Construction Noise:

1. Abbreviation List

2. Plant Inventory – Unmitigated
3. Summary of CNL – Unmitigated (Overall)
4. Summary of CNL – Unmitigated (due to the Project only)
5. Sample Calculation – Unmitigated (NSR39: Salvation Army Ng Kok Wai Memorial Kindergarten)

6. Plant Inventory – Mitigated
7. Summary of CNL – Mitigated (Overall)
8. Summary of CNL – Mitigated (due to the Project only)
9. Sample Calculation – Mitigated (NSR39: Salvation Army Ng Kok Wai Memorial Kindergarten)

Abbreviation List

Works Area	Area ID	Inventory List
Connects Viaduct N1	1	Plant Inventory (North)
Connects Viaduct S1	2	Plant Inventory (South)
Deck 1	3	Plant Inventory (Modifications)
Deck 2	4	Plant Inventory (Modifications)
Footbridge	5	Plant Inventory (Modifications)
Paving	6	Plant Inventory (Modifications)
Structure A	7	Plant Inventory (South)
Structure B	8	Plant Inventory (North)
Structure C	9	Plant Inventory (South)
Structure H	10	Plant Inventory (South)
Underpass	11	Plant Inventory (Modifications)
Viaduct N1	12	Plant Inventory (North)
Viaduct N10	13	Plant Inventory (North)
Viaduct N2	14	Plant Inventory (North)
Visduct N3	15	Plant Inventory (North)
Viaduct N4	16	Plant Inventory (North)
Visduct N5	17	Plant Inventory (North)
Viaduct N6	18	Plant Inventory (North)
Visduct N7	19	Plant Inventory (North)
Viaduct N8	20	Plant Inventory (North)
Viaduct N9	21	Plant Inventory (North)
Viaduct S1	22	Plant Inventory (South)
Viaduct S10	23	Plant Inventory (South)
Viaduct S11	24	Plant Inventory (South)
Viaduct S12	25	Plant Inventory (South)
Viaduct S13	26	Plant Inventory (South)
Viaduct S2	27	Plant Inventory (South)
Viaduct S3	28	Plant Inventory (South)
Viaduct S4	29	Plant Inventory (South)
Viaduct S5	30	Plant Inventory (South)
Viaduct S6	31	Plant Inventory (South)
Viaduct S7	32	Plant Inventory (South)
Viaduct S8	33	Plant Inventory (South)
Viaduct S9	34	Plant Inventory (South)
Wall 1	35	Plant Inventory (At Grade)
Wall 2	36	Plant Inventory (At Grade)
Wall 3	37	Plant Inventory (At Grade)
Wall 4	38	Plant Inventory (At Grade)
Wall 5	39	Plant Inventory (At Grade)

Inventory List contained in sheets:

Sheet	Works Area Category
P_N -- Plant Inventory (North)	North Bound
P_S -- Plant Inventory (South)	South Bound
P_AG -- Plant Inventory (At Grade)	At grade section
P_MOD -- Plant Inventory (Modifications)	Modifications
P_TW567 -- Plant Inventory (TW567)	Concurrent Project -- Development at TW5, TW6, TW7
P_TMR -- Plant Inventory (Tuen Mun Road)	Concurrent Project -- Reconstruction and Improvement of Tuen Mun Road

Abbreviation List

In plant inventory list:

1 (*) denotes use of "quiet" Plant, QPME, reference were made to BS5228 Noise and Vibration control on construction and open sites

2 (#) denotes use of barrier / full enclosures and acoustic insulation mats for mitigation of noise impact to achieve noise reduction of 5dB(A) or 10dB(A)

3 Noise enclosure and noise acoustic mats are assumed for bored pile oscillator to achieve noise reduction of 15dB(A)

4 Considered the piling operation (in "P_N", "P_S" and "P_MOD"), 2 activities would not take place simultaneously, as activity 2 would be more noisy, SWL of plants in Activity 2 was adopted for whole phase

5 P_TW567 is assumed plant inventory base on building construction of similar scale

6 P_TMR is plant inventory based on "Final Environmental Review Study Report" for the Project "Reconstruction and Improvement of Tuen Mun Road"

Unmitigated Scenario

Group 1 Transport and Utility Diversion

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Dunp Truck	CNP 068	3	105	30%		104.5
2	Road Roller	CNP185	2	108	100%		111.0
3	Excavator	CNP081	2	112	70%		113.5
4	Mobile Crane	CNP048	3	112	50%		113.8
5	Lorry	CNP142	4	105	30%		105.8
6	Air Compressor	CNP001	1	100	70%		98.5
7	Generator, standard	CNP101	2	108	100%		111.0
8	Breaker, hand-held, mass up to 10kg	CNP 023	1	108	30%		102.8
Total							119.1

Group 2 Piling

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer (Act 1)	CNP044	0	109	70%		0.0
2	Poker Vibrator (Act 1)	CNP170	0	113	60%		0.0
3	Bored Pile Oscillator(Act 2)	CNP165	3	115	60%		117.6
4	Mobile Crane(Act 1&2)	CNP048	3	112	30%		111.5
5	Lorry (Act 1&2)	CNP142	3	105	30%		104.5
6	Generator, standard (Act 1&2)	CNP101	2	108	100%		111.0
Total							119.4

As Concreting will not overlap with Pile Boring activity, maximum sound power level was selected among for analysis.

Group 3 Substructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer	CNP044	3	109	70%		112.2
2	Poker Vibrator	CNP170	4	113	70%		117.5
3	Mobile Crane	CNP048	2	112	50%		112.0
4	Lorry	CNP142	4	105	30%		105.8
5	Air Compressor	CNP001	1	100	70%		98.5
6	Generator, standard	CNP101	2	108	100%		111.0
7	Excavator	CNP081	2	112	70%		113.5
8	Breaker, excavator mounted	CNP 028	1	122	30%		116.8
Total							122.4

Group 4 Superstructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Crane, tower(electric)	CNP049	1	95	100%		95.0
2	Mobile Crane	CNP048	2	112	60%		112.8
3	Lorry	CNP142	4	105	50%		108.0
4	Air Compressor	CNP001	1	100	100%		100.0
5	Generator, standard	CNP101	2	108	100%		111.0
6	Launching Girder	CNP049	1	95	50%		92.0
7	Segment Transporter	CNP141	1	112	30%		106.8
Total							116.5

Group 5 Finishing Works

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Asphalt Paver	CNP004	1	109	80%		108.0
2	Road Roller	CNP185	1	108	80%		107.0
3	Mobile Crane	CNP048	2	112	60%		112.8
4	Lorry	CNP142	4	105	50%		108.0
5	Air Compressor	CNP001	1	100	100%		100.0
6	Generator, standard	CNP101	2	108	100%		111.0
Total							117.0

Group 1 Transport and Utility Diversion

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Dump Truck	C9/27	3	105	40%		105.8
2	Road Roller	CNP185	2	108	100%		111.0
3	Excavator	CNP081	2	112	70%		113.5
4	Mobile Crane	CNP048	3	112	60%		114.6
5	Lorry	CNP142	4	105	50%		108.0
6	Air Compressor	CNP001	1	100	100%		100.0
7	Generator, standard	CNP101	2	108	100%		111.0
8	Breaker, hand-held, mass up to 10kg	CNP 023	1	108	30%		102.8
Total							119.5

Group 2 Piling

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer (Act 1)	CNP044	0	109	80%		0.0
2	Poker Vibrator (Act 1)	CNP170	0	113	70%		0.0
3	Bored Pile Oscillator (Act 2)	CNP165	3	115	60%		117.6
4	Mobile Crane (Act 1&2)	CNP048	4	112	50%		115.0
5	Lorry(Act 1&2)	CNP142	4	105	50%		108.0
6	Generator, standard (Act 1&2)	CNP101	2	108	100%		111.0
Total							120.3

Group 3 Substructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer	CNP044	3	109	80%		112.8
2	Poker Vibrator	CNP170	4	113	70%		117.5
3	Mobile Crane	CNP048	2	112	70%		113.5
4	Lorry	CNP142	4	105	50%		108.0
5	Air Compressor	CNP001	1	100	100%		100.0
6	Generator, standard	CNP101	2	108	100%		111.0
7	Excavator	CNP081	2	112	70%		113.5
8	Breaker, excavator mounted	CNP 028	1	122	30%		116.8
Total							122.7

Group 4 Superstructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Crane, tower(electric)	CNP049	1	95	100%		95.0
2	Mobile Crane	CNP048	2	112	70%		113.5
3	Lorry	CNP142	4	105	50%		108.0
4	Air Compressor	CNP001	1	100	100%		100.0
5	Generator, standard	CNP101	2	108	100%		111.0
6	Launching Girder	CNP049	1	95	50%		92.0
7	Segment Transporter	CNP141	1	112	30%		106.8
Total							116.8

Group 5 Finishing Works

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Asphalt Paver	CNP004	1	109	80%		108.0
2	Road Roller	CNP185	1	108	80%		107.0
3	Mobile Crane	CNP048	2	112	70%		113.5
4	Lorry	CNP142	4	105	50%		108.0
5	Air Compressor	CNP001	1	100	100%		100.0
6	Generator, standard	CNP101	2	108	100%		111.0
Total							117.3

Group 1 Transport and Utility Diversion

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Dunp Truck	C9/27	4	105	40%		107.0
2	Road Roller	CNP185	2	108	100%		111.0
3	Excavator	CNP081	2	112	70%		113.5
4	Mobile Crane	CNP048	2	112	70%		113.5
5	Lorry	CNP142	4	105	70%		109.5
6	Air Compressor	CNP001	1	100	100%		100.0
7	Generator, standard	CNP101	2	108	100%		111.0
8	Breaker, hand-held, mass up to 10kg	CNP 023	1	108	30%		102.8
Total							119.4

Group 2 Shoring

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Mobile Crane	CNP048	1	112	70%		110.5
2	Lorry	CNP142	4	105	70%		109.5
3	Generator, standard	CNP101	2	108	100%		111.0
Total							115.1

Group 3 Earthworks

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Mobile Crane	CNP048	1	112	70%		110.5
2	Excavator	CNP081	1	112	70%		110.5
3	Lorry	CNP142	2	105	70%		106.5
4	Roller, Vibratory	CNP186	1	108	100%		108.0
5	Generator, standard	CNP101	2	108	100%		111.0
Total							116.6

Group 4 Retaining Wall

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Mobile Crane	CNP048	1	112	70%		110.5
2	Poker Vibrator	CNP170	2	113	70%		114.5
3	Generator, standard	CNP101	1	108	100%		108.0
4	Lorry	CNP142	2	105	70%		106.5
Total							117.0

Group 5 Finishing Works

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer	CNP044	3	109	80%		112.8
2	Poker Vibrator	CNP170	4	113	70%		117.5
3	Road Roller	CNP185	2	108	100%		111.0
4	Mobile Crane	CNP048	2	112	70%		113.5
5	Lorry	CNP142	4	105	70%		109.5
6	Air Compressor	CNP001	1	100	100%		100.0
7	Generator, standard	CNP101	2	108	100%		111.0
Total							121.2

Group 6 Drainage

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer	CNP044	2	109	80%		111.0
2	Lorry	CNP142	2	105	70%		106.5
3	Poker Vibrator	CNP185	3	108	70%		111.2
4	Air Compressor	CNP001	1	100	100%		100.0
5	Generator, standard	CNP101	2	108	100%		111.0
6	Breaker, hand-held, mass up to 10kg	CNP 023	1	108	30%		102.8
Total							116.6

Group 7 Paving

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Asphalt Paver	CNP004	1	109	80%		108.0
2	Road Roller	CNP185	1	108	80%		107.0
Total							110.6

Group 8 Lane Marking

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Paint Line Marker	CNP161	1	90	80%		89.0
2	Generator, standard	CNP101	2	108	100%		111.0
Total							111.0

* Group 6 to Group 8 inventory used for "Modifications" Works SWL Calculations, included in this page for programme limitation

Group 1 Transport and Utility Diversion

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Dunp Truck	C9/25	4	105	40%		107.0
2	Road Roller	CNP185	2	108	100%		111.0
3	Excavator	CNP081	2	112	50%		112.0
4	Mobile Crane	CNP048	2	112	50%		112.0
5	Lorry	CNP142	4	105	50%		108.0
6	Air Compressor	CNP001	1	100	100%		100.0
7	Generator, standard	CNP101	2	108	100%		111.0
8	Breaker, hand-held, mass up to 10kg	CNP 023	1	108	30%		102.8
Total							118.5

Group 2 Demolition of Existing Structure

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Air Compressor	CNP001	1	100	100%		100.0
2	Generator, standard	CNP101	2	108	100%		111.0
3	Breaker, hand-held, mass up to 10kg	CNP 023	1	108	30%		102.8
4	Mobile Crane	CNP048	2	112	70%		113.5
5	Lorry	CNP142	4	105	50%		108.0
6	Breaker, excavator mounted	CNP 028	1	122	30%		116.8
Total							119.6

Group 3 Piling

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer (Act 1)	CNP044	0	109	80%		0.0
2	Poker Vibrator (Act 1)	CNP170	0	113	70%		0.0
3	Bored Pile Oscillator (Act 2)	CNP165	4	115	60%		118.8
4	Mobile Crane (Act 1& 2)	CNP048	2	112	50%		112.0
5	Lorry (Act 1& 2)	CNP142	4	105	50%		108.0
6	Generator, standard (Act 1& 2)	CNP101	2	108	100%		111.0
Total							120.4

Group 4 Substructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer	CNP044	3	109	80%		112.8
2	Poker Vibrator	CNP170	4	113	70%		117.5
3	Mobile Crane	CNP048	1	112	70%		110.5
4	Lorry	CNP142	4	105	50%		108.0
5	Air Compressor	CNP001	1	100	100%		100.0
6	Generator, standard	CNP101	2	108	100%		111.0
7	Excavator	CNP081	2	112	70%		113.5
8	Breaker, excavator mounted	CNP 028	1	122	30%		116.8
Total							122.4

Group 5 Superstructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer	CNP044	3	109	80%		112.8
2	Poker Vibrator	CNP170	4	113	70%		117.5
3	Mobile Crane	CNP048	2	112	70%		113.5
4	Lorry	CNP142	4	105	50%		108.0
5	Air Compressor	CNP001	1	100	100%		100.0
6	Generator, standard	CNP101	2	108	100%		111.0
Total							120.7

Group 6 Finishing Works

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer	CNP044	3	109	80%		112.8
2	Poker Vibrator	CNP170	4	113	70%		117.5
3	Mobile Crane	CNP048	2	112	70%		113.5
4	Lorry	CNP142	4	105	50%		108.0
5	Air Compressor	CNP001	1	100	100%		100.0
6	Generator, standard	CNP101	2	108	100%		111.0
Total							120.7

Group 1 Piling and Foundation

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer (Act 1)	CNP044	0	109	80%		0.0
2	Poker Vibrator (Act 1)	CNP170	0	113	70%		0.0
3	Bored Pile Oscillator (Act 2)	CNP165	3	115	70%		118.2
4	Mobile Crane (Act 1& 2)	CNP048	3	112	50%		113.8
5	Lorry (Act 1& 2)	CNP142	3	105	70%		108.2
6	Generator, standard (Act 1& 2)	CNP101	2	108	100%		111.0
Total							120.4

Group 2 Substructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer	CNP044	3	109	80%		112.8
2	Poker Vibrator	CNP170	4	113	70%		117.5
3	Mobile Crane	CNP048	2	112	70%		113.5
4	Lorry	CNP142	4	105	50%		108.0
5	Air Compressor	CNP001	1	100	100%		100.0
6	Generator, standard	CNP101	2	108	100%		111.0
7	Excavator	CNP081	2	112	50%		112.0
8	Breaker, excavator mounted	CNP 028	1	122	30%		116.8
Total							122.6

Group 3 Superstructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer	CNP044	2	109	80%		111.0
2	Poker Vibrator	CNP170	3	113	70%		116.2
3	Crane, tower(electric)	CNP049	1	95	100%		95.0
4	Mobile Crane	CNP048	4	112	70%		116.5
5	Lorry	CNP142	4	105	50%		108.0
6	Air Compressor	CNP001	1	100	100%		100.0
7	Generator, standard	CNP101	2	108	100%		111.0
Total							120.8

Group 1 Construction Work_Mitigated_Activity 1

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)	
1	Piling Rig	CNP166	1	100	100%		100.0	
2	Excavator	C3/97	1	105	100%		105.0	
3	Trucks	C9/39	2	103	0%		0.0	Activity 2
4	Crane	C7/114	1	101	100%		101.0	
5	Concrete Truck	C6/23	1	100	100%		100.0	
6	Compressor	C7/16	1	96	100%		96.0	
7	Bar Bender	CNP021	1	90	100%		90.0	
8	Poker Vibrator	C6/32	1	100	100%		100.0	
Total							109.0	

Group 2 Construction Work_Angler's Beach_Mitigated_Activity 2

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)	
1	Trucks	C9/27	1	103	100%		103.0	
2	Crane	C7/114	1	101	0%		0.0	Activity 1
3	Compressor	C7/16	1	96	0%		0.0	Activity 1
Total							103.0	

Noise Level in Unmitigated Senario (Overall)

Summary

Monthly Construction Noise Level at each NSR dB(A)

NSR ID	2011 Jun	Jul	Aug	Sep	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May
1	71	71	71	71	71	68	68	68	68	70	70	70	70	70	70	70	71	71	71	71	70	67	67	67	67	67	68	67	67	67	67	67	67	66	66	66	61	61	61	61	61	41	41	40	40	40	40	40
2	70	70	70	70	70	68	68	70	69	71	71	69	69	70	70	69	70	71	71	71	71	68	68	68	68	68	68	70	70	70	70	70	70	70	70	70	68	68	68	68	68	67	61	61	62	62	62	62
3	70	70	70	70	70	69	69	70	69	71	72	71	71	71	71	70	71	72	72	72	72	70	70	69	69	69	70	70	70	70	70	70	70	70	70	70	68	68	68	68	68	67	61	61	61	61	61	61
4	70	70	70	70	70	69	69	70	69	71	71	70	70	70	70	69	71	71	71	71	71	69	69	69	69	69	71	71	71	71	71	71	71	71	71	71	69	69	69	69	69	68	62	62	62	62	62	62
5	71	71	71	71	71	70	70	71	70	72	73	72	72	72	72	72	72	73	73	73	73	71	71	70	70	70	71	71	71	71	71	71	71	71	71	71	69	69	69	69	69	68	62	62	63	63	63	63
6	73	73	73	72	72	71	71	72	71	73	73	72	72	72	72	71	72	73	73	73	73	69	69	69	70	70	71	71	71	71	71	71	71	70	70	70	69	69	69	69	69	68	62	62	63	63	63	63
7	72	72	72	71	71	70	70	71	70	72	72	71	71	71	71	70	71	72	72	72	72	69	69	69	69	69	70	70	70	70	70	70	70	70	70	70	68	68	69	69	69	68	62	62	62	62	62	62
8	74	74	74	74	74	72	72	73	72	74	74	73	73	73	73	72	73	73	73	73	73	70	70	70	70	70	71	71	71	71	71	71	71	71	71	71	70	70	70	70	70	69	63	63	64	64	64	64
9	73	73	73	73	73	71	71	72	71	73	74	73	73	73	73	73	73	74	74	74	74	71	71	70	71	71	72	72	71	71	71	71	71	71	71	71	70	70	70	70	70	69	63	63	63	63	63	63
10	77	77	77	76	76	76	76	76	76	77	78	77	77	78	78	77	78	78	78	78	77	75	76	74	75	75	75	75	75	75	75	75	75	75	75	74	73	73	73	73	73	72	67	67	67	67	67	66
11	78	78	78	78	78	77	77	77	77	78	79	78	78	78	78	78	78	79	79	79	78	76	76	75	75	75	76	76	76	75	75	75	75	75	75	75	74	74	74	74	74	73	68	68	68	68	67	67
12	80	80	80	80	80	78	78	79	78	79	80	79	79	79	79	79	79	80	80	79	79	77	77	76	76	76	77	76	76	76	76	76	76	76	76	75	75	75	74	74	74	74	69	68	69	69	68	68
13	74	74	74	74	74	72	72	73	72	74	74	72	72	72	72	71	72	72	72	72	72	69	69	69	69	69	70	70	70	70	70	70	70	70	70	70	68	68	68	68	68	68	62	62	62	62	62	62
14	74	74	74	74	74	73	73	74	74	75	75	74	74	75	75	74	74	75	75	75	74	73	73	72	72	72	72	73	73	72	72	72	72	72	72	72	71	71	71	71	71	70	65	65	65	65	64	64
15	73	73	73	73	73	72	72	73	73	74	74	73	73	74	74	73	74	74	74	74	73	72	72	71	71	71	72	72	72	71	71	71	71	71	71	71	70	70	70	70	70	69	64	64	64	64	64	63
16	72	72	72	72	72	70	71	72	71	72	72	71	71	71	71	70	70	71	71	71	71	68	68	68	68	68	69	69	69	69	69	69	69	69	69	69	68	68	68	68	68	67	61	61	62	62	62	62
17	72	72	72	71	71	70	70	71	70	72	72	70	70	70	70	69	70	71	71	71	71	68	68	68	68	68	69	69	69	69	69	69	69	69	69	69	68	68	68	68	68	68	62	62	62	62	62	62
18	79	79	79	79	79	79	79	72	71	72	73	70	70	70	70	69	69	70	70	70	70	68	68	66	66	66	66	68	67	67	67	67	67	67	67	67	67	67	67	67	67	67	61	61	62	62	62	62
19	79	79	79	79	79	81	81	83	83	83	84	79	80	80	80	77	77	79	79	78	78	77	77	76	76	76	77	78	78	78	78	78	78	78	78	78	77	77	77	77	77	77	71	71	72	72	72	72
20	74	74	74	74	74	74	74	75	75	75	75	72	72	72	72	70	71	72	72	72	72	70	70	70	70	70	71	72	72	72	72	72	72	72	72	72	71	71	71	71	71	71	65	65	65	65	65	65
21	73	73	73	73	73	72	72	73	72	73	74	71	71	71	71	70	71	72	72	72	72	70	70	69	69	69	70	71	71	71	71	71	71	70	70	70	69	69	69	69	69	69	63	63	63	63	63	63
22	71	71	71	71	71	71	71	72	71	72	72	70	70	70	70	69	70	71	71	71	71	69	69	68	68	68	69	70	69	69	69	69	69	69	69	69	68	68	68	68	68	68	62	62	62	62	62	62
23	74	74	74	74	74	74	74	75	75	75	76	75	75	75	75	74	75	75	75	75	74	73	73	71	71	71	72	73	72	72	72	72	72	72	72	72	70	70	70	70	70	70	64	64	64	64	64	64
24	73	73	73	73	73	74	74	75	74	75	76	74	74	74	74	72	73	74	74	74	74	73	73	71	71	71	73	73	73	73	73	73	73	73	73	73	72	72	72	72	72	71	65	65	65	65	65	65
25	74	74	74	74	74	74	74	75	75	75	76	74	75	75	75	73	74	75	75	74	74	73	73	71	71	71	72	73	72	72	72	72	72	72	72	72	71	71	71	71	71	70	64	64	65	65	65	65
26	59	59	59	59	59	59	59	42	42	42	42	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	42	42	42	41	41	41	41	41	40	40	40	40
27	59	59	59	59	59	59	59	42	42	42	42	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	42	42	42	41	41	41	41	41	40	40	40	40
28	58	58	58	58	58	58	58	42	42	42	42	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	42	42	42	41	41	41	41	41	40	40	40	40
29	70	70	70	70	70	70	70	70	72	72	72	72	72	72	72	75	75	75	75	75	74	74	75	77	77	77	76	76	76	75	75	75	75	75	75	75	75	71	71	71	71	71	71	71	71	71	71	69
30	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	69	69	69	69	69	69	69	69	69	69	69	69
31	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	69	69	69	69	69	69	69	69	69	69	69	69
32	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	70	70	70	70	70	70	70	70	70	70	70	70
33	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	71	71	71	71	71	71	71	71	71	71	71	71
34	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	70	70	70	70	70	70	70	70	70	70	70	70
35	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	72	72	72	72	73	73	73	73	74	74	75	75	75	75	75	75	75	75	75	75	74	74	73	71	71	72	72	72	72	71	71	71	70
36	76	76	76	76	76	76	76	76	77	77	77	77	77	79	79	80	80	80	80	81	80	80	80	81	81	81	81	81	81	80	80	81	80	80	80	80	80	79	77	77	77	76	76	76	75	75	75	72
37	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	73	73	73	73	73	73	73	73	73	73	73	73
38	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	72	72	72	72	72	72	72	72	72	72	72	72
39	83	83	83	83	83	83	83	83	84	84	84	85	85	87	87	91	91	91	91	91	91	91	91	93	94	94	93	93	93	93	93	93	93	93	93	93	93	88	88	88	88	88	88	88	88	87	73
40	81	81	81	81	81	82	82	82	83	83	83	83	84	85	85	87	87	87	87	87	86	86	86	88	88	88	88	88	88	87	87	87	87	87	87	87	86	83	83	83	82	82	82	82	82	81	73
41	79	79	79	79	79	79	79	79	80	80	80	80	80	82	82	84	84	84	85	85	84	84	84	86	86	86	86	86	86	86	86	86	86	86	86	85	85	84	82	82	82	81	81	81	80	80	79	76
42	82	82	82	82	82	82	82	82	82	82	82	82	82	84	84	89	89	89	89	89	89	89	89	91	91	92	92	92	92	92	92	92	92	92	92	90	90	89	87	87	88	87	87	87	85	85	84	81
43	84	84	84	84	84	84	84	84	84	84	84	84	84	85	85	85	85	85	85	87	86	87	87	87	87	87	87	87	87	87	87	87	87	87	87	86	86	85	85	85	85	84	84	84	84	84	84	84
44																																												83	79	79	76	75
45																																												78	76	76	73	71
46																																												76	75	75	68	61
47																																												40	40	40	40	40
48																																												76	75	75	69	60
49																																												40	40	40	40	40
50																																												77	76	76	71	61
51																																												79	78	78	71	60

Max. Construction Noise Level at each NSR dB(A)

NSR ID	2011 Jun-Dec	2012	2013	2014	2015 Jan-May	Limit	
1	71	71	71	67	40	75	
2	70	71	71	70	62	75	
3	70	72	72	70	61	75	
4	70	71	71	71	62	75	
5	71	73	73	71	63	75	
6	73	73	73	71	63	75	
7	72	72	72	70	62	75	
8	74	74	73	71	64	75	
9	73	74	74	71	63	75	
10	77	78	78	75	67	75	
11	78	79	79	75	68	75	
12	80	80	79	76	69	75	
13	74	74	72	70	62	70	
14	74	75	75	72	65	75	
15	73	74	74	71	64	75	
16	72	72	71	69	62	75	
17	72	72	71	69	62	75	
18	79	73	70	67	62	70	
19	81	84	78	78	72	75	
20	74	75	72	72	65	75	
21	73	74	72	71	63	75	
22	71	72	71	69	62	75	
23	74	76	75	72	64	75	
24	74	76	74	73	65	75	
25	74	76	74	72	65	75	
26	59	43	43	43	40	75	
27	59	43	43	43	40	75	
28	58	43	43	43	40	75	
29	70	75	77	75	71	75	
30	68	68	71	71	69	75	
31	69	69	71	71	69	75	
32	69	69	71	71	70	75	
33	70	70	72	72	71	75	
34	69	69	72	72	70	75	
35	70	72	75	75	72	75	
36	76	80	81	81	76	65	(70)*
37	72	72	75	75	73	75	
38	71	71	73	73	72	75	
39	83	91	94	93	88	65	(70)*
40	82	87	88	87	82	75	
41	79	85	86	86	81	75	
42	82	89	92	92	87	75	
43	84	85	87	87	84	75	
44					83	75	
45					78	75	
46					76	75	
47					40	75	
48					76	75	
49					40	75	
50					77	75	
51					79	75	

Noise Level in Unmitigated Senario (Overall)

NSR ID	2011							2012												2013												2014												2015				
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
52																																												85	85	85	77	60
53																																												86	86	86	74	60
54																																												86	85	85	70	61
55	75	75	75	75	75	75	75	76	76	76	76	76	77	78	78	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	78	78	77	76	76	76	76	75	75	74	74	74	73	73
56	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	71	71	71	71	71	71	71	71	71	71	71
57	74	74	74	74	74	74	74	75	75	75	76	76	76	77	77	78	78	78	78	78	77	77	77	76	76	76	77	77	77	76	76	76	76	76	75	75	74	73	73	73	73	72	71	70	70	70	69	68
58	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	61	61	61	61	61	61	61	61	61	61	61
59	73	73	73	73	73	73	73	74	75	75	75	75	76	76	76	77	77	77	77	77	76	76	76	75	75	75	75	75	75	75	75	75	75	75	74	73	72	72	72	71	71	70	68	67	67	66	64	63
60	71	71	71	71	71	71	71	72	73	73	73	73	73	73	74	74	74	74	74	74	72	72	71	69	68	68	69	69	70	70	69	69	69	69	69	69	69	69	67	67	67	63	63	64	61	61	61	61
61	70	70	70	70	70	70	70	71	72	72	72	72	72	72	73	73	73	73	73	73	71	71	70	67	66	66	66	66	66	66	64	65	65	65	65	65	65	65	66	66	66	66	60	60	60	60	60	60
62	70	70	70	70	70	70	70	71	71	71	71	71	72	72	72	72	72	72	72	72	71	71	69	66	66	66	66	66	66	66	64	65	65	65	65	65	65	65	65	65	65	65	59	59	60	60	60	60
63	77	77	77	77	77	77	77	78	78	78	78	79	79	80	80	81	81	81	81	81	80	80	80	80	79	80	80	80	80	80	79	80	79	79	78	78	77	76	76	76	76	75	75	72	72	72	71	70
64	78	78	78	78	78	78	78	79	79	79	79	80	80	81	81	81	81	81	82	81	80	81	80	79	79	79	79	79	79	79	79	79	79	79	78	78	77	76	76	76	76	75	74	72	71	71	70	70
65	82	82	82	82	82	82	82	84	84	84	84	85	85	85	86	86	86	86	86	86	86	86	84	84	85	85	85	85	85	85	85	84	84	84	83	83	80	80	80	80	80	77	76	72	72	72	71	70
66	83	83	83	83	83	83	83	85	85	85	85	85	86	86	86	86	86	86	87	86	86	86	84	83	83	83	83	83	83	83	83	81	81	81	81	81	80	79	79	79	79	79	77	72	72	72	71	71
67								88	88	88	89	89	89	89	89	89	89	89	90	89	89	89	86	85	85	85	85	85	86	85	85	85	85	85	85	85	85	85	85	85	85	85	79	79	79	79	79	79
68								87	88	88	88	88	88	88	88	88	88	88	89	89	89	89	87	86	86	86	86	86	86	86	86	87	87	87	87	87	86	86	87	87	87	86	81	81	81	81	81	81
69								86	87	87	87	87	87	87	87	87	87	87	89	88	88	88	86	85	85	86	86	86	86	86	85	86	86	86	86	86	86	86	86	86	86	86	81	81	81	81	81	81
70								82	83	83	84	84	84	84	84	84	84	84	86	86	86	86	85	84	84	84	84	84	84	84	84	86	86	86	86	86	85	85	85	85	85	85	80	80	80	80	80	80
71								81	83	83	83	83	83	83	84	84	84	84	86	86	86	86	86	85	84	84	85	85	85	85	84	86	86	86	86	86	86	86	86	86	86	86	80	80	81	80	80	80
72								82	84	84	85	85	85	85	85	85	85	85	89	89	89	89	88	88	87	87	88	88	88	88	87	90	90	90	90	90	90	90	90	89	89	89	84	84	84	84	84	84
73								89	89	89	92	92	92	92	92	92	92	92	92	92	92	92	92	92	88	88	89	89	89	89	89	87	87	87	86	86	86	86	86	85	85	85	81	81	81	80	80	80
74	87	87	87	87	87	87	87	88	88	88	88	89	89	89	90	90	90	90	90	90	90	90	89	87	87	87	87	87	87	87	87	88	88	88	87	87	87	87	87	87	87	87	86	76	76	76	76	76
75	87	87	87	87	87	87	87	87	87	87	87	89	89	89	89	89	89	89	90	89	89	89	89	87	87	87	87	87	87	87	87	88	88	88	88	87	87	87	87	87	87	87	86	76	77	76	76	76
76	86	86	86	86	86	86	86	87	87	87	87	89	89	89	89	89	89	89	89	89	89	89	89	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	86	76	77	76	76	76
77	84	84	84	84	84	84	84	84	85	85	85	87	87	87	87	87	87	87	87	87	87	87	87	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	84	75	76	75	74	74
78	82	82	82	82	82	82	82	82	82	82	83	84	84	84	84	84	84	84	85	85	85	85	85	84	83	83	83	83	83	83	83	83	83	83	82	82	82	82	82	82	82	82	81	73	73	71	71	71
79	79	79	79	79	79	79	79	80	80	80	80	81	81	81	81	82	82	82	82	81	81	81	81	80	79	79	79	80	79	79	79	79	79	79	79	79	79	78	79	78	78	78	77	71	71	70	69	69
80	77	77	77	77	77	77	77	77	78	78	78	79	79	79	79	79	79	79	80	80	79	79	79	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	77	77	77	76	69	69	68	68	68
81	73	73	73	73	73	73	73	73	73	73	73	75	75	75	75	75	75	75	75	74	74	74	74	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	40	40	40	40	40
82	70	70	70	70	70	70	70	70	70	70	70	72	72	72	72	72	72	72	72	72	72	72	72	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	40	40	40	40	40
83	68	68	68	68	68	68	68	68	68	68	68	70	70	70	70	70	70	70	70	70	70	70	70	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	40	40	40	40	40
84	70	70	70	70	70	70	70	70	70	70	70	72	72	72	72	72	72	72	72	72	72	72	72	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	40	40	40	40	40
85	69	69	69	69	69	69	69	69	69	69	69	72	72	72	72	72	72	72	72	72	72	72	72	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	40	40	40	40	40
86	68	68	68	68	68	68	68	68	68	68	68	70	70	70	70	70	70	70	70	70	70	70	70	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	40	40	40	40	40
87	72	72	72	72	72	72	72	72	72	72	73	74	74	74	74	74	74	74	75	75	75	74	74	73	73	73	74	74	73	73	73	74	74	74	74	74	73	73	73	73	73	73	71	67	67	65	65	65
88	75	75	75	75	75	75	75	75	75	75	77	77	77	77	77	77	77	77	78	78	78	77	77	76	75	75	76	76	76	76	76	76	76	76	76	76	75	75	75	74	75	75	73	69	69	67	67	67
89	76	76	76	76	76	76	76	76	77	77	78	79	79	79	79	79	79	79	80	80	80	79	80	79	78	78	78	78	78	78	78	78	78	78	78	78	77	77	77	76	76	77	75	70	70	69	69	69
90	76	76	76	76	76	76	76	76	76	76	77	77	77	77	77	78	77	77	77	77	78	77	77	77	77	77	76	77	75	75	75	75	75	75	75	75	74	74	73	73	73	72	68	68	68	68	65	65
91	74	74	74	74	74	74	74	74	74	75	76	76	76	76	76	77	76	76	76	76	77	75	75	75	75	75	73	74	71	71	72	72	72	72	72	72	71	70	70	70	70	70	64	64	64	64	64	64
92	76	76	77	77	77	77	77	76	76	77	78	78	78	78	78	78	78	78	78	78	78	77	77	77	77	77	76	77	75	75	76	75	75	75	75	75	74	74	72	72	73	72	69	69	69	69	64	64
93	73	73	74	74	74	74	74	73	73	74	74	74	74	74	73	73	73	73	73	73	73	74	74	74	74	74	73	74	74	74	74	73	73	73	73	73	73	73	70	70	70	68	68	68	68	68	40	40
94	72	72	73	74	74	74	74	73	73	73	73	73	73	74	73	73	72	72	72	72	73	73	73	73	73	74	72	73	73	73	74	73	73	72	72	72	72	72	69	69	69	68	68	68	68	68	40	40
95	78	78	80	80	80	80	80	79	79	80	80	80	80	80	79	79	79	79	79	79	80	80	80	80	80	81	80	80	81	81	82	81	81	80	80	80	80	80	78	78	78	75	75	75	75	75	40	40
96	65	65	66	67	67	67	67	65	65	65	65	65	65	67	64	64	64	64	64	64	65	65	65	65	66	66	66	66	67	67	68	67	67	66	66	66	66	66	63	63	63	41	41	40	40	40	40	40
97	64	64	64	66	66	66	66	61	62	62	62	62	62	66	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	42	42	42	41	41	41	41	41	41	40	40	40	40	40

NSR ID	2011 Jun-Dec	2012	2013	2014	2015 Jan-May	Limit	
52					85	75	
53					86	75	
54					86	75	
55	75	79	79	79	74	75	
56	70	70	73	73	71	75	
57	74	78	78	76	70	75	
58	66	66	62	62	61	75	
59	73	77	77	75	67	70	
60	71	74	74	69	64	75	
61	70	73	73	66	60	75	
62	70	72	72	65	60	75	
63	77	81	81	80	72	75	
64	78	82	81	79	72	75	
65	82	86	86	84	72	75	
66	83	87	86	81	72	75	
67		90	89	85	79	75	
68		89	89	87	81	75	
69		89	88	86	81	75	
70		86	86	86	80	75	
71		86	86	86	81	75	
72		89	89	90	84	75	
73		92	92	87	81	75	
74	87	90	90	88	76	75	
75	87	90	89	88	77	75	
76	86	89	89	87	77	75	
77	84	87	87	85	76	75	
78	82	85	85	83	73	65	(70)*
79	79	82	81	79	71	65	(70)*
80	77	80	80	78	69	75	
81	73	75	74	72	40	75	
82	70	72	72	70	40	75	
83	68	70	70	69	40	75	
84	70	72	72	70	40	75	
85	69	72	72	70	40	75	
86	68	70	70	68	40	75	
87	72	75	75	74	67	75	
88	75	78	78	76	69	75	
89	76	80	80	78	70	75	
90	76	78	78	75	68	65	(70)*
91	74	77	77	72	64	75	
92	77	78	78	75	69	75	
93	74	74	74	73	68	75	
94	74	74	74	73	68	75	
95	80	80	82	81	75	65	(70)*
96	67	67	68	67	40	75	
97	66	66	43	43	40	75	

Remarks * Construction noise standard for schools is 70 dB(A) at normal school days and is reduced to 65 dB(A) during examination period. The more conservative 65 dB(A) standard is applied in this construction noise impact assessment.

Noise Level in Unmitigated Senario (the Project Only)

Summary

Monthly Construction Noise Level at each NSR dB(A)

NSR ID	2011 Jun	Jul	Aug	Sep	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	71	71	71	71	71	68	68	68	68	70	70	70	70	70	70	70	71	71	71
2	70	70	70	70	70	68	68	70	69	71	71	69	69	70	70	69	70	71	71
3	70	70	70	70	70	69	69	70	69	71	72	71	71	71	71	70	71	72	72
4	70	70	70	70	70	69	69	70	69	71	71	70	70	70	70	69	71	71	71
5	71	71	71	71	71	70	70	71	70	72	73	72	72	72	72	72	72	73	73
6	73	73	73	72	72	71	71	72	71	73	73	72	72	72	72	71	72	73	73
7	72	72	72	71	71	70	70	71	70	72	72	71	71	71	71	70	71	72	72
8	74	74	74	74	74	72	72	73	72	74	74	73	73	73	73	72	73	73	73
9	73	73	73	73	73	71	71	72	71	73	74	73	73	73	73	73	73	74	74
10	77	77	77	76	76	76	76	76	76	77	78	77	77	78	78	77	78	78	78
11	78	78	78	78	78	77	77	77	77	78	79	78	78	78	78	78	78	79	79
12	80	80	80	80	80	78	78	79	78	79	80	79	79	79	79	79	79	80	80
13	74	74	74	74	74	72	72	73	72	74	74	72	72	72	72	71	72	72	72
14	74	74	74	74	74	73	73	74	74	75	75	74	74	75	75	74	74	75	75
15	73	73	73	73	73	72	72	73	73	74	74	73	73	74	74	73	74	74	74
16	72	72	72	72	72	70	71	72	71	72	72	71	71	71	71	70	70	71	71
17	72	72	72	71	71	70	70	71	70	72	72	70	70	70	70	69	70	71	71
18	70	70	70	70	70	70	70	72	71	72	73	70	70	70	70	69	69	70	70
19	79	79	79	79	79	81	81	83	83	83	84	79	80	80	80	77	77	79	79
20	73	73	73	73	73	73	73	75	75	75	75	72	72	72	72	70	71	72	72
21	71	71	71	71	71	71	71	73	72	73	74	71	71	71	71	70	71	72	72
22	70	70	70	70	70	70	70	72	71	72	72	70	70	70	70	69	70	71	71
23	74	74	74	74	74	74	74	75	75	75	76	75	75	75	75	74	75	75	75
24	73	73	73	73	73	73	73	75	74	75	76	74	74	74	74	72	73	74	74
25	74	74	74	73	73	74	74	75	75	75	76	74	75	75	75	73	74	75	75
26	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34
27	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34
28	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34
29	67	67	67	67	67	67	67	67	70	70	70	70	70	70	70	74	74	74	74
30	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34
31	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34
32	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34
33	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34
34	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34
35	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	68	68	68	68
36	74	74	74	74	74	75	75	75	75	75	75	76	76	78	78	80	80	80	80
37	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34
38	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34
39	82	82	82	82	82	83	83	83	84	84	84	84	85	86	86	91	91	91	91
40	81	81	81	81	81	81	81	81	82	82	82	83	83	85	85	87	87	87	87
41	76	76	76	76	76	77	77	77	78	78	78	.78	79	81	81	84	84	84	84
42	75	75	75	75	75	76	76	76	76	77	77	77	78	82	82	88	88	88	88
43	73	73	73	73	73	74	74	74	75	75	75	75	76	78	78	80	80	80	80
44																			
45																			
46																			
47																			
48																			
49																			
50																			
51																			

NSR ID	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May
1	71	70	67	67	67	67	67	68	67	67	67	67	67	67	66	66	66	60	60	61	61	61	32	31	31	31	31	31	31
2	71	71	68	68	68	68	68	70	70	70	70	70	70	70	70	70	70	68	68	68	68	68	67	61	61	61	61	61	61
3	72	72	70	70	69	69	69	70	70	70	70	70	70	70	70	70	70	68	68	68	68	68	67	61	61	61	61	61	61
4	71	71	69	69	69	69	69	71	71	71	71	71	71	71	71	71	71	69	69	69	69	69	68	62	62	62	62	62	62
5	73	73	71	71	70	70	70	71	71	71	71	71	71	71	71	71	71	69	69	69	69	69	68	62	62	63	63	63	63
6	73	73	69	69	69	70	70	71	70	70	70	70	70	70	70	70	70	69	69	69	69	69	68	62	62	63	63	63	63
7	72	72	69	69	69	69	69	70	70	70	70	70	70	70	70	70	70	68	68	69	69	69	68	62	62	62	62	62	62
8	73	73	70	70	70	70	70	71	71	71	71	71	71	71	71	71	71	70	70	70	70	70	69	63	63	64	64	64	64
9	74	74	71	71	70	71	71	72	72	71	71	71	71	71	71	71	71	70	70	70	70	70	69	63	63	63	63	63	63
10	78	77	75	76	74	75	75	75	75	75	75	75	75	75	75	75	74	73	73	73	73	73	72	67	67	67	67	67	66
11	79	78	76	76	75	75	75	76	76	76	75	75	75	75	75	75	75	74	74	74	74	74	73	68	68	68	68	67	67
12	79	79	77	77	76	76	76	77	76	76	76	76	76	76	76	76	75	75	75	74	74	74	74	69	68	69	69	68	68
13	72	72	69	69	69	69	69	70	70	70	70	70	70	70	70	70	70	68	68	68	68	68	68	62	62	62	62	62	62
14	75	74	73	73	72	72	72	72	73	72	72	72	72	72	72	72	72	71	71	71	71	71	70	65	65	65	65	64	64
15	74	73	72	72	71	71	71	72	72	72	71	71	71	71	71	71	71	70	70	70	70	70	69	64	64	64	64	64	63
16	71	71	68	68	68	68	68	69	69	69	69	69	69	69	69	69	69	68	68	68	68	68	67	61	61	62	62	62	62
17	71	71	68	68	68	68	68	69	69	69	69	69	69	69	69	69	69	68	68	68	68	68	68	62	62	62	62	62	62
18	70	70	68	68	66	66	66	66	68	67	67	67	67	67	67	67	67	67	67	67	67	67	67	61	61	62	62	62	62
19	78	78	77	77	76	76	76	77	78	78	78	78	78	78	78	78	78	77	77	77	77	77	77	71	71	72	72	72	72
20	72	72	70	70	70	70	70	71	72	72	72	72	72	72	72	72	72	71	71	71	71	71	71	65	65	65	65	65	65
21	72	72	70	70	69	69	69	70	71	71	71	71	71	71	70	70	70	69	69	69	69	69	69	63	63	63	63	63	63
22	71	71	69	69	68	68	68	69	70	69	69	69	69	69	69	69	69	68	68	68	68	68	68	62	62	62	62	62	62
23	75	74	73	73	71	71	71	72	73	72	72	72	72	72	72	72	72	70	70	70	70	70	70	64	64	64	64	64	64
24	74	74	73	73	71	71	71	73	73	73	73	73	73	73	73	73	73	72	72	72	72	72	71	65	65	65	65	65	65
25	74	74	73	73	71	71	71	72	73	72	72	72	72	72	72	72	72	71	71	71	71	71	70	64	64	65	65	65	65
26	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
27	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
28	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
29	74	74	74	73	73	73	73	73	73	67	67	67	67	67	67	67	67	67	67	67	67	67	67	31	31	31	31	31	31
30	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
31	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
32	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
34	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
35	70	70	72	72	72	72	72	72	72	72	72	72	69	69	70	66	66	66	66	66	66	63	63	63	31				
36	80	80	81	80	80	80	79	79	80	80	80	80	79	79	78	76	76	76	74	74	74	73	73	71	31				
37	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
38	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
39	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	88	88	88	87	87	87	87	87	87	31				
40	86	86	86	88	88	88	88	88	88	87	87	87	87	87	87	86	86	86	82	82	83	81	81	81	81	81	80	61	
41	83	83	83	85	85	85	85	85	85	85	85	85	85	85	85	84	84	84	81	81	81	80	80	79	79	79	77	60	
42	90	90	91	91	91	91	91	91	91	91	91	91	89	89	89	86	86	86	86	86	86	83	83	81	60				
43	80	80	80	80	81	81	81	81	81	81	81	81	80	79	78	77	77	77	77	75	75	72	71	68	61				
44																						83	77	77	72	61			
45																						78	74	74	70	61			
46																						76	75	75	68	61			
47																						31	31	31	31	31			
48																						76	75	75	69	60			
49																						31	31	31	31	31			
50																						77	76	76	71	60			
51																						79	78	78	71	60			

Maximum Construction Noise Level at each NSR dB(A)

NSR ID	2011 Jun-Dec	2012	2013	2014	2015 Jan-May	Limit	
1	71	71	71	67	31	75	
2	70	71	71	70	61	75	
3	70	72	72	70	61	75	
4	70	71	71	71	62	75	
5	71	73	73	71	63	75	
6	73	73	73	70	63	75	
7	72	72	72	70	62	75	
8	74	74	73	71	64	75	
9	73	74	74	71	63	75	
10	77	78	78	75	67	75	
11	78	79	79	75	68	75	
12	80	80	79	76	69	75	
13	74	74	72	70	62	70	
14	74	75	75	72	65	75	
15	73	74	74	71	64	75	
16	72	72	71	69	62	75	
17	72	72	71	69	62	75	
18	70	73	70	67	62	70	
19	81	84	78	78	72	75	
20	73	75	72	72	65	75	
21	71	74	72	71	63	75	
22	70	72	71	69	62	75	
23	74	76	75	72	64	75	
24	73	76	74	73	65	75	
25	74	76	74	72	65	75	
26	33	34	34	33	31	75	
27	33	34	34	33	31	75	
28	33	34	34	33	31	75	
29	67	74	75	74	67	75	
30	33	34	34	33	31	75	
31	33	34	34	33	31	75	
32	33	34	34	33	31	75	
33	33	34	34	33	31	75	
34	33	34	34	33	31	75	
35	33	68	72	72	66	75	
36	75	80	81	80	74	65	(70)*
37	33	34	34	33	31	75	
38	33	34	34	33	31	75	
39	83	91	93	93	87	65	(70)*
40	81	87	88	87	81	75	
41	77	84	85	85	79	75	
42	76	88	91	91	86	75	
43	74	80	81	81	74	75	
44					83	75	
45					78	75	
46					76	75	
47					31	75	
48					76	75	
49					31	75	
50					77	75	
51					79	75	

Noise Level in Unmitigated Senario (the Project Only)

	2011							2012												2013												2014												2015				
NSR ID	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
52																																												85	85	85	77	60
53																																												86	86	86	74	60
54																																												86	85	85	70	61
55	72	72	73	73	73	73	73	73	74	74	74	74	75	76	77	77	77	78	78	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	76	75	74	74	73	73	73	72	71	70	68	68	64	61
56	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34	34	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
57	73	73	73	73	73	73	73	74	74	74	75	75	76	76	77	77	77	77	77	77	76	76	76	75	75	76	76	76	76	75	75	75	75	75	74	74	73	72	72	72	72	71	69	68	67	66	64	63
58	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34	34	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
59	73	73	73	73	73	73	73	74	74	74	75	75	75	76	76	77	77	77	77	77	76	76	76	75	75	75	75	75	75	75	75	75	75	75	74	73	72	72	72	71	71	70	68	67	67	66	64	63
60	71	71	71	71	71	71	71	72	73	73	73	73	73	73	74	74	74	74	74	74	72	72	71	69	68	68	69	69	70	70	69	69	69	69	69	69	69	69	67	67	67	63	63	64	61	61	61	61
61	70	70	70	70	70	70	70	71	72	72	72	72	72	72	73	73	73	73	73	73	71	71	70	67	66	66	66	66	66	66	64	65	65	65	65	65	65	65	66	66	66	66	60	60	60	60	60	60
62	70	70	70	70	70	70	70	71	71	71	71	71	72	72	72	72	72	72	72	72	71	71	69	66	66	66	66	66	66	66	64	65	65	65	65	65	65	65	65	65	65	65	59	59	60	60	60	60
63	76	76	76	76	76	76	76	76	77	77	77	77	78	79	80	80	80	80	80	80	79	80	79	79	79	79	79	79	79	79	79	79	79	79	77	77	75	75	75	74	74	73	72	70	68	68	65	63
64	77	77	77	77	77	77	77	77	78	78	78	78	79	80	80	81	81	81	81	80	79	80	79	78	78	78	78	79	78	78	78	78	78	78	77	76	75	75	75	74	74	73	71	69	69	68	66	65
65	82	82	82	82	82	82	82	84	84	84	84	84	85	85	85	86	86	86	86	86	85	86	83	83	84	84	84	84	84	84	84	83	83	83	83	82	79	79	79	79	79	75	74	70	70	69	67	66
66	82	82	82	82	82	82	82	84	84	84	85	85	85	85	86	86	86	86	86	86	85	85	82	82	82	82	82	82	82	82	82	80	80	80	79	79	77	77	77	77	77	76	73	71	71	70	69	69
67								88	88	88	88	88	88	88	89	89	89	89	90	89	89	89	86	85	85	85	85	85	86	85	85	85	85	85	85	85	85	85	85	85	85	85	79	79	79	79	79	79
68								87	88	88	88	88	88	88	88	88	88	88	89	89	89	89	87	86	86	86	86	86	86	86	86	87	87	87	87	87	86	86	87	87	87	86	81	81	81	81	81	81
69								86	87	87	87	87	87	87	87	87	87	87	89	88	88	88	86	85	85	86	86	86	86	86	85	86	86	86	86	86	86	86	86	86	86	86	81	81	81	81	81	81
70								82	83	83	84	84	84	84	84	84	84	84	86	86	86	86	85	84	84	84	84	84	84	84	84	86	86	86	86	86	85	85	85	85	85	85	80	80	80	80	80	80
71								81	82	82	83	83	83	83	83	84	84	84	86	86	86	86	86	85	84	84	85	85	85	85	84	86	86	86	86	86	86	86	86	86	86	86	80	80	81	80	80	80
72								82	84	84	85	85	85	85	85	85	85	85	89	89	89	89	88	88	87	87	88	88	88	88	87	90	90	90	90	90	90	90	90	89	89	89	84	84	84	84	84	84
73								89	89	89	92	92	92	92	92	92	92	92	92	92	92	92	92	92	88	88	89	89	89	89	89	87	87	87	86	86	86	86	86	85	85	85	81	81	81	80	80	80
74	81	81	81	81	81	81	81	83	83	83	83	83	84	84	84	84	84	84	85	85	85	85	83	82	82	82	82	82	82	82	81	82	82	82	82	82	81	81	81	81	81	81	76	76	76	76	76	76
75	80	80	80	80	80	80	80	82	82	82	83	83	83	83	83	83	83	83	85	84	84	84	83	82	82	82	82	82	82	82	81	82	82	82	82	82	82	82	82	82	82	82	76	76	77	76	76	76
76	78	78	78	78	78	78	78	79	80	80	81	81	81	81	81	82	82	82	83	83	83	83	82	81	81	81	81	81	81	81	81	82	82	82	82	82	82	82	82	81	81	81	76	76	77	76	76	76
77	78	78	78	78	78	78	78	79	80	80	81	81	81	81	81	81	81	82	83	82	82	82	82	81	80	80	81	81	81	81	80	81	81	81	81	81	81	80	81	80	80	80	75	75	76	75	74	74
78	77	77	77	77	77	77	77	78	78	78	80	80	80	80	80	80	80	81	82	82	81	81	81	81	79	79	80	80	80	80	80	79	79	79	79	79	78	78	78	76	76	77	73	73	73	71	71	71
79	76	76	76	76	76	76	76	77	77	77	78	78	78	79	79	79	79	79	80	79	79	79	78	78	77	77	77	78	77	77	77	77	77	77	77	77	76	76	76	75	75	75	71	71	71	70	69	69
80	72	72	72	72	72	72	72	72	74	74	74	74	74	74	74	74	74	75	76	76	76	76	76	75	74	74	75	75	75	75	74	75	75	75	74	74	74	74	74	73	73	73	69	69	69	68	68	68
81	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34	34	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
82	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34	34	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
83	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34	34	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
84	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34	34	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
85	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34	34	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
86	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	34	34	34	34	34	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31
87	69	69	69	69	69	69	69	69	69	69	71	71	71	71	71	71	71	72	73	73	72	71	71	71	71	71	72	72	71	71	71	72	72	72	72	72	71	71	72	70	70	70	67	67	67	65	65	65
88	72	72	72	72	72	72	72	73	74	74	75	75	75	75	75	75	75	76	76	77	76	76	76	75	73	73	74	74	74	74	74	74	74	74	74	74	73	73	74	72	72	72	69	69	69	67	67	67
89	74	74	74	74	74	74	74	74	75	75	77	77	76	76	76	76	76	77	78	78	78	78	78	77	76	76	77	77	77	76	76	76	76	76	76	76	75	75	75	74	74	74	70	70	70	69	69	69
90	76	76	76	76	76	76	76	76	76	76	77	77	77	77	77	78	77	77	77	77	78	77	77	77	77	77	76	77	75	75	75	75	75	75	75	75	74	74	73	73	73	72	68	68	68	68	65	65
91	74	74	74	74	74	74	74	74	74	75	76	76	76	76	76	77	76	76	76	76	77	75	75	75	75	75	73	74	71	71	72	72	72	72	72	72	71	70	70	70	70	70	64	64	64	64	64	64
92	76	76	77	77	77	77	77	76	76	77	78	78	78	78	78	78	78	78	78	78	78	77	77	77	77	77	76	77	75	75	76	75	75	75	75	75	74	74	72	72	72	72	69	69	69	69	64	64
93	73	73	74	74	74	74	74	73	73	74	74	74	74	74	73	73	73	73	73	73	73	74	74	74	74	74	73	74	74	74	74	73	73	73	73	73	73	73	70	70	70	68	68	68	68	68	31	31
94	72	72	73	74	74	74	74	73	73	73	73	73	73	74	73	73	72	72	72	72	73	73	73	73	73	74	72	73	73	73	74	73	73	72	72	72	72	72	69	69	69	68	68	68	68	68	31	31
95	78	78	80	80	80	80	80	79	79	80	80	80	80	80	79	79	79	79	79	79	80	80	80	80	80	81	80	80	81	81	82	81	81	80	80	80	80	80	78	78	78	75	75	75	75	75	31	31
96	65	65	66	67	67	67	67	65	65	65	65	65	65	67	64	64	64	64	64	64	65	65	65	65	65	65	65	65	67	67	67	67	67	66	66	66	66	66	63	63	63	32	31	31	31	31	31	31
97	64	64	64	66	66	66	66	61	62	62	62	62	62	66	33	34	34	34	34	34	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31	31	31

NSR ID	2011 Jun-Dec	2012	2013	2014	2015 Jan-May	Limit	
52					85	75	
53					86	75	
54					86	75	
55	73	78	77	77	70	75	
56	33	34	34	33	31	75	
57	73	77	77	75	68	75	
58	33	34	34	33	31	75	
59	73	77	77	75	67	70	
60	71	74	74	69	64	75	
61	70	73	73	66	60	75	
62	70	72	72	65	60	75	
63	76	80	80	79	70	75	
64	77	81	80	78	69	75	
65	82	86	86	83	70	75	
66	82	86	86	80	71	75	
67		90	89	85	79	75	
68		89	89	87	81	75	
69		89	88	86	81	75	
70		86	86	86	80	75	
71		86	86	86	81	75	
72		89	89	90	84	75	
73		92	92	87	81	75	
74	81	85	85	82	76	75	
75	80	85	84	82	77	75	
76	78	83	83	82	77	75	
77	78	83	82	81	76	75	
78	77	82	82	79	73	65	(70)*
79	76	80	79	77	71	65	(70)*
80	72	76	76	75	69	75	
81	33	34	34	33	31	75	
82	33	34	34	33	31	75	
83	33	34	34	33	31	75	
84	33	34	34	33	31	75	
85	33	34	34	33	31	75	
86	33	34	34	33	31	75	
87	69	73	73	72	67	75	
88	72	76	77	74	69	75	
89	74	78	78	76	70	75	
90	76	78	78	75	68	65	(70)*
91	74	77	77	72	64	75	
92	77	78	78	75	69	75	
93	74	74	74	73	68	75	
94	74	74	74	73	68	75	
95	80	80	82	81	75	65	(70)*
96	67	67	67	67	31	75	
97	66	66	34	33	31	75	

Remarks * Construction noise standard for schools is 70 dB(A) at normal school days and is reduced to 65 dB(A) during examination period. The more conservative 65 dB(A) standard is applied in this construction noise impact assessment.

Sample Calculation (Unmitigated, N39)

Noise Level in Unmitigated Senario

Row 39

NSR 39

Wpks Area (Area ID)		SWL	Distance	2011 Jun	Jul	Aug	Sep	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May
Viaduct S1 (22)																																																			
Group 1	Transportation and Utilities diversion	119																																																	
Group 2	Piling	120																																																	
Group 3	Substructure Construction	123																																																	
Group 4	Superstructure Construction	117																																																	
Group 5	Finishing Works	117																																																	
Viaduct S2 (27)			299																																																	
Group 1	Transportation and Utilities diversion	119	299																	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62																	
Group 2	Piling	120	299																												63	63	63	63	63	63																
Group 3	Substructure Construction	123	299																																		65	65	65													
Group 4	Superstructure Construction	117	299																																					59	59												
Group 5	Finishing Works	117	299																																							60	60	60									
Viaduct S3 (28)			94																																																	
Group 1	Transportation and Utilities diversion	119	94	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72																																
Group 2	Piling	120	94									73	73	73	73	73	73	73	73																																
Group 3	Substructure Construction	123	94																	75	75	75	75																												
Group 4	Superstructure Construction	117	94																					69	69	69																									
Group 5	Finishing Works	117	94																									70	70	70																						
Viaduct S4 (29)			67																																																	
Group 1	Transportation and Utilities diversion	119	67																75	75	75	75	75	75	75	75	75	75	75	75																						
Group 2	Piling	120	67																								76	76	76	76	76																						
Group 3	Substructure Construction	123	67																													78	78																			
Group 4	Superstructure Construction	117	67																															72	72																	
Group 5	Finishing Works	117	67																																	73	73	73	73	73	73	73										
Viaduct S5 (30)			18																																																	
Group 1	Transportation and Utilities diversion	119	18																86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86																	
Group 2	Piling	120	18																								87	87	87	87	87	87	87	87	87																	
Group 3	Substructure Construction	123	18																																	90	90	90	90	90	90											
Group 4	Superstructure Construction	117	18																																							84	84									
Group 5	Finishing Works	117	18																																									84	84	84	84	84	84	84	
Viaduct S6 (31)			175																																																	
Group 1	Transportation and Utilities diversion	119	175																67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67																	
Group 2	Piling	120	175																											67	67	67	67	67	67																	
Group 3	Substructure Construction	123	175																																	70	70	70														
Group 4	Superstructure Construction	117	175																																				64	64												
Group 5	Finishing Works	117	175																																						64	64	64	64	64	64	64				
Viaduct S7 (32)																																																			
Group 1	Transportation and Utilities diversion	119															61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61																		
Group 2	Piling	120																							62	62	62	62	62	62	62	62	62																			
Group 3	Substructure Construction	123																																64	64	64	64	64														
Group 4	Superstructure Construction	117																																				59	59													
Group 5	Finishing Works	117																																						59	59	59	59	59	59	59					
Viaduct S8 (33)																																																			
Group 1	Transportation and Utilities diversion	119																																																	
Group 2	Piling	120																																																	
Group 3	Substructure Construction	123																																																	
Group 4	Superstructure Construction	117																																																	
Group 5	Finishing Works	117																																																	
Viaduct S9 (34)																																																			
Group 1	Transportation and Utilities diversion	119																																																	
Group 2	Piling	120																																																	
Group 3	Substructure Construction	123																																																	
Group 4	Superstructure Construction	117																																																	
Group 5	Finishing Works	117																																																	
Viaduct S10 & Slip Road C (23)																																																			
Group 1	Transportation and Utilities diversion	119																																																	
Group 2	Piling	120																																																	
Group 3	Substructure Construction	123																																																	
Group 4	Superstructure Construction	117																																																	
Group 5	Finishing Works	117																																																	
Viaduct S11 (24)																																																			
Group 1	Transportation and Utilities diversion	119																																																	
Group 2	Piling	120																																																	
Group 3	Substructure Construction	123																																																	
Group 4	Superstructure Construction	117																																																	
Group 5	Finishing Works	117																																																	
Viaduct S12 (25)																																																			
Group 1	Transportation and Utilities diversion	119																																																	
Group 2	Piling	120																																																	
Group 3	Substructure Construction	123																																																	
Group 4	Superstructure Construction	117																																																	
Group 5	Finishing Works	117																																																	
Viaduct S13 (26)																																																			
Group 1	Transportation and Utilities diversion	119																																																	
Group 2	Piling	120																																																	
Group 3	Substructure Construction	123																																																	
Group 4	Superstructure Construction	117																																																	
Group 5	Finishing Works	117																																																	
Abutment Connects Viaduct S1 (2)																																																			
Group 1	Transportation and Utilities diversion	119																																																	
Group 2	Piling	120																																																	
Group 3	Substructure Construction	123																																																	
Group 4	Superstructure Construction	117																																																	
Group 5	Finishing Works	117																																																	
Viaduct - Structure A & Associate (7)			93																																																	
Group 1	Transportation and Utilities diversion	119	93	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72																																
Group 2	Piling	120	93																	73	73	73	73																												
Group 3	Substructure Construction	123	93																					75	75	75																									
Group 4	Superstructure Construction	117	93																								69																									
Group 5	Finishing Works	117	93																									70	70	70																						
Viaduct - Structure C & Associate (9)																																																			
Group 1	Transportation and Utilities diversion	119																																																	
Group 2	Piling	120																																																	
Group 3	Substructure Construction	123																																																	
Group 4	Superstructure Construction	117																																																	

Row 39

NSR 39

Wprks Area (Area ID)	SWL	Distance	2011 Jun	Jul	Aug	Sep	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Group 5 Finishing Works	117																				
Viaduct - Structure H & Associate (10)																					
Group 1 Transportation and Utilities diversion	119																				
Group 2 Piling	120																				
Group 3 Substructure Construction	123																				
Group 4 Superstructure Construction	117																				
Group 5 Finishing Works	117																				
Viaduct N1 (12)																					
Group 1 Transportation and Utilities diversion	119																				
Group 2 Piling	119																				
Group 3 Substructure Construction	122																				
Group 4 Superstructure Construction	116																				
Group 5 Finishing Works	117																				
Viaduct N2 (14)		277																			
Group 1 Transportation and Utilities diversion	119	277	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
Group 2 Piling	119	277											63	63	63	63	63	63	63	63	63
Group 3 Substructure Construction	122	277																			
Group 4 Superstructure Construction	116	277																			
Group 5 Finishing Works	117	277																			
Viaduct N3 (15)		108																			
Group 1 Transportation and Utilities diversion	119	108	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Group 2 Piling	119	108												71	71	71	71	71	71	71	71
Group 3 Substructure Construction	122	108																			
Group 4 Superstructure Construction	116	108																			
Group 5 Finishing Works	117	108																			
Viaduct N4 (16)		62																			
Group 1 Transportation and Utilities diversion	119	62	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	
Group 2 Piling	119	62														76	76	76	76	76	
Group 3 Substructure Construction	122	62																			79
Group 4 Superstructure Construction	116	62																			
Group 5 Finishing Works	117	62																			
Viaduct N5 (17)		77																			
Group 1 Transportation and Utilities diversion	119	77														73	73	73	73	73	73
Group 2 Piling	119	77																			
Group 3 Substructure Construction	122	77																			
Group 4 Superstructure Construction	116	77																			
Group 5 Finishing Works	117	77																			
Viaduct N6 (18)		196																			
Group 1 Transportation and Utilities diversion	119	196														65	65	65	65	65	65
Group 2 Piling	119	196																			
Group 3 Substructure Construction	122	196																			
Group 4 Superstructure Construction	116	196																			
Group 5 Finishing Works	117	196																			
Viaduct N7 (19)																					
Group 1 Transportation and Utilities diversion	119																				
Group 2 Piling	119																				
Group 3 Substructure Construction	122																				
Group 4 Superstructure Construction	116																				
Group 5 Finishing Works	117																				
Viaduct N8 (20)																					
Group 1 Transportation and Utilities diversion	119																				
Group 2 Piling	119																				
Group 3 Substructure Construction	122																				
Group 4 Superstructure Construction	116																				
Group 5 Finishing Works	117																				
Viaduct N9 (21)																					
Group 1 Transportation and Utilities diversion	119																				
Group 2 Piling	119																				
Group 3 Substructure Construction	122																				
Group 4 Superstructure Construction	116																				
Group 5 Finishing Works	117																				
Viaduct N10 (13)																					
Group 1 Transportation and Utilities diversion	119																				
Group 2 Piling	119																				
Group 3 Substructure Construction	122																				
Group 4 Superstructure Construction	116																				
Group 5 Finishing Works	117																				
Abutment connects Viaduct N1 (1)																					
Group 1 Transportation and Utilities diversion	119																				
Group 2 Piling	119																				
Group 3 Substructure Construction	122																				
Group 4 Superstructure Construction	116																				
Group 5 Finishing Works	117																				
Viaduct - Structure B & Associate (8)		111																			
Group 1 Transportation and Utilities diversion	119	111	70	70	70	70	70	70	70	70	70	70									
Group 2 Piling	119	111						70	70	70	70	70									
Group 3 Substructure Construction	122	111											74	74	74	74	74				
Group 4 Superstructure Construction	116	111																68	68		
Group 5 Finishing Works	117	111																		68	68
Wall 1 (35)																					
Group 1 Transportation and Utilities diversion	119																				
Group 2 Shoring	115																				
Group 3 Earthworks	117																				
Group 4 Retaining Wall Construction	117																				
Group 5 Finishing Works	121																				
Group 6	117																				
Group 7	111																				

Wprks Area (Area ID)	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Group 5 Finishing Works												
Viaduct - Structure H & Associate (10)												
Group 1 Transportation and Utilities diversion												
Group 2 Piling												
Group 3 Substructure Construction												
Group 4 Superstructure Construction												
Group 5 Finishing Works												
Viaduct N1 (12)												
Group 1 Transportation and Utilities diversion												
Group 2 Piling												
Group 3 Substructure Construction												
Group 4 Superstructure Construction												
Group 5 Finishing Works												
Viaduct N2 (14)												
Group 1 Transportation and Utilities diversion												
Group 2 Piling												
Group 3 Substructure Construction	66	66	66	66	66							
Group 4 Superstructure Construction						60						
Group 5 Finishing Works							60	60	60	60		
Viaduct N3 (15)												
Group 1 Transportation and Utilities diversion												
Group 2 Piling												
Group 3 Substructure Construction	74	74	74	74	74							
Group 4 Superstructure Construction						68	68					
Group 5 Finishing Works								68	68	68	68	
Viaduct N4 (16)												
Group 1 Transportation and Utilities diversion												
Group 2 Piling												
Group 3 Substructure Construction	79	79	79									
Group 4 Superstructure Construction			73	73								
Group 5 Finishing Works					73	73	73	73	73	73	73	
Viaduct N5 (17)												
Group 1 Transportation and Utilities diversion	73	73	73	73	73	73	73	73	73	73	73	73
Group 2 Piling												
Group 3 Substructure Construction												
Group 4 Superstructure Construction												
Group 5 Finishing Works												
Viaduct N6 (18)												
Group 1 Transportation and Utilities diversion	65	65	65	65	65	65	65	65	65	65	65	65
Group 2 Piling												
Group 3 Substructure Construction												
Group 4 Superstructure Construction												
Group 5 Finishing Works												
Viaduct N7 (19)												
Group 1 Transportation and Utilities diversion												
Group 2 Piling												
Group 3 Substructure Construction												
Group 4 Superstructure Construction												
Group 5 Finishing Works												
Viaduct N8 (20)												
Group 1 Transportation and Utilities diversion												
Group 2 Piling												
Group 3 Substructure Construction												
Group 4 Superstructure Construction												
Group 5 Finishing Works												
Viaduct N9 (21)												
Group 1 Transportation and Utilities diversion												
Group 2 Piling												
Group 3 Substructure Construction												
Group 4 Superstructure Construction												
Group 5 Finishing Works												
Viaduct N10 (13)												
Group 1 Transportation and Utilities diversion												
Group 2 Piling												
Group 3 Substructure Construction												
Group 4 Superstructure Construction												
Group 5 Finishing Works												
Abutment connects Viaduct N1 (1)												
Group 1 Transportation and Utilities diversion												
Group 2 Piling												
Group 3 Substructure Construction												
Group 4 Superstructure Construction												
Group 5 Finishing Works												
Viaduct - Structure B & Associate (8)												
Group 1 Transportation and Utilities diversion												
Group 2 Piling												
Group 3 Substructure Construction												
Group 4 Superstructure Construction												
Group 5 Finishing Works												
Wall 1 (35)												
Group 1 Transportation and Utilities diversion												
Group 2 Shoring												
Group 3 Earthworks												
Group 4 Retaining Wall Construction												
Group 5 Finishing Works												
Group 6												
Group 7												

Wprks Area (Area ID)	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May
Group 5 Finishing Works																	
Viaduct - Structure H & Associate (10)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Piling																	
Group 3 Substructure Construction																	
Group 4 Superstructure Construction																	
Group 5 Finishing Works																	
Viaduct N1 (12)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Piling																	
Group 3 Substructure Construction																	
Group 4 Superstructure Construction																	
Group 5 Finishing Works																	
Viaduct N2 (14)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Piling																	
Group 3 Substructure Construction																	
Group 4 Superstructure Construction																	
Group 5 Finishing Works																	
Viaduct N3 (15)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Piling																	
Group 3 Substructure Construction																	
Group 4 Superstructure Construction																	
Group 5 Finishing Works																	
Viaduct N4 (16)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Piling																	
Group 3 Substructure Construction																	
Group 4 Superstructure Construction																	
Group 5 Finishing Works																	
Viaduct N5 (17)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Piling	74	74	74	74	74	74											
Group 3 Substructure Construction							77	77	77								
Group 4 Superstructure Construction										71	71	71					
Group 5 Finishing Works														71	71		
Viaduct N6 (18)																	
Group 1 Transportation and Utilities diversion	65	65															
Group 2 Piling	66	66															
Group 3 Substructure Construction			69	69	69	69											
Group 4 Superstructure Construction							63	63									
Group 5 Finishing Works									63	63	63	63	63	63	63		
Viaduct N7 (19)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Piling																	
Group 3 Substructure Construction																	
Group 4 Superstructure Construction																	
Group 5 Finishing Works																	
Viaduct N8 (20)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Piling																	
Group 3 Substructure Construction																	
Group 4 Superstructure Construction																	
Group 5 Finishing Works																	
Viaduct N9 (21)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Piling																	
Group 3 Substructure Construction																	
Group 4 Superstructure Construction																	
Group 5 Finishing Works																	
Viaduct N10 (13)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Piling																	
Group 3 Substructure Construction																	
Group 4 Superstructure Construction																	
Group 5 Finishing Works																	
Abutment connects Viaduct N1 (1)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Piling																	
Group 3 Substructure Construction																	
Group 4 Superstructure Construction																	
Group 5 Finishing Works																	
Viaduct - Structure B & Associate (8)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Piling																	
Group 3 Substructure Construction																	
Group 4 Superstructure Construction																	
Group 5 Finishing Works																	
Wall 1 (35)																	
Group 1 Transportation and Utilities diversion																	
Group 2 Shoring																	
Group 3 Earthworks																	
Group 4 Retaining Wall Construction																	
Group 5 Finishing Works																	
Group 6																	
Group 7																	

Plant Inventory (North)

Noise Level in Unmitigated Senario

Row 39

NSR 39

	Works Area (Area ID)		SWL	Distance	2011 Jun	Jul	Aug	Sep	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May
	Group 8		111																																																	
	Wall 2 (36)																																																			
	Group 1	Transportation and Utilities diversion	119																																																	
	Group 2	Shoring	115																																																	
	Group 3	Earthworks	117																																																	
	Group 4	Retaining Wall Construction	117																																																	
	Group 5	Finishing Works	121																																																	
	Group 6		117																																																	
	Group 7		111																																																	
	Group 8		111																																																	
	Wall 3 (37)																																																			
	Group 1	Transportation and Utilities diversion	119																																																	
Plant Inventory (At Grade)	Group 2	Shoring	115																																																	
	Group 3	Earthworks	117																																																	
	Group 4	Retaining Wall Construction	117																																																	
	Group 5	Finishing Works	121																																																	
	Group 6		117																																																	
	Group 7		111																																																	
	Group 8		111																																																	
	Wall 4 (38)																																																			
	Group 1	Transportation and Utilities diversion	119																																																	
	Group 2	Shoring	115																																																	
	Group 3	Earthworks	117																																																	
	Group 4	Retaining Wall Construction	117																																																	
	Group 5	Finishing Works	121																																																	
	Group 6		117																																																	
	Group 7		111																																																	
	Group 8		111																																																	
	Wall 5 (39)																																																			
	Group 1	Transportation and Utilities diversion	119																																																	
	Group 2	Shoring	115																																																	
	Group 3	Earthworks	117																																																	
	Group 4	Retaining Wall Construction	117																																																	
	Group 5	Finishing Works	121																																																	
	Group 6		117																																																	
	Group 7		111																																																	
	Group 8		111																																																	
	Kwai Hei St Footbridge (5)																																																			
	Group 1	Transportation and Utilities diversion	119																																																	
	Group 2	Demolition of Existing Structures	120																																																	
	Group 3	Piling	120																																																	
	Group 4	Substructure Construction	122																																																	
	Group 5	Superstructure Construction	121																																																	
	Group 6	Finishing Works	121																																																	
	Group 7																																																			
	Group 8																																																			
	Underpass at Kwai Hei St (11)																																																			
	Group 1	Transportation and Utilities diversion	119																																																	
	Group 2	Demolition of Existing Structures	120																																																	
	Group 3	Piling	120																																																	
	Group 4	Substructure Construction	122																																																	
	Group 5	Superstructure Construction	121																																																	
	Group 6	Finishing Works	121																																																	
	Group 7																																																			
	Group 8																																																			
	Bridge 38/2 - Deck 1 (3)																																																			
	Group 1	Transportation and Utilities diversion	119																																																	
	Group 2	Demolition of Existing Structures	120																																																	
	Group 3	Piling	120																																																	
	Group 4	Substructure Construction	122																																																	
	Group 5	Superstructure Construction	121																																																	
	Group 6	Finishing Works	121																																																	
	Group 7																																																			
	Group 8																																																			
	Bridge 38/2 - Deck 2 (4)																																																			
	Group 1	Transportation and Utilities diversion	119																																																	
	Group 2	Demolition of Existing Structures	120																																																	
	Group 3	Piling	120																																																	
	Group 4	Substructure Construction	122																																																	
	Group 5	Superstructure Construction	121																																																	
	Group 6	Finishing Works	121																																																	
	Group 7																																																			
	Group 8																																																			
	Drainage and Paving (6)																																																			
	Group 1		119																																																	
	Group 2		120																																																	
	Group 3		120																																																	
	Group 4		122																																																	
	Group 5		121																																																	
	Group 6	Drainage	121																																																	
	Group 7	Paving																																																		
	Group 8	Lane Marking																																																		
	TW5 City Side			255																																																	
	Group 1	Piling and Foundation	120	255	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64																													
	Group 2	Substructure Construction	123	255																				66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66						
	Group 3	Superstructure Construction	121	255																																											65	65	65	65	65	65	65	65	65	64.6
	Group 4			255																																																	
	Group 5			255																																																	
	Group 6			255																																																	
	Group 7			255																																																	
	Group 8			255																																																	

Row 39

NSR 39

	Wprks Area (Area ID)	SWL	Distance	2011 Jun	Jul	Aug	Sep	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plant Inventory (Tuen Mun Road)	TW5 Bay Side		162																			
	Group 1 Piling and Foundation	120	162	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
	Group 2 Substructure Construction	123	162																			
	Group 3 Superstructure Construction	121	162																			
	Group 4		162																			
	Group 5		162																			
	Group 6		162																			
	Group 7		162																			
	Group 8		162																			
	TW6																					
	Group 1 Piling and Foundation	120																				
	Group 2 Substructure Construction	123																				
	Group 3 Superstructure Construction	121																				
	Group 4																					
	Group 5																					
	Group 6																					
	Group 7																					
	Group 8																					
	TW7																					
	Group 1 Piling and Foundation	120																				
	Group 2 Substructure Construction	123																				
	Group 3 Superstructure Construction	121																				
	Group 4																					
	Group 5																					
	Group 6																					
	Group 7																					
	Group 8																					
Plant Inventory (Tuen Mun Road)	Group 1	109																				
	Group 2	103																				
	Group 3																					
	Group 4																					
	Group 5																					
	Group 6																					
	Group 7																					
	Group 8																					

	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May
TW5 Bay Side																													
Group 1 Piling and Foundation																													
Group 2 Substructure Construction	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70											
Group 3 Superstructure Construction																			69	69	69	69	69	69	69	69	69	69	68.6
Group 4																													
Group 5																													
Group 6																													
Group 7																													
Group 8																													
TW6																													
Group 1 Piling and Foundation																													
Group 2 Substructure Construction																													
Group 3 Superstructure Construction																													
Group 4																													
Group 5																													
Group 6																													
Group 7																													
Group 8																													
TW7																													
Group 1 Piling and Foundation																													
Group 2 Substructure Construction																													
Group 3 Superstructure Construction																													
Group 4																													
Group 5																													
Group 6																													
Group 7																													
Group 8																													
Group 1																													
Group 2																													
Group 3																													
Group 4																													
Group 5																													
Group 6																													
Group 7																													
Group 8																													

CNL cummulative (Distance Corrected)	80	80	80	80	80	80	80	80	81	81	81	82	82	84	84	88	88	88	88	88	88	88	88	90	91	91	90	90	90	90	90	90	90	90	90	90	90	90	90	85	85	85	85	85	85	85	85	84	70
Façade Correction	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
CNL (Overall)	83	83	83	83	83	83	83	83	84	84	84	85	85	87	87	91	91	91	91	91	91	91	91	93	94	94	93	93	93	93	93	93	93	93	93	93	93	93	93	88	88	88	88	88	88	88	88	87	73
CNL TWRd (Distance Corrected)	79	79	79	79	79	80	80	80	81	81	81	81	82	83	83	88	88	88	88	88	88	88	88	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	85	85	85	84	84	84	84	84	84	28
Façade Correction	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
CNL (the Project)	82	82	82	82	82	83	83	83	84	84	84	84	85	86	86	91	91	91	91	91	91	91	91	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	88	88	88	87	87	87	87	87	87	31

Notes: "CNL cummunative" -- Assuming all active works activities will be in parallel operation.

Blank cells refers to:

1. Construction activity not commenced yet; or
2 Distance from construction activity to NSR greater than 300m; or
3. Construction Noise Level due to the activity smaller than 35dB(A)

Mitigated Scenario

Group 1 Transport and Utility Diversion

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Dump Truck *	C9/20	3	103	30%	0	102.5
2	Road Roller *#	C8/25	2	96	100%	5	94.0
3	Excavator *#	C3/61	2	104	50%	5	99.0
4	Mobile Crane *#	C7/114	3	101	30%	5	95.5
5	Lorry *	C8/25	4	96	30%	0	96.8
6	Air Compressor *#	C7/17	1	90	100%	10	80.0
7	Generator *	C7/54	2	89	100%	0	92.0
8	Breaker, hand-held, mass up to 10kg #	CNP023	1	108	30%	5	97.8
Total							106.5

Group 2 Piling

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer * (Act 1)	C6/23	0	100	60%	0	0.0
2	Poker Vibrator *# (Act 1)	C6/32	0	100	60%	5	0.0
3	Bored Pile Oscillator # (Act 2)	CNP165	3	115	60%	10	107.6
4	Mobile Crane * #(Act 1&2)	C7/114	3	101	30%	5	95.5
5	Lorry *(Act 1&2)	C8/25	3	96	30%	0	95.5
6	Generator *# (Act 1&2)	C7/54	2	89	100%	10	82.0
Total							108.1

Group 3 Substructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer *	C6/23	3	100	60%	0	102.6
2	Poker Vibrator *#	C6/32	4	100	70%	5	99.5
3	Mobile Crane *#	C7/114	2	101	40%	5	95.0
4	Lorry *	C8/25	4	96	30%	0	96.8
5	Air Compressor *#	C7/17	1	90	100%	10	80.0
6	Generator *	C7/54	2	89	100%	0	92.0
7	Excavator *#	C3/61	2	104	50%	5	99.0
8	Breaker, excavator mounted *#	C8/13	1	110	30%	5	99.8
Total							107.3

Group 4 Superstructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Crane, tower(electric)	CNP049	1	95	100%	0	95.0
2	Mobile Crane *#	C7/114	2	101	40%	5	95.0
3	Lorry *	C8/25	4	96	30%	0	96.8
4	Air Compressor *#	C7/17	1	90	100%	10	80.0
5	Generator *	C7/54	2	89	100%	0	92.0
6	Launching Girder (note 3)	CNP049	1	95	50%	0	92.0
7	Segment Transporter *	C9/40	1	104	30%	0	98.8
Total							103.4

Group 5 Finishing Works

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Asphalt Paver *#	C8/24	1	101	70%	5	94.5
2	Road Roller *#	C8/25	1	96	80%	5	90.0
3	Mobile Crane *#	C7/114	2	101	50%	5	96.0
4	Lorry *	C8/25	4	96	30%	0	96.8
5	Air Compressor *#	C7/17	1	90	100%	10	80.0
6	Generator *	C7/54	2	89	100%	0	92.0
Total							101.5

1 (*) denotes use of "quiet" Plant, QPME, reference were made to BS5228 Noise and Vibration control on construction and open sites

2 (#) denotes use of barrier / full enclosures and acoustic insulation mats for mitigation of noise impac to achieve noise reduction of 5dB(A) or 10dB(A)

3 Launching girder driven by electricity, considering the nature and capacity requirement, CNP049 was referenced for the SWL

Group 1 Transport and Utility Diversion

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Dunp Truck *	C9/20	3	103	30%	0	102.5
2	Road Roller *#	C8/25	2	96	100%	5	94.0
3	Excavator *#	C3/61	2	104	50%	5	99.0
4	Mobile Crane *#	C7/114	3	101	50%	5	97.8
5	Lorry *	C8/25	4	96	50%	0	99.0
6	Air Compressor *#	C7/17	1	90	100%	10	80.0
7	Generator *	C7/54	2	89	100%	0	92.0
8	Breaker, hand-held, mass up to 10kg #	CNP023	1	108	30%	5	97.8
Total							107.0

Group 2 Piling

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer * (Act 1)	C6/23	0	100	80%	0	0.0
2	Poker Vibrator *# (Act 1)	C6/32	0	100	70%	5	0.0
3	Bored Pile Oscillator # (Act 2)	CNP165	3	115	60%	10	107.6
4	Mobile Crane *# (Act 1&2)	C7/114	4	101	30%	5	96.8
5	Lorry * (Act 1&2)	C8/25	4	96	30%	0	96.8
6	Generator * (Act 1&2)	C7/54	2	89	100%	0	92.0
Total							108.3

Group 3 Substructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer *	C6/23	3	100	80%	0	103.8
2	Poker Vibrator *#	C6/32	4	100	70%	5	99.5
3	Mobile Crane *#	C7/114	2	101	50%	5	96.0
4	Lorry *	C8/25	4	96	50%	0	99.0
5	Air Compressor *#	C7/17	1	90	100%	10	80.0
6	Generator *	C7/54	2	89	100%	0	92.0
7	Excavator *#	C3/61	2	104	50%	5	99.0
8	Breaker, excavator mounted *#	C8/13	1	110	30%	5	99.8
Total							108.1

Group 4 Superstructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Crane, tower(electric)	CNP049	1	95	100%	0	95.0
2	Mobile Crane *#	C7/114	2	101	50%	5	96.0
3	Lorry *	C8/25	4	96	50%	0	99.0
4	Air Compressor *#	C7/17	1	90	100%	10	80.0
5	Generator *	C7/54	2	89	100%	0	92.0
6	Launching Girder (Note 3)	CNP049	1	95	50%	0	92.0
7	Segment Transporter *	C9/40	1	104	30%	0	98.8
Total							104.1

Group 5 Finishing Works

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Asphalt Paver *#	C8/24	1	101	70%	5	94.5
2	Road Roller *#	C8/25	1	96	80%	5	90.0
3	Mobile Crane *#	C7/114	4	101	70%	5	100.5
4	Lorry *	C8/25	4	96	50%	0	99.0
5	Air Compressor *#	C7/17	1	90	100%	10	80.0
6	Generator *	C7/54	2	89	100%	0	92.0
Total							103.9

1 (*) denotes use of "quiet" Plant, QPME, reference were made to BS5228 Noise and Vibration control on construction and open sites

2 (#) denotes use of barrier / full enclosures and acoustic insulation mats for mitigation of noise impac to achieve noise reduction of 5dB(A) or 10dB(A)

3 Launching girder driven by electricity, considering the nature and capacity requirement, CNP049 was referenced for the SWL

Group 1 Transport and Utility Diversion

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Dump Truck *	C9/20	4	103	40%	0	105.0
2	Road Roller *#	C8/25	2	96	100%	5	94.0
3	Excavator *#	C3/61	2	104	50%	5	99.0
4	Mobile Crane *#	C7/114	2	101	50%	5	96.0
5	Lorry *	C8/25	4	96	70%	0	100.5
6	Air Compressor *#	C7/17	1	90	100%	10	80.0
7	Generator *	C7/54	2	89	100%	0	92.0
8	Breaker, hand-held, mass up to 10kg	CNP023	1	108	30%	5	97.8
Total							108.1

Group 2 Shoring

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Mobile Crane *	C7/114	1	101	50%	0	98.0
2	Lorry *	C8/25	4	96	70%	0	100.5
3	Generator *	C7/54	2	89	100%	0	92.0
Total							102.8

Group 3 Earthworks

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Mobile Crane *#	C7/114	1	101	50%	5	93.0
2	Excavator *#	C3/61	1	104	50%	5	96.0
3	Lorry *	C8/25	2	96	70%	0	97.5
4	Roller, Vibratory *#	C3/116	1	106	70%	5	99.5
5	Generator *	C7/54	2	89	100%	0	92.0
Total							103.4

Group 4 Retaining Wall

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Mobile Crane *#	C7/114	1	101	70%	5	94.5
2	Poker Vibrator *#	C6/32	2	100	70%	5	96.5
3	Generator *	C7/54	1	89	100%	0	89.0
4	Lorry *	C8/25	2	96	70%	0	97.5
Total							101.3

Group 5 Finishing Works

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer *	C6/23	3	100	80%	0	103.8
2	Poker Vibrator *#	C6/32	4	100	70%	5	99.5
3	Road Roller *#	C8/25	2	96	100%	5	94.0
4	Mobile Crane *#	C7/114	2	101	50%	5	96.0
5	Lorry *	C8/25	4	96	70%	0	100.5
6	Air Compressor *#	C7/17	1	90	100%	10	80.0
7	Generator *	C7/54	2	89	100%	0	92.0
Total							107.2

Group 6 Drainage

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer *	C6/23	2	100	80%	0	102.0
2	Lorry *	C8/25	2	96	70%	0	97.5
3	Poker Vibrator *#	C6/32	3	100	70%	5	98.2
4	Air Compressor *#	C7/17	1	90	100%	10	80.0
5	Generator *	C10/54	2	89	100%	0	92.0
6	Breaker, hand-held, mass up to 10kg	CNP023	1	108	30%	5	97.8
Total							105.5

Group 7 Paving

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Asphalt Paver *#	C8/24	1	101	70%	5	94.5
2	Road Roller *#	C8/25	1	96	80%	5	90.0
Total							95.8

Group 8 Lane Marking

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Paint Line Marker #	CNP161	1	90	80%	5	84.0
2	Generator *	C7/54	2	89	100%	0	92.0
Total							92.7

* Group 6 to Group 8 inventory used for "Modifications" Works SWL Calculations, included in this page for programme limitation

1 (*) denotes use of "quiet" Plant, QPME, reference were made to BS5228 Noise and Vibration control on construction and open sites

2 (#) denotes use of barrier / full enclosures and acoustic insulation mats for mitigation of noise impac to achieve noise reduction of 5dB(A) or 10dB(A)

Group 1 Transport and Utility Diversion

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Dunp Truck *	C9/20	4	103	40%	0	105.0
2	Road Roller *#	C8/25	2	96	100%	5	94.0
3	Excavator *#	C3/61	2	104	50%	5	99.0
4	Mobile Crane *#	C7/114	2	101	50%	5	96.0
5	Lorry *	C8/25	4	96	50%	0	99.0
6	Air Compressor *#	C7/17	1	90	100%	10	80.0
7	Generator, standard *	C7/54	2	89	100%	0	92.0
8	Breaker, hand-held, mass up to 10kg #	CNP023	1	108	30%	5	97.8
Total							107.9

Group 2 Demolition of Existing Structure

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Air Compressor *#	C7/17	1	90	100%	10	80.0
2	Generator *	C7/54	2	89	100%	0	92.0
3	Breaker, hand-held, mass up to 10kg #	CNP023	1	108	30%	5	97.8
4	Mobile Crane *#	C7/114	2	101	50%	5	96.0
5	Lorry *	C8/25	4	96	50%	0	99.0
6	Breaker, excavator mounted *#	C8/13	1	110	30%	5	99.8
Total							104.6

Group 3 Piling

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer * (Act 1)	C6/23	0	100	80%	0	0.0
2	Poker Vibrator *# (Act 1)	C6/32	0	100	70%	5	0.0
3	Bored Pile Oscillator *# (Act 2)	CNP165	4	115	60%	10	108.8
4	Mobile Crane *# (Act 1& 2)	C7/114	2	101	50%	5	96.0
5	Lorry * (Act 1& 2)	C8/25	4	96	50%	0	99.0
6	Generator * (Act 1& 2)	C7/54	2	89	100%	0	92.0
Total							109.5

Group 4 Substructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer *	C6/23	3	100	80%	0	103.8
2	Poker Vibrator *#	C6/32	4	100	70%	5	99.5
3	Mobile Crane *#	C7/114	1	101	70%	5	94.5
4	Lorry *	C8/25	4	96	50%	0	99.0
5	Air Compressor *#	C7/17	1	90	100%	10	80.0
6	Generator *	C7/54	2	89	100%	0	92.0
7	Excavator *#	C3/61	2	104	50%	5	99.0
8	Breaker, excavator mounted *#	C8/13	1	110	30%	5	99.8
Total							108.0

Group 5 Superstructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer *	C6/23	3	100	80%	0	103.8
2	Poker Vibrator *#	C6/32	4	100	70%	5	99.5
3	Mobile Crane *#	C7/114	2	101	70%	5	97.5
4	Lorry *	C8/25	4	96	50%	0	99.0
5	Air Compressor *#	C7/17	1	90	100%	10	80.0
6	Generator *	C7/54	2	89	100%	0	92.0
Total							106.8

Group 6 Finishing Works

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer *	C6/23	3	100	80%	0	103.8
2	Poker Vibrator *#	C6/32	4	100	70%	5	99.5
3	Mobile Crane *	C7/114	2	101	70%	0	102.5
4	Lorry *	C8/25	4	96	50%	0	99.0
5	Air Compressor *#	C7/17	1	90	100%	10	80.0
6	Generator *	C7/54	2	89	100%	0	92.0
Total							107.8

1 (*) denotes use of "quiet" Plant, QPME, reference were made to BS5228 Noise and Vibration control on construction and open sites

2 (#) denotes use of barrier / full enclosures and acoustic insulation mats for mitigation of noise impac to achieve noise reduction of 5dB(A) or 10dB(A)

Group 1 Piling and Foundation

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer(Act 1)	C6/23	0	100	80%	0	0.0
2	Poker Vibrator (Act 1)	C6/32	0	100	70%	5	0.0
3	Bored Pile Oscillator (Act 2)	CNP165	3	115	70%	10	108.2
4	Mobile Crane(Act 1& 2)	C7/114	3	101	50%	0	102.8
5	Lorry (Act 1& 2)	C11/25	3	96	70%	0	99.2
6	Generator (Act 1& 2)	C7/54	2	89	100%	0	92.0
Total							109.8

Group 2 Substructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer	C6/23	3	100	80%	0	103.8
2	Poker Vibrator	C6/32	4	100	70%	5	99.5
3	Mobile Crane	C7/114	2	101	70%	0	102.5
4	Lorry	C11/25	4	96	50%	0	99.0
5	Air Compressor	C7/17	1	90	100%	10	80.0
6	Generator	C7/54	2	89	100%	0	92.0
7	Excavator	C3/61	2	104	50%	5	99.0
8	Breaker, excavator mounted	C8/13	1	110	30%	5	99.8
Total							108.9

Group 3 Superstructure Construction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Concrete Lorry Mixer	C6/23	2	100	80%	0	102.0
2	Poker Vibrator	C6/32	3	100	70%	5	98.2
3	Crane, tower(electric)	CNP049	1	95	100%	0	95.0
4	Mobile Crane	C7/114	4	101	70%	0	105.5
5	Lorry	C11/25	4	96	50%	0	99.0
6	Air Compressor	C7/17	1	90	100%	10	80.0
7	Generator	C7/54	2	89	100%	0	92.0
Total							108.5

Plant Inventory
(Reconstruction and Improvement of Tuen Mun Road)

Group 1 Construction Work_Mitigated_Activity 1

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Piling Rig	CNP166	1	100	100%		100.0
2	Excavator	C3/97	1	105	100%		105.0
3	Trucks	C9/39	2	103	0%		0.0
4	Crane	C7/114	1	101	100%		101.0
5	Concrete Truck	C6/23	1	100	100%		100.0
6	Compressor	C7/16	1	96	100%		96.0
7	Bar Bender	CNP021	1	90	100%		90.0
8	Poker Vibrator	C6/32	1	100	100%		100.0
Total							109.0

Group 2 Construction Work_Angler's Beach_Mitigated_Activity 2

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Trucks	C9/27	1	103	100%		103.0
2	Crane	C7/114	1	101	0%		0.0
3	Compressor	C7/16	1	96	0%		0.0
Total							103.0

Monthly Construction Noise Level at Each NSR dB(A)

Summary	2011							2012												2013												2014												2015				
NSR ID	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
1	58	58	58	57	57	56	56	56	56	58	58	58	58	58	58	58	59	57	57	57	56	54	54	54	54	54	56	54	54	54	54	54	54	52	52	52	48	48	48	48	48	34	34	34	34	34	34	34
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33	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	58	58	58	58	58	58	58	58	58	58	58	58
34	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	57	57	57	57	57
35	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	61	61	61	61	60	60	60	60	61	61	62	62	62	62	62	62	62	61	61	61	60	60	60	59	59	59	59	59	59	58	58	58	58
36	64	64	64	64	64	65	65	65	65	65	65	65	65	67	67	68	68	68	67	67	67	67	67	68	68	69	69	68	68	68	68	68	67	66	66	66	66	66	64	64	64	63	63	63	62	62	62	59
37	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61
38	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	59	59	59	59	59	59	59	59	59	59	59
39	71	71	71	71	71	71	71	71	72	72	72	72	73	74	74	79	79	78	78	78	78	78	78	79	79	79	79	79	79	79	79	79	79	78	78	78	78	78	75	75	75	74	74	74	74	74	74	61
40	69	69	69	69	69	70	70	70	71	71	70	71	71	73	73	75	74	74	74	74	73	73	74	75	75	75	75	75	75	75	75	75	73	73	73	73	73	72	69	69	69	69	68	68	68	68	68	61
41	67	67	67	67	67	68	68	68	68	68	68	68	69	70	70	72	72	72	72	71	71	71	71	73	73	73	73	73	73	73	73	73	72	72	71	71	71	71	69	69	69	68	68	68	67	67	67	63
42	71	71	71	71	71	71	71	71	71	71	71	71	71	73	73	77	77	77	77	77	77	77	77	78	78	79	79	79	79	79	79	79	78	77	77	76	76	76	74	74	74	74	74	74	72	72	71	69
43	73	73	73	73	73	73	73	73	73	73	73	73	73	74	74	74	74	74	74	73	73	73	73	73	73	74	74	74	74	73	73	73	73	73	73	73	73	72	72	72	72	72	72	72	72	72	72	71
44																																												70	65	65	64	62
45																																												65	62	62	61	59
46																																												62	60	60	54	46
47																																												34	34	34	34	34
48																																												62	60	60	55	46
49																																												34	34	34	34	34
50																																												63	62	62	57	46
51																																												65	63	63	58	46

Max. Construction Noise Level at each NSR dB(A)

NSR ID	2011 Jun-Dec	2012	2013	2014	2015 Jan-May	Limit	
1	58	59	57	54	34	75	
2	58	58	58	58	48	75	
3	58	59	58	58	48	75	
4	58	58	59	59	49	75	
5	59	60	59	59	49	75	
6	60	60	59	59	49	75	
7	59	59	58	58	49	75	
8	62	61	59	59	50	75	
9	61	61	60	59	50	75	
10	65	65	64	63	54	75	
11	66	66	64	63	54	75	
12	68	67	65	64	55	75	
13	62	61	58	58	49	70	
14	63	62	61	60	52	75	
15	62	61	60	59	51	75	
16	61	59	57	57	48	75	
17	59	59	57	57	49	75	
18	78	60	56	55	48	70	
19	72	71	66	66	58	75	
20	68	63	60	60	52	75	
21	67	61	59	59	50	75	
22	66	59	58	57	49	75	
23	64	63	61	60	51	75	
24	63	63	61	61	52	75	
25	65	63	60	60	51	75	
26	59	35	34	34	34	75	
27	59	35	34	34	34	75	
28	58	35	34	34	34	75	
29	59	63	64	63	58	75	
30	58	58	57	57	56	75	
31	58	58	57	57	57	75	
32	59	59	58	58	57	75	
33	60	60	59	59	58	75	
34	59	59	58	58	57	75	
35	59	61	62	62	59	75	
36	65	68	69	68	63	65	(70)*
37	62	62	61	61	61	75	
38	61	61	60	60	59	75	
39	71	79	79	79	74	65	(70)*
40	70	75	75	75	68	75	
41	68	72	73	73	68	75	
42	71	77	79	79	74	75	
43	73	74	74	73	72	75	
44					70	75	
45					65	75	
46					62	75	
47					34	75	
48					62	75	
49					34	75	
50					63	75	
51					65	75	

Summary	2011							2012												2013												2014												2015				
NSR ID	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
52																																												71	69	69	63	46
53																																												72	70	70	61	46
54																																												71	70	70	56	46
55	64	64	64	64	64	64	64	64	65	65	65	65	65	66	66	67	66	66	66	65	65	66	66	66	66	66	66	66	66	66	66	66	65	65	64	64	64	63	63	62	62	62	62	61	61	61	61	60
56	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
57	62	62	62	62	62	63	63	63	64	64	64	64	64	65	65	66	65	65	65	64	64	64	64	64	63	64	64	64	64	63	63	63	63	62	62	61	61	60	60	59	59	59	58	57	57	57	56	56
58	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	48	48	48	48	48	48	48	48	48	48	48
59	61	61	61	61	61	61	61	62	62	62	63	63	63	64	64	65	64	64	64	63	63	63	63	62	62	62	63	63	62	62	61	61	61	61	60	60	59	59	57	57	57	56	55	54	53	51	50	49
60	58	58	58	58	58	58	58	59	60	60	60	60	61	61	61	61	61	59	60	60	58	58	57	56	55	55	57	57	57	57	56	57	57	57	56	56	56	56	54	53	53	52	50	50	49	45	45	45
61	58	58	58	58	58	58	58	59	60	60	60	60	60	60	61	61	60	58	59	59	57	57	56	54	53	53	53	53	53	53	51	54	54	54	54	54	54	54	51	51	51	51	47	47	45	45	45	45
62	57	57	57	57	57	57	57	58	59	59	59	59	59	59	60	60	59	57	58	58	56	56	55	54	53	53	53	53	52	52	50	53	53	53	53	53	53	53	50	50	50	50	46	46	45	45	45	45
63	65	65	65	65	65	65	65	66	66	66	66	66	67	68	68	69	68	68	68	67	66	67	67	67	67	67	67	67	67	67	66	66	66	65	65	64	64	63	63	62	62	62	62	59	59	58	58	57
64	66	66	66	66	66	66	66	67	67	67	67	67	68	69	69	69	69	68	68	67	67	67	67	67	66	67	67	67	67	66	66	66	65	65	64	64	64	63	62	62	62	62	61	59	58	58	57	57
65	70	70	70	70	70	70	70	72	72	72	72	72	73	73	73	74	73	72	72	72	72	72	71	71	72	72	72	72	72	72	72	70	70	69	69	69	67	67	66	66	66	64	64	59	58	58	57	57
66	71	71	71	71	71	71	71	73	73	73	73	73	74	74	74	74	73	72	72	72	72	72	70	70	70	70	70	70	70	70	69	68	68	68	68	68	67	67	66	66	66	66	65	59	58	58	57	57
67								76	76	76	77	77	77	77	77	77	75	74	75	75	75	75	73	73	72	72	72	72	72	72	71	73	73	73	73	73	73	73	70	70	70	70	66	66	64	64	64	64
68								75	76	76	76	76	76	76	76	76	75	74	75	75	75	75	74	73	73	73	73	73	73	73	72	75	75	75	75	75	74	74	72	71	71	71	68	68	66	66	66	66
69								74	75	75	75	75	75	75	75	75	74	73	75	74	74	74	73	73	72	72	72	72	72	72	72	74	74	74	74	74	74	74	71	71	71	71	68	67	66	66	65	65
70								70	71	71	72	72	72	72	72	72	71	70	73	72	72	72	71	71	71	71	71	71	71	71	71	74	74	74	73	73	73	73	70	70	70	70	67	67	65	65	64	64
71								69	70	70	71	71	71	71	71	71	71	70	73	73	72	72	72	72	71	71	72	72	72	72	71	74	74	74	74	74	74	74	71	71	71	71	67	67	66	65	65	65
72								70	72	72	73	73	73	73	73	73	73	72	76	75	75	75	75	75	75	75	75	75	75	75	75	78	78	78	78	78	77	77	75	74	74	74	71	71	69	69	69	69
73								76	76	76	80	80	80	80	80	80	80	80	80	78	78	78	78	78	75	75	76	75	75	75	75	74	74	74	74	74	73	73	71	71	71	70	68	68	67	65	65	65
74	76	76	76	76	76	76	76	77	77	77	77	76	76	76	76	76	76	76	76	76	76	76	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	74	63	61	60	60	60
75	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	75	76	76	76	76	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	74	63	62	61	61	61
76	76	76	76	76	76	76	76	76	76	76	76	75	75	75	75	75	75	75	76	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	74	74	74	74	63	62	61	61	61
77	73	73	73	73	73	73	73	74	74	74	74	73	73	73	74	74	73	73	74	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	72	72	72	72	72	62	61	60	59	59
78	71	71	71	71	71	71	71	71	71	71	72	71	71	71	71	71	71	71	72	71	71	71	71	71	70	70	71	70	70	70	70	70	70	70	70	70	70	70	69	69	69	69	68	60	59	56	56	56
79	67	67	67	67	67	67	67	68	68	68	69	68	68	69	69	69	68	68	68	68	68	68	67	67	67	67	67	67	67	67	66	67	67	67	66	66	66	66	65	65	65	65	64	57	56	55	54	54
80	66	66	66	66	66	66	66	66	66	66	67	66	66	66	66	66	66	66	66	66	66	66	66	65	65	65	65	65	65	65	65	66	66	66	65	65	65	65	64	64	64	64	64	56	55	53	53	53
81	62	62	62	62	62	62	62	62	62	62	62	61	61	61	61	61	61	61	61	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	34	34	34	34	34
82	59	59	59	59	59	59	59	59	59	59	59	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	34	34	34	34	34
83	58	58	58	58	58	58	58	58	58	58	58	57	57	57	57	57	57	57	57	57	57	57	57	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	34	34	34	34	34
84	59	59	59	59	59	59	59	59	59	59	59	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	34	34	34	34	34
85	59	59	59	59	59	59	59	59	59	59	59	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	34	34	34	34	34
86	57	57	57	57	57	57	57	57	57	57	57	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	34	34	34	34	34
87	61	61	61	61	61	61	61	61	61	61	62	61	61	61	61	61	60	61	61	62	61	61	61	61	60	60	61	61	61	61	61	62	62	62	61	61	61	61	60	59	59	59	58	54	53	51	51	51
88	63	63	63	63	63	63	63	63	64	64	65	65	64	64	64	64	64	64	65	64	64	64	64	63	62	62	63	63	63	63	63	63	63	63	63	63	63	63	62	61	61	61	60	55	55	52	52	52
89	65	65	65	65	65	65	65	65	65	65	67	66	66	66	66	66	66	66	67	66	66	66	66	66	65	65	66	65	65	65	65	65	65	65	65	65	65	65	64	63	63	63	62	57	56	54	54	54
90	64	64	65	65	65	65	65	65	65	65	65	65	66	66	66	66	65	65	65	65	65	65	65	65	65	64	63	64	62	62	61	60	60	62	62	62	61	60	59	59	60	59	55	55	55	55	52	52
91	63	63	63	63	63	63	63	63	63	62	64	64	65	65	65	65	63	63	63	63	64	63	63	63	62	61	60	61	58	58	57	57	57	59	59	59	57	56	56	56	57	57	51	51	51	51	51	51
92	65	65	65	65	65	65	65	65	65	65	66	66	66	66	66	66	65	65	65	65	65	65	65	65	65	64	63	64	62	62	61	61	61	62	62	62	61	61	59	59	60	59	56	56	56	56	51	51
93	62	62	63	63	63	63	63	62	62	62	62	62	62	63	62	62	62	62	61	61	60	62	62	62	63	62	62	62	61	61	60	59	59	59	59	59	60	60	57	57	57	56	56	56	56	56	34	34
94	61	61	62	63	63	63	63	62	62	62	62	62	62	62	62	62	61	61	60	60	59	61	61	61	62	62	61	61	60	60	59	59	59	58	59	59	59	59	56	56	56	55	55	55	55	55	34	34
95	68	68	69	69	69	69	69	68	68	68	68	68	68	69	68	68	68	68	66	66	65	68	68	68	69	69	69	69	68	68	67	67	67	66	67	67	67	67	65	65	65	62	62	62	62	62	34	34
96	54	54	55	56	56	56	56	54	54	54	54	54	54	55	53	53	53	53	52	52	50	53	53	53	55	55	55	55	54	54	53	53	53	52	52	52	53	53	50	50	50	34	34	34	34	34	34	34
97	53	53	53	54	54	54	54	48	46	46	46	46	46	52	35	35	35	35	35	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34

NSR ID	2011 Jun-Dec	2012	2013	2014	2015 Jan-May	Limit	
52					71	75	
53					72	75	
54					71	75	
55	64	67	66	66	61	75	
56	60	60	59	59	59	75	
57	63	66	64	63	57	75	
58	54	54	49	49	48	75	
59	61	65	63	61	54	70	
60	58	61	60	57	50	75	
61	58	61	59	54	47	75	
62	57	60	58	53	46	75	
63	65	69	67	66	59	75	
64	66	69	67	66	59	75	
65	70	74	72	70	59	75	
66	71	74	72	68	59	75	
67		77	75	73	66	75	
68		76	75	75	68	75	
69		75	74	74	67	75	
70		73	72	74	67	75	
71		73	73	74	67	75	
72		76	75	78	71	75	
73		80	78	74	68	75	
74	76	77	76	75	63	75	
75	76	76	76	75	63	75	
76	76	76	75	75	63	75	
77	73	74	73	73	62	75	
78	71	72	71	70	60	65	(70)*
79	67	69	68	67	57	65	(70)*
80	66	67	66	66	56	75	
81	62	62	60	60	34	75	
82	59	59	58	58	34	75	
83	58	58	57	56	34	75	
84	59	59	58	58	34	75	
85	59	59	58	58	34	75	
86	57	57	56	56	34	75	
87	61	62	62	62	54	75	
88	63	65	64	63	55	75	
89	65	67	66	65	57	75	
90	65	66	65	62	55	65	(70)*
91	63	65	64	59	51	75	
92	65	66	65	62	56	75	
93	63	63	63	60	56	75	
94	63	62	62	59	55	75	
95	69	69	69	67	62	65	(70)*
96	56	55	55	53	34	75	
97	54	52	34	34	34	75	

Remarks *: Construction noise standard for schools is 70 dB(A) at normal school days and is reduced to 65 dB(A) during examination period. The more conservative 65 dB(A) standard is applied in this construction noise impact assessment.

Summary

Monthly Construction Noise Level at Each NSR dB(A)

NSR ID	2011 Jun	Jul	Aug	Sep	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	58	58	58	57	57	56	56	56	56	58	58	58	58	58	58	58	59	57	57
2	58	58	58	56	56	56	56	57	56	58	58	57	57	57	57	57	58	57	57
3	58	58	58	57	57	56	56	58	57	58	59	58	58	58	58	58	59	58	58
4	58	58	58	56	56	56	56	57	57	58	58	58	58	57	57	57	58	58	58
5	59	59	59	58	58	58	58	59	58	59	60	60	60	60	60	59	60	60	59
6	60	60	60	59	59	58	58	60	59	60	60	60	60	59	59	59	60	59	59
7	59	59	59	58	58	57	57	59	58	59	59	59	59	58	58	58	59	58	58
8	62	62	62	60	60	60	60	61	60	61	61	61	61	60	60	60	61	59	59
9	60	60	60	59	59	59	59	60	59	61	61	61	61	61	61	60	61	60	60
10	64	64	64	63	63	63	63	64	64	65	65	65	65	65	65	65	65	64	64
11	66	66	66	64	64	64	64	65	64	66	66	66	66	66	66	66	66	65	65
12	67	67	67	66	66	65	65	66	65	67	67	67	67	67	67	67	67	66	65
13	62	62	62	60	60	59	59	61	60	61	61	60	60	60	60	59	60	58	58
14	62	62	62	61	61	61	61	62	61	62	62	62	62	62	62	62	62	61	61
15	61	61	61	60	60	60	60	61	61	61	61	61	61	61	61	61	61	61	60
16	60	60	60	58	58	58	58	59	59	59	59	58	58	58	58	57	58	57	57
17	59	59	59	58	58	57	57	59	58	59	59	58	58	58	58	57	58	57	57
18	58	58	58	56	56	58	57	60	59	58	59	58	58	57	57	56	56	56	56
19	66	66	66	65	65	68	68	71	71	69	69	67	67	66	66	64	64	65	65
20	61	61	61	59	59	60	60	63	63	61	61	60	60	59	59	58	58	59	59
21	59	59	59	57	57	59	58	61	60	59	60	59	59	59	59	58	58	59	58
22	58	58	58	56	56	57	57	59	59	58	59	58	58	58	58	57	58	58	57
23	61	61	61	60	60	62	62	63	63	62	62	62	63	63	63	62	62	62	61
24	61	61	61	59	59	61	61	63	62	62	62	61	61	61	61	60	61	61	60
25	61	61	61	60	60	61	61	63	63	62	62	62	62	62	62	61	61	61	60
26	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
27	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
28	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
29	54	54	54	54	54	54	54	54	58	58	58	58	58	58	58	62	61	61	61
30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
32	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
33	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
34	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
35	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	56	56	56	56
36	61	61	61	61	61	62	62	62	63	63	62	63	63	65	65	67	67	67	66
37	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
38	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
39	70	70	70	70	70	71	71	71	71	71	71	72	72	74	74	79	79	78	78
40	68	68	68	68	68	69	69	69	70	70	70	70	71	72	72	75	74	74	73
41	64	64	64	64	64	65	65	65	66	66	65	66	66	69	69	72	71	71	71
42	63	63	63	63	63	63	63	64	64	64	64	64	65	69	69	76	76	76	76
43	61	61	61	61	61	61	61	62	62	62	63	63	63	66	66	68	67	67	67
44																			
45																			
46																			
47																			
48																			
49																			
50																			
51																			

NSR ID	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May
1	57	56	54	54	54	54	54	56	54	54	54	54	54	54	52	52	52	48	48	48	48	48	31	31	31	31	31	31	31
2	57	57	55	55	55	55	55	57	58	58	58	58	58	58	57	57	57	53	53	53	53	53	52	48	48	46	46	46	46
3	58	58	57	57	56	56	56	57	58	58	58	58	58	58	57	57	57	53	53	53	53	53	52	48	48	46	46	46	46
4	58	58	56	56	56	56	56	58	59	59	59	59	59	59	57	57	57	54	54	54	54	54	52	49	49	47	47	47	47
5	59	59	58	58	57	57	57	58	59	59	59	59	59	59	58	58	58	54	54	54	54	54	53	49	49	47	47	47	47
6	59	59	57	57	57	57	57	58	58	58	58	58	58	58	58	58	58	54	54	54	54	54	53	49	49	48	48	48	48
7	58	58	56	56	56	56	56	57	58	58	58	58	58	58	57	57	57	54	54	54	54	54	53	49	49	47	47	47	47
8	59	59	57	57	57	57	57	58	59	59	59	59	59	59	58	58	58	55	55	55	55	55	54	50	50	48	48	48	48
9	60	60	58	58	58	58	58	59	59	59	59	59	59	59	58	58	58	55	55	55	55	55	54	50	50	48	48	48	48
10	64	63	62	62	62	62	62	63	63	63	63	63	63	62	62	61	61	59	59	58	58	58	57	54	54	52	52	51	51
11	64	64	63	63	63	62	62	63	63	63	63	63	63	63	62	62	62	59	59	59	59	59	58	55	54	53	53	52	52
12	65	65	63	64	63	63	63	64	64	64	64	64	64	63	63	63	63	60	60	60	60	60	59	55	55	53	53	53	53
13	58	58	56	56	56	56	56	57	58	58	58	58	58	58	57	57	57	54	54	54	54	54	53	49	49	47	47	47	47
14	61	60	59	60	59	59	59	60	60	60	60	60	60	60	59	59	59	57	56	56	56	56	55	52	52	50	50	49	49
15	60	60	59	59	58	58	58	59	60	59	59	59	59	59	58	58	58	56	56	55	55	55	54	51	51	49	49	48	48
16	57	57	55	55	55	55	55	56	57	57	57	57	57	57	56	56	56	53	53	53	53	53	52	48	48	46	46	46	46
17	57	57	55	55	55	55	55	56	57	57	57	57	57	57	57	57	57	53	53	53	53	53	52	49	49	47	47	47	47
18	56	56	54	54	54	53	53	53	55	55	55	55	55	55	55	55	55	52	52	52	52	52	52	48	48	46	46	46	46
19	65	64	64	64	64	63	63	64	66	66	66	66	66	66	66	65	65	63	63	62	62	62	62	58	58	57	56	56	56
20	59	59	57	57	57	57	57	58	60	60	60	60	60	60	59	59	59	56	56	56	56	56	56	52	52	50	50	50	50
21	58	58	57	57	56	56	56	57	59	59	59	59	59	59	58	58	58	55	55	55	55	55	54	50	50	48	48	48	48
22	57	57	56	56	55	55	55	56	58	57	57	57	57	57	57	57	57	53	53	53	53	53	52	49	49	47	47	47	47
23	61	60	60	60	58	58	58	59	60	60	60	60	60	60	59	59	59	56	56	56	56	56	55	51	51	49	49	49	49
24	60	60	59	59	59	58	58	60	61	61	61	61	61	61	60	60	60	57	57	57	57	57	56	52	52	50	50	50	50
25	60	60	59	59	58	58	58	59	60	60	60	60	60	60	59	59	59	56	56	56	56	56	55	51	51	49	49	49	49
26	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
27	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
28	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
29	61	61	61	63	63	63	63	62	62	61	61	61	59	59	59	59	59	59	54	54	54	54	54	54	54	54	54	54	31
30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
32	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
33	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
34	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
35	58	58	60	60	60	60	60	60	60	57	57	57	55	55	55	53	53	53	53	53	53	53	50	50	50	50	50	50	31
36	68	68	68	68	68	68	67	67	67	66	65	65	65	65	65	62	62	62	61	61	61	59	59	58	31	31	31	31	31
37	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
38	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
39	79	79	79	79	79	79	79	79	79	78	78	78	78	78	78	75	75	74	74	74	74	74	74	74	31	31	31	31	31
40	75	75	75	75	75	75	74	74	75	73	72	72	72	72	72	69	69	69	68	68	68	67	67	67	46	46	46	46	46
41	72	73	73	73	73	73	73	73	73	71	71	71	70	70	70	67	67	67	66	66	66	65	65	64	45	45	45	45	45
42	77	77	79	79	79	79	79	79	79	77	77	77	75	75	75	73	73	73	72	72	72	69	69	68	45	45	45	45	45
43	68	68	69	69	69	69	68	68	68	67	67	66	65	65	64	63	63	63	62	61	60	57	57	54	46	46	46	46	46
44																					69	62	62	59	46	46	46	46	46
45																					64	60	59	56	46	46	46	46	46
46																					62	60	60	54	46	46	46	46	46
47																					31	31	31	31	31	31	31	31	31
48																					62	60	60	55	45	45	45	45	45
49																					31	31	31	31	31	31	31	31	31
50																					63	62	62	57	46	46	46	46	46
51																					65	63	63	58	45	45	45	45	45

Max. Construction Noise Level at each NSR dB(A)

NSR ID	2011 Jun-Dec	2012	2013	2014	2015 Jan-May	Limit	
1	58	59	57	54	31	75	
2	58	58	58	58	48	75	
3	58	59	58	58	48	75	
4	58	58	59	59	49	75	
5	59	60	59	59	49	75	
6	60	60	59	58	49	75	
7	59	59	58	58	49	75	
8	62	61	59	59	50	75	
9	60	61	60	59	50	75	
10	64	65	64	63	54	75	
11	66	66	64	63	54	75	
12	67	67	65	64	55	75	
13	62	61	58	58	49	70	
14	62	62	61	60	52	75	
15	61	61	60	59	51	75	
16	60	59	57	57	48	75	
17	59	59	57	57	49	75	
18	58	60	56	55	48	70	
19	68	71	66	66	58	75	
20	61	63	60	60	52	75	
21	59	61	59	59	50	75	
22	58	59	58	57	49	75	
23	62	63	61	60	51	75	
24	61	63	61	61	52	75	
25	61	63	60	60	51	75	
26	31	31	31	31	31	75	
27	31	31	31	31	31	75	
28	31	31	31	31	31	75	
29	54	62	63	61	54	75	
30	31	31	31	31	31	75	
31	31	31	31	31	31	75	
32	31	31	31	31	31	75	
33	31	31	31	31	31	75	
34	31	31	31	31	31	75	
35	31	56	60	60	53	75	
36	62	67	68	67	61	65	(70)*
37	31	31	31	31	31	75	
38	31	31	31	31	31	75	
39	71	79	79	79	74	65	(70)*
40	69	75	75	75	68	75	
41	65	72	73	73	66	75	
42	63	76	79	79	72	75	
43	61	68	69	68	60	75	
44					69	75	
45					64	75	
46					62	75	
47					31	75	
48					62	75	
49					31	75	
50					63	75	
51					65	75	

Noise Level in Mitigated Senario (the Project Only)

NSR ID	2011							2012											
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
52																			
53																			
54																			
55	60	60	60	60	60	60	60	61	62	62	62	62	63	64	64	65	65	64	64
56	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
57	61	61	61	61	61	61	61	62	62	62	63	63	63	64	64	65	64	64	64
58	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
59	61	61	61	61	61	61	61	61	62	62	63	63	63	64	64	64	64	63	63
60	58	58	58	58	58	58	58	59	60	60	60	60	61	61	61	61	61	59	60
61	58	58	58	58	58	58	58	59	60	60	60	60	60	60	61	61	60	58	59
62	57	57	57	57	57	57	57	58	59	59	59	59	59	59	60	60	59	57	58
63	63	63	63	63	63	63	63	64	65	65	65	65	66	67	67	68	68	66	67
64	64	64	64	64	64	64	64	65	66	66	66	66	67	68	68	69	68	67	67
65	69	69	69	69	69	69	69	72	72	72	72	72	73	73	73	74	73	72	72
66	70	70	70	70	70	70	70	72	72	72	73	73	73	73	74	74	72	71	71
67								76	76	76	76	76	76	76	77	77	75	74	75
68								75	76	76	76	76	76	76	76	76	74	74	75
69								74	75	75	75	75	75	75	75	75	74	73	75
70								70	71	71	71	71	72	72	72	72	71	70	73
71								69	70	70	71	71	71	71	71	71	71	70	73
72								70	72	72	73	73	73	73	73	73	73	72	76
73	76	76	76	76	76	76	76	76	76	76	80	80	80	80	80	80	80	80	80
74	68	68	68	68	68	68	68	71	71	71	71	71	72	72	72	72	71	70	71
75	67	67	67	67	67	67	67	70	70	70	71	71	71	71	71	71	70	69	71
76	66	66	66	66	66	66	66	67	68	68	69	69	69	69	69	69	69	68	70
77	66	66	66	66	66	66	66	66	67	67	69	69	69	69	69	69	68	68	69
78	65	65	65	65	65	65	65	66	66	66	68	68	68	68	68	68	68	68	69
79	63	63	63	63	63	63	63	65	65	65	66	66	66	66	67	67	66	66	66
80	60	60	60	60	60	60	60	60	61	61	62	62	62	62	62	62	62	62	63
81	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
82	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
83	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
84	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
85	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
86	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
87	57	57	57	57	57	57	57	58	58	57	59	59	59	59	59	58	57	58	59
88	60	60	60	60	60	60	60	61	62	62	63	63	63	63	63	63	63	63	63
89	61	61	61	61	61	61	61	62	63	63	65	65	64	64	64	64	64	64	65
90	64	64	65	65	65	65	65	65	65	65	65	65	66	66	66	66	65	65	65
91	63	63	63	63	63	63	63	63	63	62	64	64	65	65	65	65	63	63	63
92	65	65	65	65	65	65	65	65	65	65	66	66	66	66	66	66	65	65	65
93	62	62	63	63	63	63	63	62	62	62	62	62	62	63	62	62	62	62	61
94	61	61	62	63	63	63	63	62	62	62	62	62	62	62	62	62	61	61	60
95	68	68	69	69	69	69	69	68	68	68	68	68	68	69	68	68	68	68	66
96	54	54	55	56	56	56	56	54	54	54	54	54	54	55	53	53	53	53	52
97	53	53	53	54	54	54	54	48	46	46	46	46	46	52	31	31	31	31	31

NSR ID	2013												2014											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
52																								
53																								
54																								
55	64	63	64	64	64	64	65	65	65	65	64	64	64	63	63	62	62	61	60	59	59	59	58	57
56	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
57	63	63	63	63	63	63	63	63	63	63	62	62	62	62	61	61	60	59	59	58	57	57	57	55
58	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
59	63	63	63	63	62	62	62	63	63	62	62	61	61	61	61	60	60	59	59	57	57	57	56	55
60	60	58	58	57	56	55	55	57	57	57	57	56	57	57	57	56	56	56	56	54	53	53	52	50
61	59	57	57	56	54	53	53	53	53	53	53	51	54	54	54	54	54	54	54	51	51	51	51	47
62	58	56	56	55	54	52	52	52	52	52	52	50	53	53	53	53	53	53	53	50	50	50	50	46
63	66	66	67	66	66	66	66	67	67	66	66	65	65	65	64	63	63	62	62	61	60	60	59	59
64	67	66	67	66	66	66	66	66	66	66	65	65	65	64	64	63	63	62	62	60	60	60	59	58
65	72	71	72	71	71	72	72	72	72	72	71	71	69	69	69	68	68	66	66	64	64	64	61	60
66	71	71	71	69	69	69	69	69	69	69	68	68	67	66	66	66	66	64	64	62	62	62	61	59
67	75	75	75	73	73	72	72	72	72	72	72	71	73	73	73	73	73	73	73	70	70	70	70	66
68	75	75	75	74	73	73	73	73	73	73	73	72	75	75	75	75	75	74	74	72	71	71	71	68
69	74	74	74	73	73	72	72	72	72	72	72	72	74	74	74	74	74	74	74	71	71	71	71	68
70	72	72	72	72	71	71	71	71	71	71	71	71	74	74	74	73	73	73	73	70	70	70	70	67
71	73	72	72	72	72	71	71	72	72	72	72	71	74	74	74	74	74	74	74	71	71	71	71	67
72	75	75	75	75	75	75	75	75	75	75	75	75	78	78	78	78	78	77	77	75	74	74	74	71
73	78	78	78	78	78	75	75	76	75	75	75	75	74	74	74	74	74	73	73	71	71	71	70	68
74	70	70	70	69	69	68	68	69	69	69	68	68	70	70	70	69	69	69	69	66	66	66	66	63
75	70	70	70	69	69	68	69	69	69	69	69	68	70	70	70	70	70	70	70	67	67	67	67	63
76	70	69	69	69	69	68	68	69	69	68	68	68	70	70	70	70	70	69	69	67	66	66	66	63
77	67	69	69	69	68	68	68	68	68	68	68	67	69	69	69	68	68	68	68	66	65	65	65	62
78	66	67	67	67	65	65	65	65	64	62	62	62	60	60	59	56	56	56	56	54	54	54	54	51
79	64	64	64	64	64	64	63	63	61	60	60	60	58	57	56	55	54	54	54	51	51	51	51	47
80	62	61	61	62	62	62	61	61	62	62	62	62	62	62	62	62	59	59	59	59	56	56	54	53
81	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
82	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
83	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
84	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
85	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
86	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
87	59	59	59	59	59	60	60	60	59	59	59	59	57	56	56	56	54	54	53	51	51	51	51	51
88	63	62	62	62	60	60	61	61	61	61	61	62	62	62	61	61	61	61	59	58	58	58	55	55
89	64	63	63	64	64	63	63	64	64	64	63	63	62	62	60	59	59	59	57	57	56	54	54	54
90	65	65	65	65	65	65	65	64	63	64	62	62	61	60	60	62	62	62	61	60	59	59	60	59
91	63	63	64	63	63	63	62	61	60	61	58	58	57	57	57	59	59	59	57	56	56	56	57	57
92	65	65	65	65	65	65	65	64	63	64	62	62	61	61	61	62	62	62	61	61	59	59	60	59
93	62	62	60	62	62	62	63	62	62	62	61	61	60	59	59	59	59	59	60	60	57	57	57	55
94	61	61	60	61	61	61	62	62	61	61	60	60	59	59	59	58	59	59	59	59	56	56	56	55
95	66	66	65	68	68	68	69	69	69	69	68	68	67	67	67	66	67	67	67	67	65	65	65	62
96	52	52	50	53	53	53	55	55	55	55	54	54	53	53	53	52	52	52	53	53	50	50	50	31
97	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

NSR ID	2015					
	Jan	Feb	Mar	Apr	May	
52	71	69	69	63	45	
53	72	70	70	61	46	
54	71	70	70	56	46	
55	56	54	53	51	46	
56	31	31	31	31	31	
57	54	53	52	50	48	
58	31	31	31	31	31	
59	54	53	51	50	49	
60	50	49	45	45	45	
61	47	45	45	45	45	
62	46	45	45	45	45	
63	56	54	53	51	49	
64	56	54	53	52	50	
65	57	55	54	52	51	
66	58	56	55	54	54	
67	66	64	64	64	64	
68	68	66	66	66	66	
69	67	66	66	65	65	
70	67	65	65	64	64	
71	67	66	65	65	65	
72	71	69	69	69	69	
73	68	67	65	65	65	
74	63	61	60	60	60	
75	63	62	61	61	61	
76	63	62	61	61	61	
77	62	61	60	59	59	
78	60	59	56	56	56	
79	57	56	55	54	54	
80	56	54	53	53	53	
81	31	31	31	31	31	
82	31	31	31	31	31	
83	31	31	31	31	31	
84	31	31	31	31	31	
85	31	31	31	31	31	
86	31	31	31	31	31	
87	53	51	51	51	51	
88	55	55	52	52	52	
89	56	54	54	54	54	
90	55	55	55	55	52	52
91	51	51	51	51	51	51
92	56	56	56	56	51	51
93	55	55	55	55	31	31
94	55	55	55	55	31	31
95	62	62	62	62	31	31
96	31	31	31	31	31	31
97	31	31	31	31	31	31

NSR ID	2011 Jun-Dec	2012	2013	2014	2015 Jan-May	Limit	
52					71	75	
53					72	75	
54					71	75	
55	60	65	65	64	56	75	
56	31	31	31	31	31	75	
57	61	65	63	62	54	75	
58	31	31	31	31	31	75	
59	61	64	63	61	54	70	
60	58	61	60	57	50	75	
61	58	61	59	54	47	75	
62	57	60	58	53	46	75	
63	63	68	67	65	56	75	
64	64	69	67	65	56	75	
65	69	74	72	69	57	75	
66	70	74	71	67	58	75	
67		77	75	73	66	75	
68		76	75	75	68	75	
69		75	74	74	67	75	
70		73	72	74	67	75	
71		73	73	74	67	75	
72		76	75	78	71	75	
73	76	80	78	74	68	75	
74	68	72	71	70	63	75	
75	67	71	70	70	63	75	
76	66	70	69	70	63	75	
77	66	69	69	69	62	75	
78	65	69	68	67	60	65	(70)*
79	63	67	66	64	57	65	(70)*
80	60	63	63	62	56	75	
81	31	31	31	31	31	75	
82	31	31	31	31	31	75	
83	31	31	31	31	31	75	
84	31	31	31	31	31	75	
85	31	31	31	31	31	75	
86	31	31	31	31	31	75	
87	57	59	60	60	54	75	
88	60	63	63	62	55	75	
89	61	65	65	64	57	75	
90	65	66	65	62	55	65	(70)*
91	63	65	64	59	51	75	
92	65	66	65	62	56	75	
93	63	63	63	60	55	75	
94	63	62	62	59	55	75	
95	69	69	69	67	62	65	(70)*
96	56	55	55	53	31	75	
97	54	52	31	31	31	75	

Remarks *: Construction noise standard for schools is 70 dB(A) at normal school days and is reduced to 65 dB(A) during examination period. The more conservative 65 dB(A) standard is applied in this construction noise impact assessment.

Sample Calculation (Mitigated, N39)

Noise Level in Mitigated Senario

Row 39

NSR 39

Works Area (Area ID)		SWL	Distance	2011 Jun	Jul	Aug	Sep	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May
Viaduct S1 (22)																																																				
Group 1	Transportation and Utilities diversion	107																																																		
Group 2	Piling	108																																																		
Group 3	Substructure Construction	108																																																		
Group 4	Superstructure Construction	104																																																		
Group 5	Finishing Works	104																																																		
Viaduct S2 (27)			299																																																		
Group 1	Transportation and Utilities diversion	107	299																	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49																	
Group 2	Piling	108	299																											51	51	51	51	51	51	51																	
Group 3	Substructure Construction	108	299																																		51	51	51														
Group 4	Superstructure Construction	104	299																																					47	47												
Group 5	Finishing Works	104	299																																							46	46	46									
Viaduct S3 (28)			94																																																		
Group 1	Transportation and Utilities diversion	107	94	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60																																		
Group 2	Piling	108	94									61	61	61	61	61	61	61	61																																		
Group 3	Substructure Construction	108	94																	61	61	61	61																														
Group 4	Superstructure Construction	104	94																					57	57	57																											
Group 5	Finishing Works	104	94																								56	56	56																								
Viaduct S4 (29)			67																																																		
Group 1	Transportation and Utilities diversion	107	67																62	62	62	62	62	62	62	62	62	62	62	62																							
Group 2	Piling	108	67																							64	64	64	64	64																							
Group 3	Substructure Construction	108	67																													64	64																				
Group 4	Superstructure Construction	104	67																															60	60																		
Group 5	Finishing Works	104	67																																	59	59	59	59	59	59	59											
Viaduct S5 (30)			18																																																		
Group 1	Transportation and Utilities diversion	107	18																74	74	74	74	74	74	74	74																											
Group 2	Piling	108	18																								75	75	75	75	75	75	75	75	75																		
Group 3	Substructure Construction	108	18																																		75	75	75	75	75	75											
Group 4	Superstructure Construction	104	18																																								71	71								
Group 5	Finishing Works	104	18																																										71	71	71	71	71	71	71	
Viaduct S6 (31)			175																																																		
Group 1	Transportation and Utilities diversion	107	175																54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54																		
Group 2	Piling	108	175																											55	55	55	55	55	55	55																	
Group 3	Substructure Construction	108	175																																		55	55	55														
Group 4	Superstructure Construction	104	175																																					51	51												
Group 5	Finishing Works	104	175																																							51	51	51	51	51	51	51				
Viaduct S7 (32)																																																				
Group 1	Transportation and Utilities diversion	107															49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49																					
Group 2	Piling	108																							50	50	50	50	50	50	50	50																					
Group 3	Substructure Construction	108																															50	50	50	50	50															
Group 4	Superstructure Construction	104																																					46	46													
Group 5	Finishing Works	104																																							46	46	46	46	46	46	46					
Viaduct S8 (33)																																																				
Group 1	Transportation and Utilities diversion	107																																																		
Group 2	Piling	108																																																		
Group 3	Substructure Construction	108																																																		
Group 4	Superstructure Construction	104																																																		
Group 5	Finishing Works	104																																																		
Viaduct S9 (34)																																																				
Group 1	Transportation and Utilities diversion	107																																																		
Group 2	Piling	108																																																		
Group 3	Substructure Construction	108																																																		
Group 4	Superstructure Construction	104																																																		
Group 5	Finishing Works	104																																																		
Viaduct S10 & Slip Road C (23)																																																				
Group 1	Transportation and Utilities diversion	107																																																		
Group 2	Piling	108																																																		
Group 3	Substructure Construction	108																																																		
Group 4	Superstructure Construction	104																																																		
Group 5	Finishing Works	104																																																		
Viaduct S11 (24)																																																				
Group 1	Transportation and Utilities diversion	107																																																		
Group 2	Piling	108																																																		
Group 3	Substructure Construction	108																																																		
Group 4	Superstructure Construction	104																																																		
Group 5	Finishing Works	104																																																		
Viaduct S12 (25)																																																				
Group 1	Transportation and Utilities diversion	107																																																		
Group 2	Piling	108																																																		
Group 3	Substructure Construction	108																																																		
Group 4	Superstructure Construction	104																																																		
Group 5	Finishing Works	104																																																		
Viaduct S13 (26)																																																				
Group 1	Transportation and Utilities diversion	107																																																		
Group 2	Piling	108																																																		
Group 3	Substructure Construction	108																																																		
Group 4	Superstructure Construction	104																																																		
Group 5	Finishing Works	104																																																		
Abutment Connects Viaduct S1 (2)																																																				
Group 1	Transportation and Utilities diversion	107																																																		
Group 2	Piling	108																																																		
Group 3	Substructure Construction	108																																																		
Group 4	Superstructure Construction	104																																																		

Plant Inventory (South)

Row 39

NSR 39

Works Area (Area ID)		SWL	Distance	2011 Jun	Jul	Aug	Sep	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Group 5	Finishing Works	104																				
Viaduct - Structure A & Associate (7)			93																			
Group 1	Transportation and Utilities diversion	107	93	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60			
Group 2	Piling	108	93													61	61	61	61			
Group 3	Substructure Construction	108	93																	61	61	61
Group 4	Superstructure Construction	104	93																			
Group 5	Finishing Works	104	93																			
Viaduct - Structure C & Associate (9)																						
Group 1	Transportation and Utilities diversion	107																				
Group 2	Piling	108																				
Group 3	Substructure Construction	108																				
Group 4	Superstructure Construction	104																				
Group 5	Finishing Works	104																				
Viaduct - Structure H & Associate (10)																						
Group 1	Transportation and Utilities diversion	107																				
Group 2	Piling	108																				
Group 3	Substructure Construction	108																				
Group 4	Superstructure Construction	104																				
Group 5	Finishing Works	104																				
Viaduct N1 (12)																						
Group 1	Transportation and Utilities diversion	106																				
Group 2	Piling	108																				
Group 3	Substructure Construction	107																				
Group 4	Superstructure Construction	103																				
Group 5	Finishing Works	102																				
Viaduct N2 (14)			277																			
Group 1	Transportation and Utilities diversion	106	277	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
Group 2	Piling	108	277											51	51	51	51	51	51	51	51	
Group 3	Substructure Construction	107	277																			50
Group 4	Superstructure Construction	103	277																			
Group 5	Finishing Works	102	277																			
Viaduct N3 (15)			108																			
Group 1	Transportation and Utilities diversion	106	108	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	
Group 2	Piling	108	108												59	59	59	59	59	59	59	
Group 3	Substructure Construction	107	108																			59
Group 4	Superstructure Construction	103	108																			
Group 5	Finishing Works	102	108																			
Viaduct N4 (16)			62																			
Group 1	Transportation and Utilities diversion	106	62	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63		
Group 2	Piling	108	62													64	64	64	64			
Group 3	Substructure Construction	107	62																	63	63	63
Group 4	Superstructure Construction	103	62																			
Group 5	Finishing Works	102	62																			
Viaduct N5 (17)			77																			
Group 1	Transportation and Utilities diversion	106	77													61	61	61	61	61	61	61
Group 2	Piling	108	77																			
Group 3	Substructure Construction	107	77																			
Group 4	Superstructure Construction	103	77																			
Group 5	Finishing Works	102	77																			
Viaduct N6 (18)			196																			
Group 1	Transportation and Utilities diversion	106	196													53	53	53	53	53	53	53
Group 2	Piling	108	196																			
Group 3	Substructure Construction	107	196																			
Group 4	Superstructure Construction	103	196																			
Group 5	Finishing Works	102	196																			
Viaduct N7 (19)																						
Group 1	Transportation and Utilities diversion	106																				
Group 2	Piling	108																				
Group 3	Substructure Construction	107																				
Group 4	Superstructure Construction	103																				
Group 5	Finishing Works	102																				
Viaduct N8 (20)																						
Group 1	Transportation and Utilities diversion	106																				
Group 2	Piling	108																				
Group 3	Substructure Construction	107																				
Group 4	Superstructure Construction	103																				
Group 5	Finishing Works	102																				
Viaduct N9 (21)																						
Group 1	Transportation and Utilities diversion	106																				
Group 2	Piling	108																				
Group 3	Substructure Construction	107																				
Group 4	Superstructure Construction	103																				
Group 5	Finishing Works	102																				
Viaduct N10 (13)																						
Group 1	Transportation and Utilities diversion	106																				
Group 2	Piling	108																				
Group 3	Substructure Construction	107																				
Group 4	Superstructure Construction	103																				
Group 5	Finishing Works	102																				
Abutment connects Viaduct N1 (1)																						
Group 1	Transportation and Utilities diversion	106																				
Group 2	Piling	108																				
Group 3	Substructure Construction	107																				
Group 4	Superstructure Construction	103																				

Works Area (Area ID)		2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May
Group 5	Finishing Works																													
Viaduct - Structure A & Associate (7)																														
Group 1	Transportation and Utilities diversion																													
Group 2	Piling																													
Group 3	Substructure Construction																													
Group 4	Superstructure Construction	57																												
Group 5	Finishing Works		57	57	57																									
Viaduct - Structure C & Associate (9)																														
Group 1	Transportation and Utilities diversion																													
Group 2	Piling																													
Group 3	Substructure Construction																													
Group 4	Superstructure Construction																													
Group 5	Finishing Works																													
Viaduct - Structure H & Associate (10)																														
Group 1	Transportation and Utilities diversion																													
Group 2	Piling																													
Group 3	Substructure Construction																													
Group 4	Superstructure Construction																													
Group 5	Finishing Works																													
Viaduct N1 (12)																														
Group 1	Transportation and Utilities diversion																													
Group 2	Piling																													
Group 3	Substructure Construction																													
Group 4	Superstructure Construction																													
Group 5	Finishing Works																													
Viaduct N2 (14)																														
Group 1	Transportation and Utilities diversion																													
Group 2	Piling																													
Group 3	Substructure Construction	50	50	50	50																									
Group 4	Superstructure Construction					47																								
Group 5	Finishing Works						45	45	45	45																				
Viaduct N3 (15)																														
Group 1	Transportation and Utilities diversion																													
Group 2	Piling																													
Group 3	Substructure Construction	59	59	59	59																									
Group 4	Superstructure Construction					55	55																							
Group 5	Finishing Works							53	53	53	53																			
Viaduct N4 (16)																														
Group 1	Transportation and Utilities diversion																													
Group 2	Piling																													
Group 3	Substructure Construction																													
Group 4	Superstructure Construction			60	60																									
Group 5	Finishing Works				58	58	58	58	58	58	58																			
Viaduct N5 (17)																														
Group 1	Transportation and Utilities diversion	61	61	61	61	61	61	61	61	61	61	61	61																	
Group 2	Piling														62	62	62	62	62	62										
Group 3	Substructure Construction																				62	62	62							
Group 4	Superstructure Construction																							58	58	58				
Group 5	Finishing Works																										56	56		
Viaduct N6 (18)																														
Group 1	Transportation and Utilities diversion	53	53	53	53	53	53	53	53	53	53	53	53	53	53															
Group 2	Piling													54	54															
Group 3	Substructure Construction															53	53	53	53											
Group 4	Superstructure Construction																			50	50									
Group 5	Finishing Works																					48	48	48	48	48	48	48		
Viaduct N7 (19)																														
Group 1	Transportation and Utilities diversion																													
Group 2	Piling																													
Group 3	Substructure Construction																													
Group 4	Superstructure Construction																													
Group 5	Finishing Works																													
Viaduct N8 (20)																														
Group 1	Transportation and Utilities diversion																													
Group 2	Piling																													
Group 3	Substructure Construction																													
Group 4	Superstructure Construction																													
Group 5	Finishing Works																													
Viaduct N9 (21)																														
Group 1	Transportation and Utilities diversion																													
Group 2	Piling																													
Group 3	Substructure Construction																													
Group 4	Superstructure Construction																													
Group 5	Finishing Works																													
Viaduct N10 (13)																														
Group 1	Transportation and Utilities diversion																													
Group 2	Piling																													
Group 3	Substructure Construction																													
Group 4	Superstructure Construction																													
Group 5	Finishing Works																													
Abutment connects Viaduct N1 (1)																														
Group 1	Transportation and Utilities diversion																													
Group 2	Piling																													
Group 3	Substructure Construction																													
Group 4	Superstructure Construction																													

Planz Inventory (North)

Noise Level in Mitigated Senario

Row 39

NSR 39

	Works Area (Area ID)	SWL	Distance	2011 Jun	Jul	Aug	Sep	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May
	Group 5 Finishing Works	102																																																	
	Viaduct - Structure B & Associate (8)		111																																																
	Group 1 Transportation and Utilities diversion	106	111	58	58	58	58	58	58	58	58	58	58																																					
	Group 2 Piling	108	111						59	59	59	59	59																																					
	Group 3 Substructure Construction	107	111											58	58	58	58	58																																
	Group 4 Superstructure Construction	103	111																55	55																															
	Group 5 Finishing Works	102	111																		53	53	53																												
	Wall 1 (35)																																																		
	Group 1 Transportation and Utilities diversion	108																																																	
	Group 2 Shoring	103																																																	
	Group 3 Earthworks	103																																																	
	Group 4 Retaining Wall Construction	101																																																	
	Group 5 Finishing Works	107																																																	
	Group 6	106																																																	
	Group 7	96																																																	
	Group 8	93																																																	
	Wall 2 (36)																																																		
	Group 1 Transportation and Utilities diversion	108																																																	
	Group 2 Shoring	103																																																	
	Group 3 Earthworks	103																																																	
	Group 4 Retaining Wall Construction	101																																																	
	Group 5 Finishing Works	107																																																	
	Group 6	106																																																	
	Group 7	96																																																	
	Group 8	93																																																	
	Wall 3 (37)																																																		
	Group 1 Transportation and Utilities diversion	108																																																	
	Group 2 Shoring	103																																																	
Plant Inventory (At Grade)	Group 3 Earthworks	103																																																	
	Group 4 Retaining Wall Construction	101																																																	
	Group 5 Finishing Works	107																																																	
	Group 6	106																																																	
	Group 7	96																																																	
	Group 8	93																																																	
	Wall 4 (38)																																																		
	Group 1 Transportation and Utilities diversion	108																																																	
	Group 2 Shoring	103																																																	
	Group 3 Earthworks	103																																																	
	Group 4 Retaining Wall Construction	101																																																	
	Group 5 Finishing Works	107																																																	
	Group 6	106																																																	
	Group 7	96																																																	
	Group 8	93																																																	
	Wall 5 (39)																																																		
	Group 1 Transportation and Utilities diversion	108																																																	
	Group 2 Shoring	103																																																	
	Group 3 Earthworks	103																																																	
	Group 4 Retaining Wall Construction	101																																																	
	Group 5 Finishing Works	107																																																	
	Group 6	106																																																	
	Group 7	96																																																	
	Group 8	93																																																	
	Kwai Hei St Footbridge (5)																																																		
	Group 1 Transportation and Utilities diversion	108																																																	
	Group 2 Demolition of Existing Structures	105																																																	
	Group 3 Piling	110																																																	
	Group 4 Substructure Construction	108																																																	
	Group 5 Superstructure Construction	107																																																	
	Group 6 Finishing Works	108																																																	
	Group 7																																																		
	Group 8																																																		
	Underpass at Kwai Hei St (11)																																																		
	Group 1 Transportation and Utilities diversion	108																																																	
	Group 2 Demolition of Existing Structures	105																																																	
	Group 3 Piling	110																																																	
	Group 4 Substructure Construction	108																																																	
	Group 5 Superstructure Construction	107																																																	
	Group 6 Finishing Works	108																																																	
	Group 7																																																		
	Group 8																																																		
	Bridge 38/2 - Deck 1 (3)																																																		
	Group 1 Transportation and Utilities diversion	108																																																	
	Group 2 Demolition of Existing Structures	105																																																	
Plant Inventory (Modifications)	Group 3 Piling	110																																																	
	Group 4 Substructure Construction	108																																																	
	Group 5 Superstructure Construction	107																																																	
	Group 6 Finishing Works	108																																																	
	Group 7																																																		
	Group 8																																																		
	Bridge 38/2 - Deck 2 (4)																																																		
	Group 1 Transportation and Utilities diversion	108																																																	
	Group 2 Demolition of Existing Structures	105																																																	
	Group 3 Piling	110																																																	
	Group 4 Substructure Construction	108																																																	
	Group 5 Superstructure Construction	107																																																	
	Group 6 Finishing Works	108																																																	
	Group 7																																																		
	Group 8																																																		
	Drainage and Paving (6)																																																		

Row 39

NSR 39

	Works Area (Area ID)		SWL	Distance	2011 Jun	Jul	Aug	Sep	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Group 1		108																				
	Group 2		105																				
	Group 3		110																				
	Group 4		108																				
	Group 5		107																				
	Group 6	Drainage	108																				
	Group 7	Paving																					
	Group 8	Lane Marking																					
	TW5 City Side			255																			
	Group 1	Piling and Foundation	110	255	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
	Group 2	Substructure Construction	109	255																			
	Group 3	Superstructure Construction	108	255																			
	Group 4			255																			
	Group 5			255																			
	Group 6			255																			
	Group 7			255																			
	Group 8			255																			
	TW5 Bay Side			162																			
	Group 1	Piling and Foundation	110	162	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
	Group 2	Substructure Construction	109	162																			
	Group 3	Superstructure Construction	108	162																			
	Group 4			162																			
	Group 5			162																			
	Group 6			162																			
	Group 7			162																			
	Group 8			162																			
	TW6																						
	Group 1	Piling and Foundation	110																				
	Group 2	Substructure Construction	109																				
	Group 3	Superstructure Construction	108																				
	Group 4																						
	Group 5																						
	Group 6																						
	Group 7																						
	Group 8																						
	TW7																						
	Group 1	Piling and Foundation	110																				
	Group 2	Substructure Construction	109																				
	Group 3	Superstructure Construction	108																				
	Group 4																						
	Group 5																						
	Group 6																						
	Group 7																						
	Group 8																						
	Group 1		109																				
	Group 2		103																				
	Group 3																						
	Group 4																						
	Group 5																						
	Group 6																						
	Group 7																						
	Group 8																						

	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May
Group 1																													
Group 2																													
Group 3																													
Group 4																													
Group 5																													
Group 6																													
Group 7																													
Group 8																													
TW5 City Side																													
Group 1																													
Group 2	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53											
Group 3																			52	52	52	52	52	52	52	52	52	52	52
Group 4																													
Group 5																													
Group 6																													
Group 7																													
Group 8																													
TW5 Bay Side																													
Group 1																													
Group 2	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57											
Group 3																			56	56	56	56	56	56	56	56	56	56	56
Group 4																													
Group 5																													
Group 6																													
Group 7																													
Group 8																													
TW6																													
Group 1																													
Group 2																													
Group 3																													
Group 4																													
Group 5																													
Group 6																													
Group 7																													
Group 8																													
TW7																													
Group 1																													
Group 2																													
Group 3																													
Group 4																													
Group 5																													
Group 6																													
Group 7																													
Group 8																													
Group 1																													
Group 2																													
Group 3																													
Group 4																													
Group 5																													
Group 6																													
Group 7																													
Group 8																													

	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
CNL cummulative (Distance Corrected)	68	68	68	68	68	68	68	68	69	69	69	69	70	71	71	76	76	75	75	75	75	75	75	76	76	76	76	76	76	76	76	76	76	75	75	75	75	75	72	72	72	71	71	71	71	71	71	58
Façade Correction	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
CNL (Overall)	71	71	71	71	71	71	71	71	72	72	72	72	73	74	74	79	79	78	78	78	78	78	78	79	79	79	79	79	79	79	79	79	79	78	78	78	78	78	75	75	75	74	74	74	74	74	74	61
CNL(the Project) (Distance Corrected)	67	67	67	67	67	68	68	68	68	68	68	69	69	71	71	76	76	75	75	75	75	75	75	76	76	76	76	76	76	76	76	76	76	75	75	75	75	75	72	72	71	71	71	71	71	71	71	28
Façade Correction	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
CNL (the Project)	70	70	70	70	70	71	71	71	71	71	71	72	72	74	74	79	79	78	78	78	78	78	78	79	79	79	79	79	79	79	79	79	79	78	78	78	78	78	75	75	74	74	74	74	74	74	74	31

Notes: "CNL cummunative" -- Assuming all active works activities will be in parallel operation.

Blank cells refers to:

1. Construction activity not commenced yet; or
2 Distance from construction activity to NSR greater than 300m; or
3. Construction Noise Level due to the activity smaller than 35dB(A)