

Temporary Cofferdam

Podium to Existing Culverts

Cofferdam Construction

(1/8/2014 - 31/10/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Pipe Pile Rigs	BS D11/2	2	112	70%	-10	103
Crawler crane	BS D7/112	1	102	30%	0	97
Grout mixer	CNP 105	1	90	50%	0	87
Grout pump	CNP 106	1	105	40%	-10	91
Air compressor	CNP 002	1	102	70%	-15	85
Drill Rig	CNP 072	1	110	50%	-10	97
Backhoe with hydraulic breaker	BS D8/13	1	110	30%	-5	100

Overall Noise Level, dB(A) **106**

At Existing Culverts

Cofferdam Construction (existing culvert)

(1/6/2015 - 31/8/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Pipe Pile Rigs	BS D11/2	2	112	70%	-10	103
Crawler crane	BS D7/112	1	102	30%	0	97
Grout mixer	CNP 105	1	90	50%	0	87
Grout pump	CNP 106	1	105	40%	-10	91
Air compressor	CNP 002	1	102	70%	-15	85
Drill Rig	CNP 072	1	110	50%	-10	97
Backhoe with hydraulic breaker	BS D8/13	1	110	30%	-5	100

Overall Noise Level, dB(A) **106**

Excavation

Podium to Existing Culverts

Excavation & Shoring

(1/11/2014 - 31/1/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	70%	-5	99
Dump Truck	BS D9/24	1	104	30%	0	99

Overall Noise Level, dB(A) **102**

At Existing Culverts

Excavation & Shoring (existing culvert)

(1/9/2015 - 31/10/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	70%	-5	99
Dump Truck	BS D9/24	1	104	30%	0	99

Overall Noise Level, dB(A) **102**

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario:

Mitigated ▼

Area C1

Structure Works

Podium to Existing Culverts

Concrete Structures SCL (MKK - HUH)

(1/2/2015 - 30/4/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	30%	-5	96
Crawler crane	BS D7/112	1	102	30%	0	97
Bar Bender and Cutter	CNP 021	2	90	30%	-10	78
Concrete Mixer Truck	BS D6/33	2	96	50%	0	96
Concrete Pump Truck	BS D6/36	2	106	50%	0	106
Poker, Vibratory, Hand-held	BS D6/40	4	98	50%	0	101
Overall Noise Level, dB(A)						108

At Existing Culverts

Concrete Structures SCL (MKK - HUH) (existing culvert)

(1/11/2015 - 31/12/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	30%	-5	96
Crawler crane	BS D7/112	1	102	30%	0	97
Bar Bender and Cutter	CNP 021	2	90	30%	-10	78
Concrete Mixer Truck	BS D6/33	2	96	50%	0	96
Concrete Pump Truck	BS D6/36	2	106	50%	0	106
Poker, Vibratory, Hand-held	BS D6/40	4	98	50%	0	101
Overall Noise Level, dB(A)						108

Backfilling

Podium to Existing Culverts and at above

Backfill

(1/4/2016 - 31/5/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	70%	-5	99
Crawler crane	BS D7/112	1	102	30%	0	97
Roller	BS D8/30	1	101	30%	0	96
Dump Truck	BS D9/24	2	104	30%	0	102
Overall Noise Level, dB(A)						105

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area C2

Demolish Existing Facilities

Demolish Existing STA Building (1/1/2014 - 28/2/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe with Hydraulic Breaker	BS D8/13	1	110	70%	-5	103
Dump Truck	BS D9/24	1	104	30%	0	99
Overall Noise Level, dB(A)						105

Temporary Cofferdam

Hung Hom Bypass Pier C2/5

Install Diaphragm Wall (1/1/2014 - 31/5/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane, mobile	BS D7/101	1	94	30%	-5	84
Rock Drill	EIA Ref.	1	108	30%	-15	88
Poker, Vibratory, Hand-held	BS D6/40	2	98	30%	0	96
Concrete lorry mixer	BS D6/33	2	96	30%	0	94
Air Compressor	CNP 002	1	102	70%	-15	85
Piling, diaphragm wall, bentonite filtering plant	CNP 162	1	105	80%	-10	94
Welder/generator	CNP107	1	99	40%	0	95
Overall Noise Level, dB(A)						101

Underpinning foundation

(1/3/2014 - 31/7/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	BS D3/35	1	106	50%	-5	98
Concrete lorry mixer	BS D6/33	2	96	30%	0	94
Poker, Vibratory, Hand-held	BS D6/40	2	98	30%	0	96
Air Compressor	CNP 002	1	102	70%	-15	85
Crane, mobile	BS D7/101	1	94	40%	-5	85
Overall Noise Level, dB(A)						101

Existing Culverts to STA Building

Cofferdam Construction

(1/1/2014 - 31/5/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Pipe Pile Rigs	BS D11/2	2	112	70%	-10	103
Crawler crane	BS D7/112	1	102	30%	0	97
Grout mixer	CNP 105	1	90	50%	0	87
Grout pump	CNP 106	1	105	40%	-10	91
Air compressor	CNP 002	1	102	70%	-15	85
Drill Rig	CNP 072	1	110	50%	-10	97
Backhoe with hydraulic breaker	BS D8/13	1	110	30%	-5	100
Overall Noise Level, dB(A)						106

Excavation

Existing Culverts to STA Building

Excavation & Shoring

(1/8/2014 - 31/12/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	70%	-5	99
Dump Truck	BS D9/24	1	104	30%	0	99
Overall Noise Level, dB(A)						102

Remarks:

EIA Ref. : The SWL of Rock Drill was made reference to the approved EIA Report of "Tsim Sha Tsui Station Northern Subway".

Structure Works

Existing Culverts to STA Building

Concrete Structures SCL (MKK - HUH)

(1/1/2015 - 31/5/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	30%	-5	96
Crawler crane	BS D7/112	1	102	30%	0	97
Bar Bender and Cutter	CNP 021	2	90	30%	-10	78
Concrete Mixer Truck	BS D6/33	2	96	50%	0	96
Concrete Pump Truck	BS D6/36	2	106	50%	0	106
Poker, Vibratory, Hand-held	BS D6/40	4	98	50%	0	101
Overall Noise Level, dB(A)						108

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area C3A

Temporary Cofferdam

STA Building to Chatham Road North (OB2)
Cofferdam Construction

(1/2/2014 - 30/4/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Pipe Pile Rigs	BS D11/2	1	112	70%	-10	100
Crawler crane	BS D7/112	1	102	30%	0	97
Grout mixer	CNP 105	1	90	50%	0	87
Grout pump	CNP 106	1	105	40%	-10	91
Air compressor	CNP 002	1	102	70%	-15	85
Drill Rig	CNP 072	1	110	50%	-10	97
Backhoe with hydraulic breaker	BS D8/13	1	110	30%	-5	100
Overall Noise Level, dB(A)						105

Excavation

STA Building to Chatham Road North (OB2)
Excavation & Shoring

(1/5/2014 - 31/8/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	70%	-5	99
Dump Truck	BS D9/24	1	104	30%	0	99
Overall Noise Level, dB(A)						102

Structure Works

STA Building to Chatham Road North (OB2)
Concrete Structures SCL (MKK - HUH)

(1/9/2014 - 31/1/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	30%	-5	96
Crawler crane	BS D7/112	1	102	30%	0	97
Bar Bender and Cutter	CNP 021	2	90	30%	-10	78
Concrete Mixer Truck	BS D6/33	2	96	50%	0	96
Concrete Pump Truck	BS D6/36	2	106	50%	0	106
Poker, Vibratory, Hand-held	BS D6/40	2	98	50%	0	98
Overall Noise Level, dB(A)						108

Backfilling

STA Building to Chatham Road North (OB2)
Backfill

(1/2/2015 - 31/3/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	70%	-5	99
Crawler crane	BS D7/112	1	102	30%	0	97
Roller	BS D8/30	1	101	30%	0	96
Dump Truck	BS D9/24	2	104	30%	0	102
Overall Noise Level, dB(A)						105

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area C4A

Temporary Cofferdam

Chatham Road North (OB2) to Slip Road (OB2A)

Cofferdam Construction

(1/2/2014 - 30/4/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Pipe Pile Rigs	BS D11/2	1	112	70%	-10	100
Crawler crane	BS D7/112	1	102	30%	0	97
Grout mixer	CNP 105	1	90	50%	0	87
Grout pump	CNP 106	1	105	40%	-10	91
Air compressor	CNP 002	1	102	70%	-15	85
Drill Rig	CNP 072	1	110	50%	-10	97
Backhoe with hydraulic breaker	BS D8/13	1	110	30%	-5	100
Overall Noise Level, dB(A)						105

Excavation

Chatham Road North (OB2) to Slip Road (OB2A)

Excavation & Shoring

(1/7/2014 - 31/10/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	70%	-5	99
Dump Truck	BS D9/24	1	104	30%	0	99
Overall Noise Level, dB(A)						102

Structure Works

Chatham Road North (OB2) to Slip Road (OB2A)

Concrete Structures SCL (MKK - HUH)

(1/11/2014 - 31/1/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	30%	-5	96
Crawler crane	BS D7/112	1	102	30%	0	97
Bar Bender and Cutter	CNP 021	1	90	30%	-10	75
Concrete Mixer Truck	BS D6/33	1	96	50%	0	93
Concrete Pump Truck	BS D6/36	1	106	50%	0	103
Poker, Vibratory, Hand-held	BS D6/40	2	98	50%	0	98
Overall Noise Level, dB(A)						106

Backfilling

Chatham Road North (OB2) to Slip Road (OB2A)

Backfill

(1/2/2015 - 31/3/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	70%	-5	99
Crawler crane	BS D7/112	1	102	30%	0	97
Roller	BS D8/30	1	101	30%	0	96
Dump Truck	BS D9/24	2	104	30%	0	102
Overall Noise Level, dB(A)						105

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated

Area C6

Modification/ Enabling Works/ Utilities Diversions

Existing CLP Substation

Modify Existing CLP Substation (1/5/2014 - 31/10/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Lorry with crane/grab	BS D7/101	1	94	30%	-5	84
Backhoe with Hydraulic Breaker	BS D8/13	1	110	30%	-5	100
Dump Truck	BS D9/24	1	104	30%	0	99
Bar Bender and Cutter	CNP 021	1	90	30%	-10	75
Poker, Vibratory, Hand-held	BS D6/40	2	98	30%	0	96
Air Compressor	CNP 002	1	102	70%	-15	85
Concrete lorry mixer	BS D6/33	1	96	30%	0	91
Overall Noise Level, dB(A)						104

Oi Sen Path Temporary Footbridge

Construct Temporary Working Platform (GL G-J)

(1/1/2014 - 31/1/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Lorry with crane/grab	BS D7/101	1	94	30%	-5	84
Overall Noise Level, dB(A)						84

Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL G-J)

(1/2/2014 - 28/2/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Soil Nailing Machine	CNP 064	1	103	50%	0	100
Grout Mixer	CNP 105	1	90	50%	0	87
Grout Pump	CNP 106	1	105	40%	-10	91
Air Compressor	CNP 002	1	102	70%	-15	85
Hand held breaker	CNP 024	1	108	30%	-5	98
Overall Noise Level, dB(A)						103

Construct Temporary Working Platform (GL E-G)

(1/3/2014 - 31/3/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Lorry with crane/grab	BS D7/101	1	94	30%	-5	84
Overall Noise Level, dB(A)						84

Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL E-G)

(1/4/2014 - 30/4/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Soil Nailing Machine	CNP 064	1	103	50%	0	100
Grout Mixer	CNP 105	1	90	50%	0	87
Grout Pump	CNP 106	1	105	40%	-10	91
Air Compressor	CNP 002	1	102	70%	-15	85
Hand held breaker	CNP 024	1	108	30%	-5	98
Overall Noise Level, dB(A)						103

Construct Temporary Working Platform (GL C-E)

(1/5/2014 - 31/5/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Lorry with crane/grab	BS D7/101	1	94	30%	-5	84
Overall Noise Level, dB(A)						84

Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL C-E)

(1/6/2014 - 30/6/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Soil Nailing Machine	CNP 064	1	103	50%	0	100
Grout Mixer	CNP 105	1	90	50%	0	87
Grout Pump	CNP 106	1	105	40%	-10	91
Air Compressor	CNP 002	1	102	70%	-15	85
Hand held breaker	CNP 024	1	108	30%	-5	98
Overall Noise Level, dB(A)						103

Construct Temporary Working Platform (GL A-C)

(1/7/2014 - 31/7/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Lorry with crane/grab	BS D7/101	1	94	30%	-5	84
Overall Noise Level, dB(A)						84

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated

Area C6

Cut Back Slope and Existing Soil Nails and Install New Soil Nails (GL A-C) (1/8/2014 - 31/8/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Soil Nailing Machine	CNP 064	1	103	50%	0	100
Grout Mixer	CNP 105	1	90	50%	0	87
Grout Pump	CNP 106	1	105	40%	-10	91
Air Compressor	CNP 002	1	102	70%	-15	85
Hand held breaker	CNP 024	1	108	30%	-5	98
Overall Noise Level, dB(A)						103

Construct Temporary Footbridge Structure and Finishes (GL A-J) (1/7/2014 - 30/9/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Bar bender and Cutter	CNP 021	1	90	30%	-10	75
Poker, Vibratory, Hand-held	BS D6/40	1	98	50%	0	95
Air Compressor	CNP 002	2	102	50%	-15	87
Concrete Lorry Mixer	BS D6/33	1	96	30%	0	91
Concrete Pump	BS D6/36	1	106	30%	-10	91
Lorry with crane/grab	BS D7/101	1	94	30%	-5	84
Welder/generator	CNP107	2	99	50%	0	99
Overall Noise Level, dB(A)						102

Install Mini Piles (Pier K) (1/5/2014 - 31/5/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Mini Piling Rig	BS D11/2	1	112	70%	-10	100
Grout Mixer	CNP 105	1	90	50%	0	87
Grout Pump	CNP 106	1	105	40%	-10	91
Air Compressor	CNP 002	1	102	70%	-15	85
Overall Noise Level, dB(A)						101

Construct Pile Cap (Pier K) (1/6/2014 - 30/6/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Bar bender and Cutter	CNP 021	1	90	30%	-10	75
Poker, Vibratory, Hand-held	BS D6/40	1	98	50%	0	95
Air Compressor	CNP 002	1	102	50%	-15	84
Concrete Lorry Mixer	BS D6/33	1	96	30%	0	91
Concrete Pump	BS D6/36	1	106	30%	-10	91
Overall Noise Level, dB(A)						98

Construct Truss Structure (Pier K) (1/7/2014 - 31/7/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler Crane	BS D7/112	1	102	30%	0	97
Welder/generator	CNP107	1	99	50%	0	96
Overall Noise Level, dB(A)						99

Install Mini Piles (Pier L) (1/6/2014 - 30/6/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Mini Piling Rig	BS D11/2	1	112	70%	-10	100
Grout Mixer	CNP 105	1	90	50%	0	87
Grout Pump	CNP 106	1	105	40%	-10	91
Air Compressor	CNP 002	1	102	70%	-15	85
Overall Noise Level, dB(A)						101

Construct Pile Cap (Pier L) (1/7/2014 - 31/7/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Bar bender and Cutter	CNP 021	1	90	30%	-10	75
Poker, Vibratory, Hand-held	BS D6/40	1	98	50%	0	95
Air Compressor	CNP 002	1	102	50%	-15	84
Concrete Lorry Mixer	BS D6/33	1	96	30%	0	91
Concrete Pump	BS D6/36	1	106	30%	-10	91
Overall Noise Level, dB(A)						98

Construct Truss Structure (Pier L) (1/8/2014 - 31/8/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler Crane	BS D7/112	1	102	30%	0	97
Welder/generator	CNP107	1	99	50%	0	96
Overall Noise Level, dB(A)						99

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated

Area C6

							(1/7/2014 - 31/7/2014)
Install Mini Piles (Pier M)							
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL	
Mini Piling Rig	BS D11/2	1	112	70%	-10	100	
Grout Mixer	CNP 105	1	90	50%	0	87	
Grout Pump	CNP 106	1	105	40%	-10	91	
Air Compressor	CNP 002	1	102	70%	-15	85	
Overall Noise Level, dB(A)							101
Construct Pile Cap (Pier M)							
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL	
Bar bender and Cutter	CNP 021	1	90	30%	-10	75	
Poker, Vibratory, Hand-held	BS D6/40	1	98	50%	0	95	
Air Compressor	CNP 002	1	102	50%	-15	84	
Concrete Lorry Mixer	BS D6/33	1	96	30%	0	91	
Concrete Pump	BS D6/36	1	106	30%	-10	91	
Overall Noise Level, dB(A)							98
Construct Truss Structure (Pier M)							
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL	
Crawler Crane	BS D7/112	1	102	30%	0	97	
Welder/generator	CNP107	1	99	50%	0	96	
Overall Noise Level, dB(A)							99
Install Mini Piles (Pier N)							
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL	
Mini Piling Rig	BS D11/2	1	112	70%	-10	100	
Grout Mixer	CNP 105	1	90	50%	0	87	
Grout Pump	CNP 106	1	105	40%	-10	91	
Air Compressor	CNP 002	1	102	70%	-15	85	
Overall Noise Level, dB(A)							101
Construct Pile Cap (Pier N)							
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL	
Bar bender and Cutter	CNP 021	1	90	30%	-10	75	
Poker, Vibratory, Hand-held	BS D6/40	1	98	50%	0	95	
Air Compressor	CNP 002	1	102	50%	-15	84	
Concrete Lorry Mixer	BS D6/33	1	96	30%	0	91	
Concrete Pump	BS D6/36	1	106	30%	-10	91	
Overall Noise Level, dB(A)							98
Construct Truss Structure (Pier N)							
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL	
Crawler Crane	BS D7/112	1	102	30%	0	97	
Welder/generator	CNP107	1	99	50%	0	96	
Overall Noise Level, dB(A)							99
Install Mini Piles (Pier P)							
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL	
Mini Piling Rig	BS D11/2	1	112	70%	-10	100	
Grout Mixer	CNP 105	1	90	50%	0	87	
Grout Pump	CNP 106	1	105	40%	-10	91	
Air Compressor	CNP 002	1	102	70%	-15	85	
Overall Noise Level, dB(A)							101
Construct Pile Cap (Pier P)							
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL	
Bar bender and Cutter	CNP 021	1	90	30%	-10	75	
Poker, Vibratory, Hand-held	BS D6/40	1	98	50%	0	95	
Air Compressor	CNP 002	1	102	50%	-15	84	
Concrete Lorry Mixer	BS D6/33	1	96	30%	0	91	
Concrete Pump	BS D6/36	1	106	30%	-10	91	
Overall Noise Level, dB(A)							98

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated

Area C6

Construct Truss Structure (Pier P) (1/11/2014 - 30/11/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler Crane	BS D7/112	1	102	30%	0	97
Welder/generator	CNP107	1	99	50%	0	96
Overall Noise Level, dB(A)						99

Construct Temporary Footbridge Structure and Finishes (GL J-O) (1/10/2014 - 31/12/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler Crane	BS D7/112	1	102	30%	0	97
Welder/generator	CNP107	1	99	50%	0	96
Dump Truck	BS D9/24	1	104	30%	0	99
Concrete Lorry Mixer	BS D6/33	1	96	30%	0	91
Concrete Pump	BS D6/36	1	106	30%	-10	91
Overall Noise Level, dB(A)						103

Construct Pile Cap (GL O-R) (1/10/2014 - 30/11/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Bar bender and Cutter	CNP 021	1	90	30%	-10	75
Poker, Vibratory, Hand-held	BS D6/40	1	98	50%	0	95
Air Compressor	CNP 002	1	102	50%	-15	84
Concrete Lorry Mixer	BS D6/33	1	96	30%	0	91
Concrete Pump	BS D6/36	1	106	30%	-10	91
Overall Noise Level, dB(A)						98

Construct Truss Structure (GL O-R) (1/11/2014 - 31/12/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler Crane	BS D7/112	1	102	30%	0	97
Welder/generator	CNP107	2	99	50%	0	99
Dump Truck	BS D9/24	1	104	30%	0	99
Overall Noise Level, dB(A)						103

Construct Temporary Footbridge Structure and Finishes (GL O-R) (1/11/2014 - 31/12/2014)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Bar bender and Cutter	CNP 021	1	90	30%	-10	75
Poker, Vibratory, Hand-held	BS D6/40	1	98	50%	0	95
Air Compressor	CNP 002	1	102	50%	-15	84
Concrete Lorry Mixer	BS D6/33	1	96	30%	0	91
Concrete Pump	BS D6/36	1	106	30%	-10	91
Overall Noise Level, dB(A)						98

Complete Footpath and Finishes (GL R-T) (1/8/2015 - 30/9/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane Lorry	BS D7/101	1	94	70%	0	92
Concrete Lorry Mixer	BS D6/33	1	96	30%	0	91
Overall Noise Level, dB(A)						95

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area C6

Chatham Road North Slip Road Overbridge (OB2A)

Site Clearance and Hoarding and Utility diversion

(1/2/2014 - 28/2/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator		BS D3/35	1	106	60%	-5	99
Air Compressor		CNP 002	1	102	50%	-15	84
Hand held breaker		CNP 024	1	108	50%	-5	100
Lorry with crane/grab		CNP 145	1	105	60%	-5	98
Welder/generator		CNP107	1	99	40%	0	95
Overall Noise Level, dB(A)							104

Foundations for Temporary OB2A (Piling & Pier)

(1/3/2014 - 31/8/2014)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator		BS D3/35	1	106	60%	-5	99
Piling, large diameterbored, grab and chisel		CNP 164	1	115	30%	-10	100
Pipe Pile Rigs		BS D11/2	1	112	30%	-10	97
Air Compressor		CNP 002	1	102	50%	-15	84
Lorry with crane/grab		CNP 145	1	105	60%	-5	98
Poker, Vibratory, Hand-held		BS D6/40	2	98	30%	0	96
Concrete lorry mixer		BS D6/33	2	96	30%	0	94
Overall Noise Level, dB(A)							105

Deck Construction for Temporary OB2A

(1/4/2015 - 31/7/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane, mobile		BS D7/101	1	94	50%	-5	86
Air Compressor		CNP 002	1	102	70%	-15	85
Poker, Vibratory, Hand-held		BS D6/40	2	98	30%	0	96
Concrete lorry mixer		BS D6/33	1	96	30%	0	91
Concrete pump		BS D6/36	1	106	30%	-10	91
Welder/generator		CNP107	1	99	40%	0	95
Overall Noise Level, dB(A)							100

Demolish Deck of Existing OB2A

(1/8/2015 - 30/9/2015)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane, mobile		BS D7/101	1	94	30%	-5	84
Air Compressor		CNP 002	1	102	70%	-15	85
Saw, Concrete		CNP 203	1	115	50%	-10	102
Hand held breaker		CNP 024	1	108	70%	-5	101
Overall Noise Level, dB(A)							105

Construction of New OB2A Pile & Pile Cap

(1/7/2016 - 31/10/2016)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator		BS D3/35	1	106	50%	-5	98
Piling, large diameterbored, grab and chisel		CNP 164	1	115	80%	-10	104
Dump truck		BS D9/24	1	104	30%	0	99
Poker, Vibratory, Hand-held		BS D6/40	2	98	30%	0	96
Air Compressor		CNP 002	1	102	50%	-15	84
Concrete lorry mixer		BS D6/33	2	96	30%	0	94
Crane, mobile		BS D7/101	1	94	60%	-5	87
Overall Noise Level, dB(A)							107

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area C6

Construction of New OB2A Abutment & Bridge Deck (1/11/2016 - 28/2/2017)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	BS D3/35	1	106	70%	-5	99
Dump truck	BS D9/24	1	104	80%	0	103
Power Rammer (petrol)	CNP169	1	108	100%	0	108
Asphalt paver	BS D8/24	1	101	30%	-5	91
Overall Noise Level, dB(A)						110

OB2A Reinstatement (1/3/2017 - 30/4/2017)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	BS D3/35	1	106	70%	-5	99
Dump truck	BS D9/24	1	104	80%	0	103
Asphalt paver	BS D8/24	1	101	30%	-5	91
Road roller	BS D8/30	1	101	30%	0	96
Welder/generator	CNP107	1	99	40%	0	95
Overall Noise Level, dB(A)						106

Temporary OB2A Removal (1/5/2017 - 30/6/2017)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	BS D3/35	1	106	70%	-5	99
Dump truck	BS D9/24	1	104	80%	0	103
Asphalt paver	BS D8/24	1	101	30%	-5	91
Road roller	BS D8/30	1	101	30%	0	96
Welder/generator	CNP107	1	99	40%	0	95
Overall Noise Level, dB(A)						106

OB2A Pedestrian Subway

Site Clearance and Hoarding and Utility diversion (1/6/2015 - 31/7/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	BS D3/35	1	106	60%	-5	99
Air Compressor	CNP 002	1	102	50%	-15	84
Hand held breaker	CNP 024	1	108	50%	-5	100
Lorry with crane/grab	CNP 145	1	105	60%	-5	98
Welder/generator	CNP107	1	99	40%	0	95
Overall Noise Level, dB(A)						104

Demolish Existing Box Structure of OB2A Pedestrian Subway (1/8/2015 - 30/9/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	BS D3/35	1	106	100%	-5	101
Hydraulic breaker	BS D8/13	1	110	80%	-5	104
Saw, Concrete	CNP 203	1	115	50%	-10	102
Air compressor	CNP 002	1	102	70%	-15	85
Lorry with crane/grab	CNP 145	1	105	100%	-5	100
Welder/generator	CNP107	1	99	40%	0	95
Overall Noise Level, dB(A)						108

OB2A Pedestrian Subway Reinstatement (1/11/2016 - 31/1/2017)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator	BS D3/35	1	106	50%	-5	98
Concrete lorry mixer	BS D6/33	2	96	50%	0	96
Poker, Vibratory, Hand-held	BS D6/40	2	98	70%	0	99
Air Compressor	CNP 002	1	102	70%	-15	85
Concrete lorry mixer	BS D6/33	1	96	30%	0	91
Overall Noise Level, dB(A)						103

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated

Area C6

Oi Sen Path Works *

Pedestrian Diversion Works								(1/10/2014 - 31/7/2015)
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL		
Mini Piling Rig	BS D11/2	1	112	70%	-10	100		
Grout mixer	CNP 105	1	90	50%	0	87		
Grout pump	CNP 106	1	105	40%	-10	91		
Air compressor	CNP 002	1	102	70%	-15	85		
Drill Rig	CNP 072	1	110	50%	-10	97		
Backhoe with hydraulic breaker	BS D8/13	1	110	30%	-5	100		
Mobile Crane	BS D7/101	1	94	50%	-5	86		
Bar Bender and Cutter	CNP 021	1	90	30%	-10	75		
Concrete Mixer Truck	BS D6/33	1	96	30%	0	91		
Concrete Pump Truck	BS D6/36	1	106	30%	0	101		
Poker, Vibratory, Hand-held	BS D6/40	2	98	30%	0	96		
Overall Noise Level, dB(A)							107	
Relocate CLP cable								(1/8/2015 - 30/11/2015)
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL		
Drill Rig	CNP 072	1	110	50%	-10	97		
Grout mixer	CNP 105	1	90	50%	0	87		
Grout pump	CNP 106	1	105	40%	-10	91		
Air compressor	CNP 002	1	102	70%	-15	85		
Backhoe with hydraulic breaker	BS D8/13	1	110	30%	-5	100		
Hydraulic Rock splitter	BS D8/13	1	110	30%	0	105		
Overall Noise Level, dB(A)							107	
Soil Nailing								(1/8/2015 - 31/12/2015)
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL		
Soil Nailing machine	CNP 064	1	103	50%	0	100		
Grout mixer	CNP 105	1	90	50%	0	87		
Grout pump	CNP 106	1	105	40%	-10	91		
Air compressor	CNP 002	1	102	70%	-15	85		
Overall Noise Level, dB(A)							101	
Retaining wall								(1/1/2016 - 30/6/2016)
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL		
Pipe Pile Rigs	BS D11/2	1	112	70%	-10	100		
Grout mixer	CNP 105	1	90	50%	0	87		
Grout pump	CNP 106	1	105	40%	-10	91		
Air compressor	CNP 002	1	102	70%	-15	85		
Backhoe with hydraulic breaker	BS D8/13	1	110	60%	-5	103		
Overall Noise Level, dB(A)							105	
Slope Cut								(1/7/2016 - 31/10/2016)
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL		
Pipe Pile Rigs	BS D11/2	1	112	70%	-10	100		
Grout mixer	CNP 105	1	90	50%	0	87		
Grout pump	CNP 106	1	105	40%	-10	91		
Air compressor	CNP 002	1	102	70%	-15	85		
Backhoe with hydraulic breaker	BS D8/13	1	110	60%	-5	103		
Overall Noise Level, dB(A)							105	
Reinstate Oi Sen Path								(1/8/2017 - 31/12/2017)
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL		
Hydraulic Excavator	BS D3/35	1	106	60%	-5	99		
Dump truck	BS D9/24	1	104	60%	0	102		
Asphalt paver	BS D8/24	1	101	50%	-5	93		
Road roller	BS D8/30	1	101	50%	0	98		
Concrete Mixer Truck	BS D6/33	1	96	30%	0	91		
Overall Noise Level, dB(A)							105	

Note:

* For Carmel Secondary School (OM4a), topography screening effect has been included in the calculation and thus the barrier effect is not applied for the Oi Sen Path Work.

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated

Area C6

Temporary Cofferdam

Between OB2 and OB2A

Temporary Retaining Wall

(1/9/2015 - 30/11/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Pipe Pile Rigs	BS D11/2	1	112	70%	-10	100
Grout mixer	CNP 105	1	90	50%	0	87
Grout pump	CNP 106	1	105	40%	-10	91
Air compressor	CNP 002	1	102	70%	-15	85
Drill Rig	CNP 072	1	110	50%	-10	97
Backhoe with hydraulic breaker	BS D8/13	1	110	30%	-5	100
Overall Noise Level, dB(A)						104

North of OB2A

Sheet Piled Wall

(1/9/2016 - 31/1/2017)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler crane	BS D7/112	1	102	50%	0	99
Vibratory Hammer	BS D4/53	1	118	70%	-10	106
Backhoe with hydraulic breaker	BS D8/13	1	110	30%	-5	100
Overall Noise Level, dB(A)						108

At Temporary OB2A *

Sheet Piled Wall

(1/8/2017 - 31/10/2017)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crawler crane	BS D7/112	1	102	50%	0	99
Vibratory Hammer	BS D4/53	1	118	70%	-10	106
Backhoe with hydraulic breaker	BS D8/13	1	110	30%	-5	100
Overall Noise Level, dB(A)						108

Excavation

Between OB2 and OB2A

Excavation & Shoring

(1/12/2015 - 29/2/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	70%	-5	99
Dump Truck	BS D9/24	1	104	30%	0	99
Overall Noise Level, dB(A)						102

North of OB2A

Excavation & Shoring (existing culvert)

(1/12/2016 - 30/4/2017)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	70%	-5	99
Dump Truck	BS D9/24	1	104	30%	0	99
Overall Noise Level, dB(A)						102

At Temporary OB2A *

Excavation & Shoring (existing culvert)

(1/11/2017 - 31/12/2017)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	70%	-5	99
Dump Truck	BS D9/24	1	104	30%	0	99
Overall Noise Level, dB(A)						102

Note:

* For Carmel Secondary School (OM4a), topography screening effect has been included in the calculation and thus the barrier effect is not applied for the Tunnel Works at Temporary OB2A area (Work site ID C6c in Appendix 6.3A refers).

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - North Approach Tunnel & Related Works

Scenario: Mitigated ▼

Area C6

Structure Works

Between OB2 and OB2A

Concrete Structures

(1/3/2016 - 30/6/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	30%	-5	96
Crawler crane	BS D7/112	1	102	30%	0	97
Bar Bender and Cutter	CNP 021	2	90	30%	-10	78
Concrete Mixer Truck	BS D6/33	1	96	50%	0	93
Concrete Pump Truck	BS D6/36	2	106	50%	0	106
Poker, Vibratory, Hand-held	BS D6/40	2	98	50%	0	98
Overall Noise Level, dB(A)						108

North of OB2A

Concrete Structures

(1/3/2017 - 31/7/2017)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	30%	-5	96
Bar Bender and Cutter	CNP 021	2	90	30%	-10	78
Concrete Mixer Truck	BS D6/33	2	96	50%	0	96
Concrete Pump Truck	BS D6/36	1	106	50%	0	103
Poker, Vibratory, Hand-held	BS D6/40	2	98	50%	0	98
Overall Noise Level, dB(A)						105

At Temporary OB2A *

Concrete Structures

(1/1/2018 - 31/3/2018)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	30%	-5	96
Bar Bender and Cutter	CNP 021	2	90	30%	-10	78
Concrete Mixer Truck	BS D6/33	2	96	50%	0	96
Concrete Pump Truck	BS D6/36	1	106	50%	0	103
Poker, Vibratory, Hand-held	BS D6/40	2	98	50%	0	98
Overall Noise Level, dB(A)						105

Backfilling

OB2 to Temporary OB2A *

Backfill

(1/4/2018 - 31/5/2018)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	1	106	70%	-5	99
Crawler crane	BS D7/112	1	102	30%	0	97
Roller	BS D8/30	1	101	30%	0	96
Dump Truck	BS D9/24	2	104	30%	0	102
Overall Noise Level, dB(A)						105

Note:

* For Carmel Secondary School (OM4a), topography screening effect has been included in the calculation and thus the barrier effect is not applied for the Tunnel Works at temporary OB2A area (Work site ID C6c in Appendix 6.3A refers).

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Homantin Siding

Scenario:

Mitigated ▼

Homantin Siding

Loco Siding @HKPolyU Building

Removal of Existing Tracks

(1/9/2012 - 31/10/2012)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane		BS D7/101	1	94	70%	-5	87
Backhoe with Hydraulic Breaker		BS D8/13	1	110	30%	-5	100
Lorry		BS D9/19	1	102	30%	0	97
Overall Noise Level, dB(A)							102

Decking Across Culvert

(1/9/2012 - 31/12/2012)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Piling Rig		BS D11/2	1	112	30%	-10	97
Air Compressor		CNP 002	1	102	50%	-15	84
Lorry with crane/grab		BS D7/101	1	94	60%	-5	87
Poker, Vibratory, Hand-held		BS D6/40	1	98	30%	0	93
Concrete lorry mixer		BS D6/33	1	96	30%	0	91
Overall Noise Level, dB(A)							99

Office / Store construction

(1/9/2012 - 31/5/2013)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator		BS D3/35	1	106	30%	-5	96
Lorry with crane/grab		BS D7/101	2	94	30%	-5	87
Bar Bender and Cutter		CNP 021	1	90	30%	-10	75
Poker, Vibratory, Hand-held		BS D6/40	2	98	30%	0	96
Air Compressor		CNP 002	2	102	70%	-15	88
Concrete lorry mixer		BS D6/33	1	96	30%	0	91
Overall Noise Level, dB(A)							100

EVA construction

(1/3/2013 - 31/5/2013)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Excavator		BS D3/35	1	106	30%	-5	96
Lorry with crane/grab		BS D7/101	2	94	30%	-5	87
Bar Bender and Cutter		CNP 021	1	90	30%	-10	75
Poker, Vibratory, Hand-held		BS D6/40	2	98	30%	0	96
Air Compressor		CNP 002	2	102	70%	-15	88
Concrete lorry mixer		BS D6/33	1	96	30%	0	91
Overall Noise Level, dB(A)							100

Track Laying to HKPolyU

(1/3/2013 - 30/4/2013)

	PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL
Crane		BS D7/101	1	94	70%	-5	87
Backhoe with Hydraulic Breaker		BS D8/13	1	110	30%	-5	100
Lorry		BS D9/19	1	102	30%	0	97
Overall Noise Level, dB(A)							102

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - New EVA

Scenario:

Mitigated ▼

New EVA

New EVA

Complete EVA between Hung Hom Station and Winslow Street

(1/2/2017 - 31/5/2017)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	2	106	70%	-5	102
Dump Truck	BS D9/24	2	104	30%	0	102
Crawler crane	BS D7/112	1	102	30%	0	97
Roller	BS D8/30	1	101	40%	0	97
Air Compressor	CNP 002	1	102	70%	-15	85
Crane Lorry	BS D7/101	1	94	70%	0	92.4509804
Overall Noise Level, dB(A)						106

Construct EVA Under HUH Podium

(1/1/2017 - 30/4/2017)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Sub-total SWL
Backhoe	BS D3/35	2	106	50%	-5	101
Dump Truck	BS D9/24	2	104	30%	0	102
Crane Lorry	BS D7/101	1	94	50%	0	91
Roller	BS D8/30	1	101	30%	0	96
Air Compressor	CNP 002	1	102	50%	-15	84
Concrete Lorry Mixer	BS D6/33	2	96	30%	0	94
Poker, Vibratory, Hand-held	BS D6/40	2	98	50%	0	98
Overall Noise Level, dB(A)						106

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Plant Inventory for Construction Noise Assessment - Hung Hom Freight Pier Barging Point

Scenario: Mitigated ▼

Hung Hom Freight Pier

Barging Activities

At the Freight Pier

Loading Activities

		PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL	(1/6/2012 - 31/12/2018)
Barges			CNP 061	1	104	30%	0	99	
Truck			BS D9/39	18	103	30%	0	110	
Overall Noise Level, dB(A)								111	

At Tip of the Freight Pier

Loading Activities

		PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Sub-total SWL	(1/6/2012 - 31/8/2014)
Barges			CNP 061	1	104	30%	0	99	
Truck			BS D9/39	18	103	30%	0	110	
Overall Noise Level, dB(A)								111	

Trucks Travelling

Travelling to Barging Points by Haul Roads

Trucks Travelling to the Freight Pier by haul road (segment 1) ^[a]

		PME	L _{WA} / Item dB(A)	No. of Veh, Q (to the freight pier) (veh/30mins) ^[b]	Speed, V (km/hr)	Angle of View (in degrees)	Leq (30mins)	(1/6/2012 - 31/12/2018)
Truck			103	35	10	57	70	
Predicted Noise Level due to Haul Traffic, dB(A)							70	

Trucks Travelling to the Freight Pier by haul road (segment 2) ^[a]

		PME	L _{WA} / Item dB(A)	No. of Veh, Q (to the freight pier) (veh/30mins) ^[b]	Speed, V (km/hr)	Angle of View (in degrees)	Leq (30mins)	(1/6/2012 - 31/12/2018)
Truck			103	35	10	60	71	
Predicted Noise Level due to Haul Traffic, dB(A)							71	

Trucks Travelling away from the Freight Pier by haul road ^[a]

		PME	L _{WA} / Item dB(A)	No. of Veh, Q (away from the freight pier) (veh/30mins) ^[b]	Speed, V (km/hr)	Angle of View (in degrees)	Leq (30mins)	(1/6/2012 - 31/12/2018)
Truck			103	35	10	180	75	
Predicted Noise Level due to Haul Traffic, dB(A)							75	

Trucks at Buffer Zone During Peak Periods

Trucks Travelling at Buffer Zone ^[a]

		PME	L _{WA} / Item dB(A)	No. of Veh, Q (away from the freight pier) (veh/30mins) ^[c]	Speed, V (km/hr)	Angle of View (in degrees)	Leq (30mins)	(1/6/2012 - 31/12/2018)
Truck			103	20	5	39	69	
Overall Noise Level, dB(A)							69	

Notes:

[a] Calculation of total SWL for Haul Road is based on BS 5228: Part 1: 2009 (Equation F.6)

[b] In the period from Jun 2012 to Aug 2014, two berths will be used for barging activities, estimated no. of dump trucks using the haul road are 834 vehicles per day. Assume working hours are 7am to 7pm only (total 12 hours), thus No. of items per half an hour = 834/ 24 = 35. After Aug 2014, only one berth at Freight Pier will be used, for worst case scenario, 35 vehicles per half an hour using the haul road is assumed in the assessment.

[c] Maximum No. of Trucks allowed at Buffer zone is 20.

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Construction Plant Inventory for SCL (HUH - ADM) at HUH area (Concurrent works from SCL (HUH - ADM))

Scenario: Mitigated ▼

Package: 12 Hung Hom Landfall

Hung Hom landfall

Cofferdam Wall Construction and Shear Piling

(1/1/2015 - 30/9/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Correction for Underground Works	Barrier Correction	Sub-total SWL
Air compressor	CNP 002	1	102	100%	0	0	102
Water Pump (electric)	CNP 282	2	103	80%	0	0	105
Crawler Crane, mobile (diesel)	CNP 048	2	112	60%	0	0	113
Welding Set	CNP 107	2	99	30%	0	0	97
Excavator	CNP 081	1	112	100%	0	0	112
Drill Rig	CNP 072	1	110	70%	0	0	108
Grout Mixer	CNP 105	1	90	50%	0	0	87
Grout Pump	CNP 106	2	105	50%	0	0	105
Lorry with crane/grab	CNP 145	1	105	30%	0	0	100
Overall Noise Level, dB(A)							117

Soft Ground Excavation

(1/10/2015 - 31/12/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Correction for Underground Works	Barrier Correction	Sub-total SWL
In Shaft							
Excavator	CNP 081	2	112	100%	-5	0	110
Breaker, excavator mounted (hydraulic)	CNP 028	1	122	50%	-5	0	114
Breaker, hand-held	CNP 024	1	108	50%	-5	0	100
Welding Set	CNP 107	1	99	30%	-5	0	89
Water Pump, submersible (electric)	CNP 283	2	83	100%	-5	0	81
At Surface							
Crawler Crane, mobile (diesel)	CNP 048	1	112	60%	0	0	110
Ventilation Fans	CNP 241	1	108	100%	0	0	108
Air compressor	CNP 002	1	102	100%	0	0	102
Water Pump (electric)	CNP 282	1	103	80%	0	0	102
Overall Noise Level, dB(A)							117

Excavation Work

(1/11/2015 - 30/4/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Correction for Underground Works	Barrier Correction	Sub-total SWL
Hand held pneumatic breaker	CNP 026	10	114	30%	0	0	119
Air Compressor	CNP 002	5	102	30%	0	0	104
Backhoe with hydraulic breaker	BS D8/13	4	110	50%	0	0	113
Excavator	BS D3/35	4	106	100%	0	0	112
Overall Noise Level, dB(A)							121

Tunnel Box Construction

(1/3/2016- 31/5/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Correction for Underground Works	Barrier Correction	Sub-total SWL
In Shaft							
Bar bender and cutter (electric)	CNP 021	1	90	50%	-5	0	82
Water Pump, submersible (electric)	CNP 283	2	83	100%	-5	0	81
Compactor, vibratory	CNP 050	1	105	50%	-5	0	97
At Surface							
Concrete lorry mixer	CNP 044	2	109	50%	0	0	109
Crawler Crane, mobile (diesel)	CNP 048	1	112	60%	0	0	110
Ventilation Fans	CNP 241	2	108	100%	0	0	111
Air compressor	CNP 002	1	102	100%	0	0	102
Water Pump (electric)	CNP 282	1	103	80%	0	0	102
Overall Noise Level, dB(A)							115

E&M Installation

(1/6/2016- 30/6/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Correction for Underground Works	Barrier Correction	Sub-total SWL
In Shaft							
Drill, hand-held (electric)	CNP 064	1	103	100%	-5	0	98
At Surface							
Crawler Crane, mobile (diesel)	CNP 048	1	112	60%	0	0	110
Ventilation Fans	CNP 241	2	108	100%	0	0	111
Lorry with crane/grab	CNP 145	1	105	40%	0	0	101
Overall Noise Level, dB(A)							114

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Construction Plant Inventory for SCL (HUH - ADM) at HUH area (Concurrent works from SCL (HUH - ADM))

Scenario: Mitigated

Package: 12 Hung Hom Landfall

Cofferdam Wall Removal (1/6/2016- 30/6/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Correction for Underground Works	Barrier Correction	Sub-total SWL
In Shaft							
Excavator	CNP 081	2	112	100%	-5	0	110
Breaker, excavator mounted (hydraulic)	CNP 028	1	122	100%	-5	0	117
Breaker, hand-held	CNP 024	1	108	50%	-5	0	100
Welding Set	CNP 107	1	99	30%	-5	0	89
Water Pump, submersible (electric)	CNP 283	2	83	100%	-5	0	81
At Surface							
Ventilation Fans	CNP 241	1	108	100%	0	0	108
Tug Boat	CNP 221	1	110	30%	0	0	105
Derrick barges	CNP 061	1	104	100%	0	0	104
Air compressor	CNP 002	1	102	100%	0	0	102
Water Pump (electric)	CNP 282	1	103	80%	0	0	102
Overall Noise Level, dB(A)							119

Backfilling and Reinstatement (1/7/2016- 30/11/2016)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Correction for Underground Works	Barrier Correction	Sub-total SWL
On Sea							
Tug Boat	CNP 221	2	110	30%	0	0	108
Derrick barges	CNP 061	2	104	100%	0	0	107
Excavator	CNP 081	2	112	100%	0	0	115
Overall Noise Level, dB(A)							116

Hung Hom Freight Pier
Demolition of Existing Tip of Freight Pier (1/9/2014- 28/2/2015)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Correction for Underground Works	Barrier Correction	Sub-total SWL
On Sea							
Drill, percussive, hand-held	CNP 064	1	103	50%	0	0	100
Saw, concrete	CNP 203	2	115	50%	0	0	115
Crawler Crane, mobile (diesel)	CNP 048	1	112	50%	0	0	109
Derrick barges	CNP 061	1	104	100%	0	0	104
Overall Noise Level, dB(A)							116

Piling Construction (1/1/2018- 31/3/2018)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Correction for Underground Works	Barrier Correction	Sub-total SWL
Generator, standard	CNP 101	2	108	80%	0	0	110
Crane lorry, mobile	CNP 048	1	112	30%	0	0	107
Crane, tower (electric)	CNP 049	1	95	30%	0	0	90
Air compressor	CNP 002	1	102	40%	0	0	98
Welder/generator, portable	CNP 107	1	99	30%	0	0	94
Rock drill, crawler mounted (hydraulic)	CNP 182	2	116	40%	0	0	115
Dump truck	CNP 067	1	117	30%	0	0	112
Lorry	CNP 141	1	112	30%	0	0	107
Overall Noise Level, dB(A)							118

Concrete Deck Construction and Marine Furniture (1/4/2018- 30/9/2018)

PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On- time %	Correction for Underground Works	Barrier Correction	Sub-total SWL
Circular Saw	CNP 201	1	108	30%	0	0	103
Bar Bender	CNP 021	2	90	30%	0	0	88
Poker, vibrator, hand-held	CNP 170	3	113	30%	0	0	113
Air Compressor	CNP 002	1	102	70%	0	0	100
Concrete lorry mixer	CNP 044	1	109	30%	0	0	104
Concrete pump	CNP 047	1	109	30%	0	0	104
Crane lorry, mobile	CNP 048	1	112	30%	0	0	107
Overall Noise Level, dB(A)							115

Appendix 6.11A Construction Plant Inventory for SCL (MKK - HUH) during non-restricted hours (Mitigated Scenario)

Construction Plant Inventory for SCL (HUH - ADM) at HUH area (Concurrent works from SCL (HUH - ADM))

Scenario: Mitigated

Package: 15 Hung Hom South Approach Tunnels (SAT)

Demolish Existing Facilities

Demolition of Freight Building							(1/11/2014 - 31/1/2015)
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Sub-total SWL	
Crane	CNP 048	1	112	80%	0	111	
Dump truck	CNP 067	1	117	30%	0	112	
Cutter, circular, steel	CNP 056	1	112	30%	0	107	
Lorry with crane/grab	CNP 145	1	105	60%	0	103	
Backhoe with Hydraulic Breaker	CNP 028	2	122	30%	0	120	
Overall Noise Level, dB(A)						121	

Package: 13 NOV

North Ventilation Building, Plant Rooms and Emergency Access (NOV)

Site Clearance, Fencing & Hoarding							(1/12/2015 - 31/12/2015)
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Sub-total SWL	
Excavator	CNP 081	1	112	70%	0	110	
Saw, concrete	CNP 203	2	115	30%	0	113	
Crane lorry, mobile	CNP 048	1	112	50%	0	109	
Dump truck	CNP 067	1	117	30%	0	112	
Poker, vibrator, hand-held	CNP 170	2	113	30%	0	111	
Air Compressor	CNP 002	1	102	70%	0	100	
Concrete lorry mixer	CNP 044	1	109	30%	0	104	
Overall Noise Level, dB(A)						118	

Excavate Soft Material (+4.0mPD to -17.5mPD)							(1/1/2016 - 28/2/2016)
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Sub-total SWL	
Crawler / Excavator Loader	CNP 082	6	94	70%	0	100	
Dump Truck	CNP 067	6	117	30%	0	120	
Modified Crane	CNP 048	3	112	30%	0	112	
Overall Noise Level, dB(A)						120	

Construct North Flood Gate Building							(1/2/2016 - 31/5/2016)
PME	TM Ref./ other Ref	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Sub-total SWL	
Modified Crane	CNP 048	1	112	30%	0	107	
Bar Bender and Cutter	CNP 021	2	90	30%	0	88	
Concrete Mixer Truck	CNP 044	2	109	30%	0	107	
Concrete Poker Vibrator	CNP 170	2	113	30%	0	111	
Concrete Pump Truck	CNP 047	1	109	30%	0	104	
Overall Noise Level, dB(A)						114	