

Construction Noise		EarthWorks														
Scenario: E1																
Name	CNP no.	No Mitigation				Silenced Equipment				Barrier constructed + Silenced Equipment						
		QTY	SWL (dB(A))	Cumulative SWL		QTY	SWL (dB(A))	Cumulative SWL		QTY	SWL (dB(A))	Cumulative SWL				
1 Breaker	027	2	122			2	117			1	112					
Dump Truck	067	1	117	126		1	112	121		1	107	113				
Excavator	081	1	112	126		1	107	121		1	102	114				
Water Pump (Petrol)	282	1	103	126		1	103	121		1	93	114				
			Total SWL	125.9			Total SWL	120.9			Total SWL	113.5				
2 Distance Attenuation		m	Attenuation (dB)		m	Attenuation (dB)		m	Attenuation (dB)							
Distance from source to NSR		(see below for various distance)			(see below for various distance)			(see below for various distance)								
(see below for various distance)		Distance Attenuation, dB(A)		0	Distance Attenuation, dB(A)		0	Distance Attenuation, dB(A)		0						
			Attenuation (dB)			Attenuation (dB)			Attenuation (dB)							
4 Facade effect		Yes	3		Yes	3		Yes	3							
		Barrier Correction		3	Barrier Correction		3	Barrier Correction		3						
		Consturction Noise Level = 1+2+3 dB(A)				128.9	Consturction Noise Level = 1+2+3 dB(A)				123.9	Consturction Noise Level = 1+2+3 dB(A)				116.5
		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level				
		4	-20	109		4	-20	104		4	-20	97				
		5	-22	107		5	-22	102		5	-22	95				
		6	-24	105		6	-24	100		6	-24	93				
		7	-25	104		7	-25	99		7	-25	92				
		8	-26	103		8	-26	98		8	-26	91				
		9	-27	102		9	-27	97		9	-27	90				
		10	-28	101		10	-28	96		10	-28	89				
		11	-29	100		11	-29	95		11	-29	88				
		12	-30	99		12	-30	94		12	-30	87				
		13	-30	99		13	-30	94		13	-30	87				
		14	-31	98		14	-31	93		14	-31	86				
		15-16	-32	97		15-16	-32	92		15-16	-32	85				
		17-18	-33	96		17-18	-33	91		17-18	-33	84				
		19-20	-34	95		19-20	-34	90		19-20	-34	83				
		21-23	-35	94		21-23	-35	89		21-23	-35	82				
		24-26	-36	93		24-26	-36	88		24-26	-36	81				
		27-29	-37	92		27-29	-37	87		27-29	-37	80				
		30-32	-38	91		30-32	-38	86		30-32	-38	79				
		33-37	-39	90		33-37	-39	85		33-37	-39	78				
		38-41	-40	89		38-41	-40	84		38-41	-40	77				
		42-46	-41	88		42-46	-41	83		42-46	-41	76				
		47-52	-42	87		47-52	-42	82		47-52	-42	75				
		53-58	-43	86		53-58	-43	81		53-58	-43	74				
		59-66	-44	85		59-66	-44	80		59-66	-44	73				
		67-74	-45	84		67-74	-45	79		67-74	-45	72				
		75-83	-46	83		75-83	-46	78		75-83	-46	71				
		84-93	-47	82		84-93	-47	77		84-93	-47	70				
		94-104	-48	81		94-104	-48	76		94-104	-48	69				
		105-117	-49	80		105-117	-49	75		105-117	-49	68				
		117-131	-50	79		117-131	-50	74		117-131	-50	67				
		132-147	-51	78		132-147	-51	73		132-147	-51	66				
		148-165	-52	77		148-165	-52	72		148-165	-52	65				
		166-186	-53	76		166-186	-53	71		166-186	-53	64				
		187-208	-54	75		187-208	-54	70		187-208	-54	63				
		209-234	-55	74		209-234	-55	69		209-234	-55	62				
		235-263	-56	73		235-263	-56	68		235-263	-56	61				
		264-295	-57	72		264-295	-57	67		264-295	-57	60				
		296-331	-58	71		296-331	-58	66		296-331	-58	59				
		332-371	-59	70		332-371	-59	65		332-371	-59	58				
		372-416	-60	69		372-416	-60	64		372-416	-60	57				
		417-437	-61	68		417-437	-61	63		417-437	-61	56				

Distance attenuation is calculated based on standard acoustic principle and Practices

Construction Noise: EarthWorks												
Scenario: E2												
Name	CNP no.	No Mitigation			Silenced Equipment			Barrier constructed + Silenced Equipment				
		QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL		
1 Bulldozor	030	1	115		1	110		1	105			
Dump Truck	067	1	117	119	1	112	114	1	107	109		
Scraper	204	1	109	120	1	109	115	1	104	110		
			Total SWL	119.5		Total SWL	115.3		Total SWL	110.3		
2 Distance Attenuation	m	Attenuation (dB)			Attenuation (dB)			Attenuation (dB)				
Distance from source to NSR	(see below for various distance)			(see below for various distance)			(see below for various distance)					
(see below for various distance)	Distance Attenuation, dB(A)	0			Distance Attenuation, dB(A)	0			Distance Attenuation, dB(A)	0		
		Attenuation (dB)			Attenuation (dB)			Attenuation (dB)				
3 Facade effect	Yes	3			Yes	3			Yes	3		
		Barrier Correction			Barrier Correction			Barrier Correction				
		3			3			3				
		Consturction Noise Level = 1+2+3			Consturction Noise Level = 1+2+3			Consturction Noise Level = 1+2+3				
		dB(A)			dB(A)			dB(A)				
		122.5			118.3			113.3				
		Distance	Attenuation	Noise Level	Distance	Attenuation	Noise Level	Distance	Attenuation	Noise Level		
		4	-20	102	4	-20	98	4	-20	93		
		5	-22	101	5	-22	101	5	-22	101		
		6	-24	99	6	-24	94	6	-24	89		
		7	-25	98	7	-25	93	7	-25	88		
		8	-26	96	8	-26	92	8	-26	87		
		9	-27	95	9	-27	91	9	-27	86		
		10	-28	95	10	-28	90	10	-28	85		
		11	-29	94	11	-29	89	11	-29	84		
		12	-30	93	12	-30	88	12	-30	83		
		13-14	-30	93	13-14	-30	88	13-14	-30	91		
		15	-31	91	15	-31	90	15	-31	90		
		16-17	-33	90	16-17	-33	85	16-17	-33	80		
		18-20	-34	89	18-20	-34	84	18-20	-34	79		
		21-22	-35	88	21-22	-35	83	21-22	-35	78		
		23-25	-36	87	23-25	-36	82	23-25	-36	77		
		26-28	-37	86	26-28	-37	81	26-28	-37	76		
		29-31	-38	85	29-31	-38	80	29-32	-38	75		
		32-35	-39	84	32-35	-39	79	33-35	-39	74		
		36-39	-40	83	36-39	-40	78	36-39	-40	73		
		40-44	-41	82	40-44	-41	77	40-44	-41	72		
		45-50	-42	81	45-50	-42	76	45-50	-42	71		
		51-56	-43	80	51-56	-43	75	51-56	-43	70		
		57-63	-44	79	57-63	-44	74	57-63	-44	69		
		64-71	-45	78	64-71	-45	73	64-71	-45	68		
		72-79	-46	77	72-79	-46	72	72-79	-46	67		
		80-89	-47	76	80-89	-47	71	80-89	-47	66		
		90-100	-48	75	90-100	-48	70	90-100	-48	65		
		101-112	-49	74	101-112	-49	69	101-112	-49	64		
		113-126	-50	73	113-126	-50	68	113-126	-50	63		
		127-141	-51	72	127-141	-51	67	127-141	-51	62		
		142-158	-52	71	142-158	-52	66	142-158	-52	61		
		159-178	-53	70	159-178	-53	65	159-178	-53	60		
		179-200	-54	69	179-200	-54	64	179-200	-54	59		
		201-224	-55	68	201-224	-55	63	201-224	-55	58		
		225-251	-56	67	225-251	-56	62	225-251	-56	57		
		252-282	-57	66	252-282	-57	61	252-282	-57	56		
		283-317	-58	65	283-317	-58	60	283-317	-58	55		
		318-355	-59	64	318-355	-59	59	318-355	-59	54		
		356-399	-60	63	356-399	-60	58	356-399	-60	53		
		400-448	-61	62	400-448	-61	57	400-448	-61	52		
Distance attenuation is calculated based on standard acoustic principle and Practices												

Construction Noise : EarthWorks														
Scenario: E3														
No Mitigation					Silenced Equipment					Barrier constructed + Silenced Equipment				
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL				
1 Dump Truck	067	1	117		1	112		1	107					
Bulldozor	030	1	115	119	1	110	114	1	105	109				
Grader	104	1	113	120	1	113	117	1	108	112				
Roller Vibratory	186	1	108	120	1	108	117	1	103	112				
Compactor	050	1	105	120	1	105	117	1	100	112				
Power Rammer	169	1	108	121	1	108	118	1	103	113				
Total SWL				120.7	Total SWL				117.9	Total SWL				115.9
2 Distance Attenuation		m	Attenuation (dB)		m	Attenuation (dB)		m	Attenuation (dB)					
Distance from source to NSR		(see below for various distance)			(see below for various distance)			(see below for various distance)						
(see below for various distance)		Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)			0	
		Attenuation (dB)			Attenuation (dB)			Attenuation (dB)						
3 Facade effect		Yes	3		Yes	3		Yes	3					
		Barrier Correction			3	Barrier Correction			3	Barrier Correction			3	
Consturction Noise Level = 1+2+3				123.7	Consturction Noise Level = 1+2+3				120.9	Consturction Noise Level = 1+2+3				115.9
		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		
		4	-20	104		4	-20	101		4	-20	96		
		5	-22	102		5	-22	99		5	-22	94		
		6	-24	100		6	-24	97		6	-24	92		
		7	-25	99		7	-25	96		7	-25	91		
		8	-26	98		8	-26	95		8	-26	90		
		9	-27	97		9	-27	94		9	-27	89		
		10	-28	96		10	-28	93		10	-28	88		
		11	-29	95		11	-29	92		11	-29	87		
		12	-30	94		12	-30	91		12	-30	86		
		13-14	-31	93		13-14	-31	90		13-14	-31	85		
		15-16	-32	92		15-16	-32	89		15-16	-32	84		
		17-18	-33	91		17-18	-33	88		17-18	-33	83		
		19-20	-34	90		19-20	-34	87		19-20	-34	82		
		21-22	-35	89		21-22	-35	86		21-22	-35	81		
		23-25	-36	88		23-25	-36	85		23-25	-36	80		
		26-28	-37	87		26-28	-37	84		26-28	-37	79		
		29-32	-38	86		29-32	-38	83		29-32	-38	78		
		33-36	-39	85		33-36	-39	82		33-36	-39	77		
		37-40	-40	84		37-40	-40	81		37-40	-40	76		
		41-45	-41	83		41-45	-41	80		41-45	-41	75		
		46-51	-42	82		46-51	-42	79		46-51	-42	74		
		52-57	-43	81		52-57	-43	78		52-57	-43	73		
		58-64	-44	80		58-64	-44	77		58-64	-44	72		
		65-72	-45	79		65-72	-45	76		65-72	-45	71		
		73-81	-46	78		73-81	-46	75		73-81	-46	70		
		82-91	-47	77		82-91	-47	74		82-91	-47	69		
		92-102	-48	76		92-102	-48	73		92-102	-48	68		
		103-114	-49	75		103-114	-49	72		103-114	-49	67		
		115-128	-50	74		115-128	-50	71		115-128	-50	66		
		129-144	-51	73		129-144	-51	70		129-144	-51	65		
		145-162	-52	72		145-162	-52	69		145-162	-52	64		
		163-181	-53	71		163-181	-53	68		163-181	-53	63		
		181-204	-54	70		181-204	-54	67		181-204	-54	62		
		205-229	-55	69		205-229	-55	66		205-229	-55	61		
		230-257	-56	68		230-257	-56	65		230-257	-56	60		
		258-288	-57	67		258-288	-57	64		258-288	-57	59		
		289-323	-58	66		289-323	-58	63		289-323	-58	58		
		324-363	-59	65		324-363	-59	62		324-363	-59	57		
		364-407	-60	64		364-407	-60	61		364-407	-60	56		
		408-457	-61	63		408-457	-61	60		408-457	-61	55		
Distance attenuation is calculated based on standard acoustic principle and Practices														

Construction Noise : Retaining Wall														
Scenario: R1														
No Mitigation						Silenced Equipment			Barrier constructed + Silenced Equipment					
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL		QTY	SWL (dB(A))	Cumulative SWL		QTY	SWL (dB(A))	Cumulative SWL		
1 Breaker	027	2	122			2	117			1	112			
Dump Truck	067	1	117	126		1	112	121		1	107	113		
Excavator	081	1	112	126		1	107	121		1	102	114		
Water Pump (Petrol)	282	1	103	126		1	103	121		1	93	114		
			Total SWL	125.9			Total SWL	120.9			Total SWL	113.5		
2 Distance Attenuation		m	Attenuation (dB)			m	Attenuation (dB)			m	Attenuation (dB)			
Distance from source to NSR		(see below for various distance)				(see below for various distance)				(see below for various distance)				
(see below for various distance)		Distance Attenuation, dB(A)		0		Distance Attenuation, dB(A)		0		Distance Attenuation, dB(A)		0		
			Attenuation (dB)				Attenuation (dB)				Attenuation (dB)			
3 Facade effect		Yes	3			Yes	3			Yes	3			
		Barrier Correction		3		Barrier Correction		3		Barrier Correction		3		
		Construction Noise Level = 1+2+3 dB(A)			128.9		Construction Noise Level = 1+2+3 dB(A)			123.9		Construction Noise Level = 1+2+3 dB(A)		116.5
		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		
		4	-20	109		4	-20	104		4	-20	97		
		5	-22	107		5	-22	102		5	-22	95		
		6	-24	105		6	-24	100		6	-24	93		
		7	-25	104		7	-25	99		7	-25	92		
		8	-26	103		8	-26	98		8	-26	91		
		9	-27	102		9	-27	97		9	-27	90		
		10	-28	101		10	-28	96		10	-28	89		
		11	-29	100		11	-29	95		11	-29	88		
		12	-30	99		12	-30	94		12	-30	87		
		13	-30	99		13	-30	94		13	-30	87		
		14	-31	98		14	-31	93		14	-31	86		
		15-16	-32	97		15-16	-32	92		15-16	-32	85		
		17-18	-33	96		17-18	-33	91		17-18	-33	84		
		19-20	-34	95		19-20	-34	90		19-20	-34	83		
		21-23	-35	94		21-23	-35	89		21-23	-35	82		
		24-26	-36	93		24-26	-36	88		24-26	-36	81		
		27-29	-37	92		27-29	-37	87		27-29	-37	80		
		30-33	-38	91		30-33	-38	86		30-33	-38	79		
		34-37	-39	90		34-37	-39	85		34-37	-39	78		
		38-41	-40	89		38-41	-40	84		38-41	-40	77		
		42-46	-41	88		42-46	-41	83		42-46	-41	76		
		47-52	-42	87		47-52	-42	82		47-52	-42	75		
		53-58	-43	86		53-58	-43	81		53-58	-43	74		
		59-66	-44	85		59-66	-44	80		59-66	-44	73		
		67-74	-45	84		67-74	-45	79		67-74	-45	72		
		75-83	-46	83		75-83	-46	78		75-83	-46	71		
		84-93	-47	82		84-93	-47	77		84-93	-47	70		
		94-104	-48	81		94-104	-48	76		94-104	-48	69		
		105-117	-49	80		105-117	-49	75		105-117	-49	68		
		118-131	-50	79		118-131	-50	74		118-131	-50	67		
		132-147	-51	78		132-147	-51	73		132-147	-51	66		
		148-165	-52	77		148-165	-52	72		148-165	-52	65		
		166-186	-53	76		166-186	-53	71		166-186	-53	64		
		187-207	-54	75		187-207	-54	70		187-207	-54	63		
		208-233	-55	74		208-233	-55	69		208-233	-55	62		
		234-263	-56	73		234-263	-56	68		234-263	-56	61		
		264-295	-57	72		264-295	-57	67		264-295	-57	60		
		296-331	-58	71		296-331	-58	66		296-331	-58	59		
		332-371	-59	70		332-371	-59	65		332-371	-59	58		
		372-416	-60	69		372-416	-60	64		372-416	-60	57		
		417-467	-61	68		417-467	-61	63		417-467	-61	56		
Distance attenuation is calculated based on standard acoustic principle and Practices														

Construction Noise : Retaining Wall												
Scenario: R2												
No Mitigation				Silenced Equipment				Barrier constructed + Silenced Equipment				
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL		
1 Water Pump (Petrol)	283	1	103		1	103		1	93			
Piling Rig	164	1	115	115	1	115	115	1	105	105		
Lorry	141	1	112	117	1	112	117	1	107	109		
			Total SWL	116.9		Total SWL	116.9		Total SWL	109.2		
2 Distance Attenuation	m		Attenuation (dB)		m		Attenuation (dB)	m		Attenuation (dB)		
Distance from source to NSR	(see below for various distance)				(see below for various distance)				(see below for various distance)			
(see below for various distance)	Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)			0
3 Facade effect	Yes		Attenuation (dB)		Yes		Attenuation (dB)	Yes		Attenuation (dB)		
	Barrier Correction			3	Barrier Correction			3	Barrier Correction			3
	Consturction Noise Level = 1+2+3 dB(A)			119.9	Consturction Noise Level = 1+2+3 dB(A)			119.9	Consturction Noise Level = 1+2+3 dB(A)			112.2
	Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level	
	4	-20	100		4	-20	100		4	-20	92	
	5	-22	98		5	-22	98		5	-22	90	
	6	-24	96		6	-24	99		6	-24	99	
	7	-25	95		7	-25	95		7	-25	87	
	8	-26	94		8	-26	94		8	-26	86	
	9	-27	93		9	-27	93		9	-27	85	
	10	-28	92		10	-28	92		10	-28	84	
	11	-29	91		11	-29	91		11	-29	83	
	12	-30	90		12	-30	90		12	-30	82	
	13	-30	90		13	-30	91		13	-30	91	
	14	-31	89		14	-31	89		14	-31	81	
	15-16	-32	88		15-16	-32	88		15-16	-32	80	
	17-18	-33	87		17-18	-33	87		17-18	-33	79	
	19-20	-34	86		19-20	-34	86		19-20	-34	78	
	21-23	-35	85		21-23	-35	85		21-23	-35	77	
	24-26	-36	84		24-26	-36	84		24-26	-36	76	
	27-29	-37	83		27-29	-37	83		27-29	-37	75	
	30-33	-38	82		30-33	-38	82		30-33	-38	74	
	34-37	-39	81		34-37	-39	81		34-37	-39	73	
	38-41	-40	80		38-41	-40	80		38-41	-40	72	
	42-47	-41	79		42-47	-41	79		42-47	-41	71	
	48-52	-42	78		48-52	-42	78		48-52	-42	70	
	53-59	-43	77		53-59	-43	77		53-59	-43	69	
	60-66	-44	76		60-66	-44	76		60-66	-44	68	
	67-74	-45	75		67-74	-45	75		67-74	-45	67	
	75-83	-46	74		75-83	-46	74		75-83	-46	66	
	84-93	-47	73		84-93	-47	73		84-93	-47	65	
	94-105	-48	72		94-105	-48	72		94-105	-48	64	
	106-118	-49	71		106-118	-49	71		106-118	-49	63	
	119-132	-50	70		119-132	-50	70		119-132	-50	62	
	133-148	-51	69		133-148	-51	69		133-148	-51	61	
	149-166	-52	68		149-166	-52	68		149-166	-52	60	
	167-187	-53	67		167-187	-53	67		167-187	-53	59	
	188-209	-54	66		188-209	-54	66		188-209	-54	58	
	210-235	-55	65		210-235	-55	65		210-235	-55	57	
	236-264	-56	64		236-264	-56	64		236-264	-56	56	
	265-296	-57	63		265-296	-57	63		265-296	-57	55	
	297-332	-58	62		297-332	-58	62		297-332	-58	54	
	333-373	-59	61		333-373	-59	61		333-373	-59	53	
	374-418	-60	60		374-418	-60	60		374-418	-60	52	
	419-470	-61	59		419-470	-61	59		419-470	-61	51	
Distance attenuation is calculated based on standard acoustic principle and Practices												

Construction Noise - Retaining Wall													
Scenario: R3													
No Mitigation					Silenced Equipment					Barrier constructed + Silenced Equipment			
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL		
1 Water Pump (Petrol)	282	1	103		282	1	103						
Concrete Lorry Mixer	044	1	109	110	044	1	109	110	1	104	104		
Poker	170	1	113	115	170	1	108	112	1	98	105		
Generator	101	1	108	116	101	1	108	114	1	98	106		
Chipper	043	1	112	117	43	1	107	114	1	102	107		
Saw, Circular	201	1	108	118	201	1	108	115	1	98	108		
Dumper	066	1	106	118	066	1	106	116	1	101	109		
			Total SWL	117.9			Total SWL	115.8		Total SWL	108.7		
2 Distance Attenuation		m	Attenuation (dB)		m	Attenuation (dB)		m	Attenuation (dB)				
Distance from source to NSR		(see below for various distance)			(see below for various distance)			(see below for various distance)					
(see below for various distance)		Distance Attenuation, dB(A)		0	Distance Attenuation, dB(A)		0	Distance Attenuation, dB(A)		0			
Construction Noise Level = 1+2+3 dB(A)				120.9	Construction Noise Level = 1+2+3 dB(A)				118.8	Construction Noise Level = 1+2+3 dB(A)			111.7
	Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		
	4	-20	101		4	-20	99		4	-20	92		
	5	-22	99		5	-22	97		5	-22	90		
	6	-24	97		6	-24	95		6	-24	88		
	7	-25	96		7	-25	94		7	-25	87		
	8	-26	95		8	-26	93		8	-26	86		
	9	-27	94		9	-27	92		9	-27	85		
	10	-28	93		10	-28	91		10	-28	84		
	11	-29	92		11	-29	90		11	-29	83		
	12	-30	91		12	-30	89		12	-30	82		
	13	-30	91		13	-30	89		13	-30	82		
	14	-31	90		14	-31	88		14	-31	81		
	15-16	-32	89		15-16	-32	87		15-16	-32	80		
	17-18	-33	88		17-18	-33	86		17-18	-33	79		
	19-20	-34	87		19-20	-34	85		19-20	-34	78		
	21-23	-35	86		21-23	-35	84		21-23	-35	77		
	24-26	-36	85		24-26	-36	83		24-26	-36	76		
	27-29	-37	84		27-29	-37	82		27-29	-37	75		
	30-33	-38	83		30-33	-38	81		30-33	-38	74		
	34-37	-39	82		34-37	-39	80		34-37	-39	73		
	38-41	-40	81		38-41	-40	79		38-41	-40	72		
	42-47	-41	80		42-47	-41	78		42-47	-41	71		
	48-52	-42	79		48-52	-42	77		48-52	-42	70		
	53-59	-43	78		53-59	-43	76		53-59	-43	69		
	60-66	-44	77		60-66	-44	75		60-66	-44	68		
	67-74	-45	76		67-74	-45	74		67-74	-45	67		
	75-83	-46	75		75-83	-46	73		75-83	-46	66		
	84-93	-47	74		84-93	-47	72		84-93	-47	65		
	94-105	-48	73		94-105	-48	71		94-105	-48	64		
	106-118	-49	72		106-118	-49	70		106-118	-49	63		
	119-132	-50	71		119-132	-50	69		119-132	-50	62		
	133-148	-51	70		133-148	-51	68		133-148	-51	61		
	149-166	-52	69		149-166	-52	67		149-166	-52	60		
	167-187	-53	68		167-187	-53	66		167-187	-53	59		
	188-210	-54	67		188-210	-54	65		188-210	-54	58		
	211-235	-55	66		211-235	-55	64		211-235	-55	57		
	236-264	-56	65		236-264	-56	63		236-264	-56	56		
	265-296	-57	64		265-296	-57	62		265-296	-57	55		
	297-332	-58	63		297-332	-58	61		297-332	-58	54		
	333-373	-59	62		333-373	-59	60		333-373	-59	53		
	374-419	-60	61		374-419	-60	59		374-419	-60	52		
	420-470	-61	60		420-470	-61	58		420-470	-61	51		
Distance attenuation is calculated based on standard acoustic principle and Practices													

Construction Noise														
Retaining Wall														
Scenario: R4														
No Mitigation				Silenced Equipment				Barrier constructed + Silenced Equipment						
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL			
1 Dump Truck	067	1	117		067	1	112		1	107				
Roller Vibratory	186	1	108	118	186	1	108	113	1	103	108			
Compact Vibratory	050	1	105	118	050	1	105	114	1	100	109			
			Total SWL	117.8			Total SWL	114.0		Total SWL	109.0			
2 Distance Attenuation		m	Attenuation (dB)			m	Attenuation (dB)			m	Attenuation (dB)			
(see below for various distance)														
(see below for various distance)	Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)			0		
			Attenuation (dB)				Attenuation (dB)				Attenuation (dB)			
3 Facade effect	Yes		3		Yes		3		Yes		3			
	Barrier Correction			3	Barrier Correction			3	Barrier Correction			3		
Construction Noise Level = 1+2+3 dB(A)				120.8	Construction Noise Level = 1+2+3 dB(A)				117.0	Construction Noise Level = 1+2+3 dB(A)				112.0
	Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level			
	4	-20	101		4	-20	97		4	-20	92			
	5	-22	99		5	-22	95		5	-22	90			
	6	-24	97		6	-24	93		6	-24	88			
	7	-25	96		7	-25	92		7	-25	87			
	8	-26	95		8	-26	91		8	-26	86			
	9	-27	94		9	-27	90		9	-27	85			
	10	-28	93		10	-28	89		10	-28	84			
	11	-29	92		11	-29	88		11	-29	83			
	12	-30	91		12	-30	87		12	-30	82			
	13	-30	91		13	-30	87		13	-30	82			
	14	-31	90		14	-31	86		14	-31	81			
	15-16	-32	89		15-16	-32	85		15-16	-32	80			
	17-18	-33	88		17-18	-33	84		17-18	-33	79			
	19-20	-34	87		19-20	-34	83		19-20	-34	78			
	21-22	-35	86		21-22	-35	82		21-22	-35	77			
	23-26	-36	85		23-26	-36	81		23-26	-36	76			
	27-29	-37	84		27-29	-37	80		27-29	-37	75			
	30-32	-38	83		30-32	-38	79		30-32	-38	74			
	33-36	-39	82		33-36	-39	78		33-36	-39	73			
	37-41	-40	81		37-41	-40	77		37-41	-40	72			
	42-46	-41	80		42-46	-41	76		42-46	-41	71			
	47-51	-42	79		47-51	-42	75		47-51	-42	70			
	52-58	-43	78		52-58	-43	74		52-58	-43	69			
	59-65	-44	77		59-65	-44	73		59-65	-44	68			
	66-73	-45	76		66-73	-45	72		66-73	-45	67			
	74-82	-46	75		74-82	-46	71		74-82	-46	66			
	83-92	-47	74		83-92	-47	70		83-92	-47	65			
	93-103	-48	73		93-103	-48	69		93-103	-48	64			
	104-116	-49	72		104-116	-49	68		104-116	-49	63			
	117-130	-50	71		117-130	-50	67		117-130	-50	62			
	131-146	-51	70		131-146	-51	66		131-146	-51	61			
	147-164	-52	69		147-164	-52	65		147-164	-52	60			
	165-184	-53	68		165-184	-53	64		165-184	-53	59			
	185-205	-54	67		185-205	-54	63		185-205	-54	58			
	206-231	-55	66		206-231	-55	62		206-231	-55	57			
	232-260	-56	65		232-260	-56	61		232-260	-56	56			
	261-291	-57	64		261-291	-57	60		261-291	-57	55			
	292-327	-58	63		292-327	-58	59		292-327	-58	54			
	328-367	-59	62		328-367	-59	58		328-367	-59	53			
	368-412	-60	61		368-412	-60	57		368-412	-60	52			
	413-462	-61	60		413-462	-61	56		413-462	-61	51			
Distance attenuation is calculated based on standard acoustic principle and Practices														

Construction Noise : Pavement Construction														
Scenario: P1														
No Mitigation				Silenced Equipment				Barrier constructed + Silenced Equipment						
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL			
1 Dump Truck	067	1	117		067	1	112		1	107				
Excavator	081	1	112	118	081	1	107	113	1	102	108			
Compact Vibratory	050	1	108	119	050	1	108	114	1	103	109			
			Total SWL	118.6			Total SWL	114.3		Total SWL	109.3			
2 Distance Attenuation		m	Attenuation (dB)		m	Attenuation (dB)		m	Attenuation (dB)					
Distance from source to NSR		(see below for various distance)			(see below for various distance)			(see below for various distance)						
(see below for various distance)		Distance Attenuation, dB(A)		0	Distance Attenuation, dB(A)		0	Distance Attenuation, dB(A)		0				
3 Facade effect		Yes	Attenuation (dB)		Yes	Attenuation (dB)		Yes	Attenuation (dB)					
			3			3			3					
		Barrier Correction		3	Barrier Correction		3	Barrier Correction		3				
Consturction Noise Level = 1+2+3 dB(A)				121.6	Consturction Noise Level = 1+2+3 dB(A)				117.3	Consturction Noise Level = 1+2+3 dB(A)				112.3
	Distance	Attenuation	Noise Level			Distance	Attenuation	Noise Level			Distance	Attenuation	Noise Level	
	4	-20	102			4	-20	97			4	-20	92	
	5	-22	100			5	-22	95			5	-22	90	
	6	-24	98			6	-24	93			6	-24	88	
	7	-25	97			7	-25	92			7	-25	87	
	8	-26	96			8	-26	91			8	-26	86	
	9	-27	95			9	-27	90			9	-27	85	
	10	-28	94			10	-28	89			10	-28	84	
	11	-29	93			11	-29	88			11-12	-29	83	
	12	-30	92			12	-30	87			13	-30	82	
	13	-30	91			13	-30	87			14	-30	81	
	14	-31	91			14	-31	86			15	-31	81	
	15-16	-32	90			15-16	-32	85			16-17	-32	80	
	17-18	-33	89			17-18	-33	84			18-19	-33	79	
	19-20	-34	88			19-20	-34	83			20-21	-34	78	
	21-22	-35	87			21-22	-35	82			22-24	-35	77	
	23-26	-36	86			23-26	-36	81			25-27	-36	76	
	27-28	-37	85			27-28	-37	80			28-30	-37	75	
	30-31	-38	84			30-31	-38	79			31-34	-38	74	
	32-35	-39	83			32-35	-39	78			35-38	-39	73	
	36-40	-40	82			36-40	-40	77			39-43	-40	72	
	41-45	-41	81			41-45	-41	76			44-48	-41	71	
	46-50	-42	80			46-50	-42	75			49-54	-42	70	
	51-56	-43	79			51-56	-43	74			55-61	-43	69	
	57-63	-44	78			57-63	-44	73			62-69	-44	68	
	64-71	-45	77			64-71	-45	72			70-77	-45	67	
	72-80	-46	76			72-80	-46	71			78-87	-46	66	
	81-90	-47	75			81-90	-47	70			88-97	-47	65	
	91-101	-48	74			91-101	-48	69			98-109	-48	64	
	102-113	-49	73			102-113	-49	68			110-123	-49	63	
	114-127	-50	72			114-127	-50	67			124-138	-50	62	
	128-142	-51	71			128-142	-51	66			139-154	-51	61	
	143-160	-52	70			143-160	-52	65			155-173	-52	60	
	161-179	-53	69			161-179	-53	64			174-194	-53	59	
	180-201	-54	68			180-201	-54	63			195-218	-54	58	
	202-226	-55	67			202-226	-55	62			219-245	-55	57	
	227-254	-56	66			227-254	-56	61			246-275	-56	56	
	255-285	-57	65			255-285	-57	60			276-309	-57	55	
	286-319	-58	64			286-319	-58	59			310-346	-58	54	
	320-358	-59	63			320-358	-59	58			347-389	-59	53	
	359-402	-60	62			359-402	-60	57			390-436	-60	52	
	403-451	-61	61			403-451	-61	56			437-489	-61	51	
Distance attenuation is calculated based on standard acoustic principle and Practices														

Construction Noise : Pavement Construction														
Scenario: P2														
Name	CNP no.	No Mitigation			Silenced Equipment			Barrier constructed + Silenced Equipment						
		QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL				
1 Dump Truck	067	1	117		1	112		1	107					
Asphalt Paver	004	1	109	118	1	109	114	1	104	109				
Road Roller	185	1	108	118	1	108	115	1	103	110				
Concrete Lorry Mixer	044	1	109	119	1	104	115	1	99	110				
Roller, Vibratory	186	1	108	119	1	108	116	1	103	111				
			Total SWL	119.0		Total SWL	115.9		Total SWL	110.9				
2 Distance Attenuation		m	Attenuation (dB)		m	Attenuation (dB)		m	Attenuation (dB)					
Distance from source to NSR		(see below for various distance)			(see below for various distance)			(see below for various distance)						
(see below for various distance)		Distance Attenuation, dB(A)		0	Distance Attenuation, dB(A)		0	Distance Attenuation, dB(A)		0				
3 Facade effect		Attenuation (dB)			Attenuation (dB)			Attenuation (dB)						
Yes		3			3			3						
Barrier Correction		3			3			3						
Consturction Noise Level = 1+2+3				122.0	Consturction Noise Level = 1+2+3				118.9	Consturction Noise Level = 1+2+3				113.9
		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		
		4	-20	102		4	-20	99		4	-20	94		
		5	-22	100		5	-22	97		5	-22	92		
		6	-24	98		6	-24	95		6	-24	90		
		7	-25	97		7	-25	94		7	-25	89		
		8	-26	96		8	-26	93		8	-26	88		
		9	-27	95		9	-27	92		9	-27	87		
		10	-28	94		10	-28	91		10	-28	86		
		11	-29	93		11	-29	90		11	-29	85		
		12	-30	92		12	-30	89		12	-30	84		
		13	-30	92		13	-30	89		13	-30	84		
		14	-31	91		14	-31	88		14	-31	83		
		15-16	-32	90		15-16	-32	87		15-16	-32	82		
		17-18	-33	89		17-18	-33	86		17-18	-33	81		
		19-21	-34	88		19-21	-34	85		19-21	-34	80		
		22-23	-35	87		22-23	-35	84		22-23	-35	79		
		24-26	-36	86		24-26	-36	83		24-26	-36	78		
		27-29	-37	85		27-29	-37	82		27-29	-37	77		
		30-33	-38	84		30-33	-38	81		30-32	-38	76		
		34-37	-39	83		34-37	-39	80		33-37	-39	75		
		38-42	-40	82		38-42	-40	79		38-42	-40	74		
		43-47	-41	81		43-47	-41	78		43-47	-41	73		
		48-53	-42	80		48-53	-42	77		48-53	-42	72		
		54-59	-43	79		54-59	-43	76		54-59	-43	71		
		60-66	-44	78		60-66	-44	75		60-66	-44	70		
		67-74	-45	77		67-74	-45	74		67-74	-45	69		
		75-84	-46	76		75-84	-46	73		75-84	-46	68		
		85-94	-47	75		85-94	-47	72		85-94	-47	67		
		95-105	-48	74		95-105	-48	71		95-105	-48	66		
		106-118	-49	73		106-118	-49	70		106-118	-49	65		
		119-133	-50	72		119-133	-50	69		119-133	-50	64		
		134-149	-51	71		134-149	-51	68		134-149	-51	63		
		150-167	-52	70		150-167	-52	67		150-167	-52	62		
		168-188	-53	69		168-188	-53	66		168-188	-53	61		
		189-211	-54	68		189-211	-54	65		189-211	-54	60		
		212-237	-55	67		212-237	-55	64		212-237	-55	59		
		238-266	-56	66		238-266	-56	63		238-266	-56	58		
		267-298	-57	65		267-298	-57	62		267-298	-57	57		
		299-334	-58	64		299-334	-58	61		299-334	-58	56		
		335-375	-59	63		335-375	-59	60		335-375	-59	55		
		376-421	-60	62		376-421	-60	59		376-421	-60	54		
		422-475	-61	61		422-475	-61	58		422-475	-61	53		
Distance attenuation is calculated based on standard acoustic principle and Practices														

Construction Noise : Pavement Construction															
Scenario: P3															
Name	CNP no.	No Mitigation			CNP no.	Silenced Equipment			CNP no.	Barrier constructed + Silenced Equipment					
		QTY	SWL (dB(A))	Cumulative SWL		QTY	SWL (dB(A))	Cumulative SWL		QTY	SWL (dB(A))	Cumulative SWL			
1 Paint Line Marker	161	1	90		161	1	90		161	1	85				
Saw	203	1	115	115	203	1	115	115	203	1	105	105			
			Total SWL	115.0			Total SWL	115.0			Total SWL	105.0			
2 Distance Attenuation		m	Attenuation (dB)			m	Attenuation (dB)			m	Attenuation (dB)				
Distance from source to NSR		(see below for various distance)				(see below for various distance)				(see below for various distance)					
(see below for various distance)		Distance Attenuation, dB(A)			0		Distance Attenuation, dB(A)			0		Distance Attenuation, dB(A)			0
3 Facade effect		Yes	Attenuation (dB)			Yes	Attenuation (dB)			Yes	Attenuation (dB)				
			3				3				3				
		Barrier Correction			3		Barrier Correction			3		Barrier Correction			3
		Consturction Noise Level = 1+2+3 dB(A)			118.0		Consturction Noise Level = 1+2+3 dB(A)			118.0		Consturction Noise Level = 1+2+3 dB(A)			108.0
		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level			
		4	-20	98		4	-20	98		4	-20	88			
		5	-22	96		5	-22	96		5	-22	86			
		6	-24	94		6	-24	94		6	-24	84			
		7	-25	93		7	-25	93		7	-25	83			
		8	-26	92		8	-26	92		8	-26	82			
		9	-27	91		9	-27	91		9	-27	81			
		10	-28	90		10	-28	90		10	-28	80			
		11	-29	89		11	-29	89		11	-29	79			
		12	-30	88		12	-30	88		12	-30	78			
		13	-30	88		13	-30	88		13	-30	78			
		14	-31	87		14	-31	87		14	-31	77			
		15-16	-32	86		15-16	-32	86		15-16	-32	76			
		17-18	-33	85		17-18	-33	85		17-18	-33	75			
		19-21	-34	84		19-21	-34	84		19-21	-34	74			
		22-23	-35	83		22-23	-35	83		22-23	-35	73			
		24-26	-36	82		24-26	-36	82		24-26	-36	72			
		27-29	-37	81		27-29	-37	81		27-29	-37	71			
		30-33	-38	80		30-33	-38	80		30-33	-38	70			
		34-37	-39	79		34-37	-39	79		34-37	-39	69			
		38-42	-40	78		38-42	-40	78		38-42	-40	68			
		43-47	-41	77		43-47	-41	77		43-47	-41	67			
		48-53	-42	76		48-53	-42	76		48-53	-42	66			
		54-59	-43	75		54-59	-43	75		54-59	-43	65			
		60-66	-44	74		60-66	-44	74		60-66	-44	64			
		67-74	-45	73		67-74	-45	73		67-74	-45	63			
		75-84	-46	72		75-84	-46	72		75-84	-46	62			
		85-94	-47	71		85-94	-47	71		85-94	-47	61			
		95-105	-48	70		95-105	-48	70		95-105	-48	60			
		106-119	-49	69		106-119	-49	69		106-119	-49	59			
		120-133	-50	68		120-133	-50	68		120-133	-50	58			
		134-149	-51	67		134-149	-51	67		134-149	-51	57			
		150-168	-52	66		150-168	-52	66		150-168	-52	56			
		169-188	-53	65		169-188	-53	65		169-188	-53	55			
		189-211	-54	64		189-211	-54	64		189-211	-54	54			
		212-237	-55	63		212-237	-55	63		212-237	-55	53			
		238-266	-56	62		238-266	-56	62		238-266	-56	52			
		267-298	-57	61		267-298	-57	61		267-298	-57	51			
		299-334	-58	60		299-334	-58	60		299-334	-58	50			
		335-375	-59	59		335-375	-59	59		335-375	-59	49			
		376-421	-60	58		376-421	-60	58		376-421	-60	48			
		422-475	-61	57		422-475	-61	57		422-475	-61	47			
Distance attenuation is calculated based on standard acoustic principle and Practices															

Construction Noise : Deck Construction									
Scenario: D1									
		No Mitigation							
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL					
1 Generator	101	1	108						
Bar Bender and Cutter	021	1	90	108					
Planer	171	1	117	118					
Saw, Circular	201	1	108	118					
Chipper, Hand-Held	043	1	112	119					
Lorry	141	1	112	120					
			Total SWL	119.8					
2 Distance Attenuation		m	Attenuation (dB)						
Distance from source to NSR		(see below for various distance)							
(see below for various distance)	Distance Attenuation, dB(A)			0					
			Attenuation (dB)						
3 Facade effect		Yes	3						
	Barrier Correction			3					
	Consturction Noise Level = 1+2+3 dB(A)			122.8					
		Distance	Attenuation	Noise Level					
		4	-20	103					
		5	-22	101					
		6	-24	99					
		7	-25	98					
		8	-26	97					
		9	-27	96					
		10	-28	95					
		11	-29	94					
		12	-30	93					
		13	-30	93					
		14	-31	92					
		15-16	-32	91					
		17-18	-33	90					
		19-20	-34	89					
		21-23	-35	88					
		24-26	-36	87					
		27-29	-37	86					
		30-32	-38	85					
		33-36	-39	84					
		37-41	-40	83					
		42-46	-41	82					
		47-51	-42	81					
		52-58	-43	80					
		59-65	-44	79					
		66-74	-45	78					
		75-82	-46	77					
		83-92	-47	76					
		93-103	-48	75					
		104-116	-49	74					
		117-130	-50	73					
		131-146	-51	72					
		147-164	-52	71					
		165-184	-53	70					
		189-206	-54	69					
		207-230	-55	68					
		231-260	-56	67					
		261-291	-57	66					
		292-326	-58	65					
		327-367	-59	64					
		368-412	-60	63					
		413-462	-61	62					
Distance attenuation is calculated based on standard acoustic principle and Practices									

Construction Noise : Deck Construction						
Scenario: D2						
		No Mitigation				
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL		
1 Concrete Lorry Mixer	044	1	109			
Concrete Pump	047	1	109	112		
Poker	170	1	113	116		
			Total SWL	115.5		
2 Distance Attenuation		m	Attenuation (dB)			
Distance from source to NSR		(see below for various distance)				
(see below for various distance)		Distance Attenuation, dB(A)		0		
		Attenuation (dB)				
3 Facade effect		Yes	3			
		Barrier Correction		3		
		Construction Noise Level = 1+2+3 dB(A)		118.5		
		Distance	Attenuation	Noise Level		
		4	-20	99	0	
		5	-22	97		
		6	-24	95		
		7	-25	94		
		8	-26	93		
		9	-27	92		
		10	-28	91		
		11	-29	90		
		12	-30	89		
		13	-30	89		
		14	-31	88		
		15-16	-32	87		
		17-18	-33	86		
		19-20	-34	85		
		21-23	-35	84		
		24-26	-36	83		
		27-29	-37	82		
		30-32	-38	81		
		33-36	-39	80		
		37-41	-40	79		
		42-46	-41	78		
		47-51	-42	77		
		52-58	-43	76		
		59-65	-44	75		
		66-74	-45	74		
		75-82	-46	73		
		83-92	-47	72		
		93-103	-48	71		
		104-116	-49	70		
		117-130	-50	69		
		131-146	-51	68		
		147-164	-52	67		
		165-184	-53	66		
		189-206	-54	65		
		207-230	-55	64		
		231-260	-56	63		
		261-291	-57	62		
		292-326	-58	61		
		327-367	-59	60		
		368-412	-60	59		
		413-462	-61	58		
Distance attenuation is calculated based on standard acoustic principle and Practices						

Construction Noise : Deck Construction									
Scenario: D3									
		No Mitigation							
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL					
1 Crane	048	1	112						
				Total SWL	112.0				
2 Distance Attenuation		m	Attenuation (dB)						
Distance from source to NSR		(see below for various distance)							
(see below for various distance)		Distance Attenuation, dB(A)			0				
			Attenuation (dB)						
3 Facade effect		Yes	3						
				Barrier Correction	3				
				Consturction Noise Level = 1+2+3 dB(A)		115.0			
		Distance	Attenuation	Noise Level					
		4	-20	95					
		5	-22	93					
		6	-24	91					
		7	-25	90					
		8	-26	89					
		9	-27	88					
		10	-28	87					
		11	-29	86					
		12	-30	85					
		13	-30	85					
		14	-31	84					
		15-16	-32	83					
		17-18	-33	82					
		19-20	-34	81					
		21-23	-35	80					
		24-26	-36	79					
		27-29	-37	78					
		30-33	-38	77					
		34-37	-39	76					
		38-42	-40	75					
		43-47	-41	74					
		48-53	-42	73					
		54-59	-43	72					
		60-66	-44	71					
		67-74	-45	70					
		75-84	-46	69					
		85-94	-47	68					
		95-105	-48	67					
		106-118	-49	66					
		119-133	-50	65					
		134-149	-51	64					
		150-167	-52	63					
		168-188	-53	62					
		189-211	-54	61					
		212-237	-55	60					
		238-266	-56	59					
		267-298	-57	58					
		299-334	-58	57					
		335-375	-59	56					
		376-423	-60	55					
		424-473	-61	54					
Distance attenuation is calculated based on standard acoustic principle and Practices									

Construction Noise : Foundation Construction									
Scenario: F1									
		No Mitigation			Silenced Equipment				
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	
1 Breaker	027	2	122		027	2	117		
Dump Truck	067	1	117	126	067	1	112	121	
Excavator	081	1	112	126	081	1	107	121	
Water Pump (Petrol)	282	1	103	126	282	1	103	121	
			Total SWL	125.9				Total SWL	120.9
2 Distance Attenuation		m	Attenuation (dB)		m		Attenuation (dB)		
Distance from source to NSR		(see below for various distance)			(see below for various distance)				
(see below for various distance)		Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)			0
		Attenuation (dB)			Attenuation (dB)				
3 Facade effect		Yes	3		Yes		3		
		Barrier Correction			3	Barrier Correction			3
		Construction Noise Level = 1+2+3 dB(A)			128.9	Construction Noise Level = 1+2+3 dB(A)			123.9
		Distance	Attenuation	Noise Level	Distance	Attenuation	Noise Level		
		4	-20	109	4	-20	104		
		5	-22	107	5	-22	102		
		6	-24	105	6	-24	100		
		7	-25	104	7	-25	99		
		8	-26	103	8	-26	98		
		9	-27	102	9	-27	97		
		10	-28	101	10	-28	96		
		11	-29	100	11	-29	95		
		12	-30	99	12	-30	94		
		13	-30	99	13	-30	94		
		14	-31	98	14	-31	93		
		15-16	-32	97	15-16	-32	92		
		17-18	-33	96	17-18	-33	91		
		19-20	-34	95	19-21	-34	90		
		21-23	-35	94	22-23	-35	89		
		24-26	-36	93	24-26	-36	88		
		27-29	-37	92	27-29	-37	87		
		30-32	-38	91	30-32	-38	86		
		33-37	-39	90	33-37	-39	85		
		38-41	-40	89	38-41	-40	84		
		42-46	-41	88	42-47	-41	83		
		47-52	-42	87	48-52	-42	82		
		53-58	-43	86	53-59	-43	81		
		59-66	-44	85	60-66	-44	80		
		67-74	-45	84	67-74	-45	79		
		75-83	-46	83	75-83	-46	78		
		84-93	-47	82	84-93	-47	77		
		94-104	-48	81	94-105	-48	76		
		105-117	-49	80	106-118	-49	75		
		117-131	-50	79	119-132	-50	74		
		132-147	-51	78	133-148	-51	73		
		148-165	-52	77	149-166	-52	72		
		166-186	-53	76	167-187	-53	71		
		187-208	-54	75	188-210	-54	70		
		209-234	-55	74	211-234	-55	69		
		235-263	-56	73	235-264	-56	68		
		264-295	-57	72	265-297	-57	67		
		296-331	-58	71	298-334	-58	66		
		332-371	-59	70	335-375	-59	65		
		372-416	-60	69	376-421	-60	64		
		417-463	-61	68	422-475	-61	63		
Distance attenuation is calculated based on standard acoustic principle and Practices									

Construction Noise :		Foundation Construction																		
Scenario:		F2																		
		No Mitigation																		
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL																
1 Water Pump	283	1	85																	
Piling Rig	164	1	115	115																
Dump Truck	067	1	117	119																
				Total SWL	119.1															
2 Distance Attenuation		m	Attenuation (dB)																	
Distance from source to NSR		(see below for various distance)																		
(see below for various distance)		Distance Attenuation, dB(A)			0															
		Attenuation (dB)																		
3 Facade effect		Yes	3																	
		Barrier Correction			3															
		Consturction Noise Level = 1+2+3 dB(A)			122.1															
		Distance	Attenuation	Noise Level																
		4	-20	102																
		5	-22	100																
		6	-24	98																
		7	-25	97																
		8	-26	96																
		9	-27	95																
		10	-28	94																
		11	-29	93																
		12	-30	93																
		13	-30	92																
		14-15	-31	91																
		16-17	-32	90																
		18-19	-33	89																
		20-21	-34	88																
		22-24	-35	87																
		25-26	-36	86																
		27-30	-37	85																
		31-33	-38	84																
		34-38	-39	83																
		39-42	-40	82																
		43-48	-41	81																
		49-53	-42	80																
		54-60	-43	79																
		61-67	-44	78																
		68-76	-45	77																
		77-85	-46	76																
		86-95	-47	75																
		96-107	-48	74																
		108-120	-49	73																
		121-135	-50	72																
		136-151	-51	71																
		152-170	-52	70																
		171-191	-53	69																
		192-214	-54	68																
		215-240	-55	67																
		241-269	-56	66																
		270-302	-57	65																
		303-339	-58	64																
		340-381	-59	63																
		382-427	-60	62																
		428-480	-61	61																
Distance attenuation is calculated based on standard acoustic principle and Practices																				

Construction Noise :		Foundation Construction								
Scenario:		F3								
		No Mitigation								
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL						
1 Generator	101	1	108							
Bar Bender and Cutter	021	1	90	108						
Planer	171	1	117	118						
Saw, Circular	201	1	108	118						
Total SWL				118.0						
2 Distance Attenuation		m		Attenuation (dB)						
Distance from source to NSR		(see below for various distance)								
(see below for various distance)		Distance Attenuation, dB(A)		0						
3 Facade effect		Yes		Attenuation (dB)						
				3						
		Barrier Correction		3						
		Consturction Noise Level = 1+2+3 dB(A)		121.0						
		Distance	Attenuation	Noise Level						
		4	-20	101						
		5	-22	99						
		6	-24	97						
		7	-25	96						
		8	-26	95						
		9	-27	94						
		10	-28	93						
		11	-29	92						
		12	-30	91						
		13	-30	91						
		14-15	-31	90						
		16-17	-32	89						
		18-19	-33	88						
		20-21	-34	87						
		22-24	-35	86						
		25-26	-36	85						
		27-30	-37	84						
		31-33	-38	83						
		34-38	-39	82						
		39-42	-40	81						
		43-48	-41	80						
		49-53	-42	79						
		54-60	-43	78						
		61-67	-44	77						
		68-76	-45	76						
		77-85	-46	75						
		86-95	-47	74						
		96-107	-48	73						
		108-120	-49	72						
		121-135	-50	71						
		136-151	-51	70						
		152-170	-52	69						
		171-191	-53	68						
		192-214	-54	67						
		215-240	-55	66						
		241-269	-56	65						
		270-302	-57	64						
		303-339	-58	63						
		340-375	-59	62						
		376-427	-60	61						
		428-480	-61	60						
Distance attenuation is calculated based on standard acoustic principle and Practices										

Construction Noise : Foundation Construction									
Scenario: F4									
		No Mitigation							
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL					
1 Concrete Lorry Mixer	044	1	109						
Concrete Pump	047	1	109	112					
Poker	170	1	113	116					
Total SWL				115.5					
2 Distance Attenuation		m	Attenuation (dB)						
Distance from source to NSR (see below for various distance)									
Distance Attenuation, dB(A)				0					
				Attenuation (dB)					
3 Facade effect		Yes	3						
Barrier Correction				3					
Construction Noise Level = 1+2+3 dB(A)				118.5					
		Distance	Attenuation	Noise Level					
		4	-20	99					
		5	-22	97					
		6	-24	95					
		7	-25	94					
		8	-26	93					
		9	-27	92					
		10	-28	91					
		11	-29	90					
		12	-30	89					
		13	-30	89					
		14	-31	88					
		15-16	-32	87					
		17-18	-33	86					
		19-20	-34	85					
		21-23	-35	84					
		24-26	-36	83					
		27-29	-37	82					
		30-32	-38	81					
		33-36	-39	80					
		37-41	-40	79					
		42-46	-41	78					
		47-51	-42	77					
		52-58	-43	76					
		59-65	-44	75					
		66-74	-45	74					
		75-82	-46	73					
		83-92	-47	72					
		93-103	-48	71					
		104-116	-49	70					
		117-130	-50	69					
		131-146	-51	68					
		147-164	-52	67					
		165-184	-53	66					
		189-206	-54	65					
		207-230	-55	64					
		231-260	-56	63					
		261-291	-57	62					
		292-326	-58	61					
		327-367	-59	60					
		368-412	-60	59					
		413-462	-61	58					
Distance attenuation is calculated based on standard acoustic principle and Practices									

Construction Noise : Slope Stabilisation									
Scenario: SS1									
		No Mitigation							
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL					
1 Rock Dowel Drill	183	1	116						
Compressor	003	1	104	116					
Total SWL				116.3					
2 Distance Attenuation		m	Attenuation (dB)						
Distance from source to NSR		(see below for various distance)							
(see below for various distance)		Distance Attenuation, dB(A)		0					
			Attenuation (dB)						
3 Facade effect		Yes	3						
		Barrier Correction		3					
Consturction Noise Level = 1+2+3 dB(A)				119.3					
		Distance	Attenuation	Noise Level					
		4	-20	99					
		5	-22	97					
		6	-24	95					
		7	-25	94					
		8	-26	93					
		9	-27	92					
		10	-28	91					
		11	-29	90					
		12	-30	89					
		13	-30	89					
		14	-31	88					
		15-16	-32	87					
		17-18	-33	86					
		19-21	-34	85					
		22-23	-35	84					
		24-26	-36	83					
		27-29	-37	82					
		30-32	-38	81					
		33-37	-39	80					
		38-41	-40	79					
		42-47	-41	78					
		48-52	-42	77					
		53-59	-43	76					
		60-66	-44	75					
		67-74	-45	74					
		75-83	-46	73					
		84-93	-47	72					
		94-105	-48	71					
		106-118	-49	70					
		119-133	-50	69					
		134-152	-51	68					
		153-166	-52	67					
		167-187	-53	66					
		188-211	-54	65					
		212-235	-55	64					
		236-266	-56	63					
		267-297	-57	62					
		298-334	-58	61					
		335-375	-59	60					
		376-421	-60	59					
		422-475	-61	58					
Distance attenuation is calculated based on standard acoustic principle and Practices									

Construction Noise : Slope Remediation Works									
Scenario: SR1									
		No Mitigation							
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL					
1 Excavator	081	1	112						
Dump Truck	067	1	117	118					
Total SWL				118.2					
2 Distance Attenuation		m	Attenuation (dB)						
Distance from source to NSR		(see below for various distance)							
(see below for various distance)		Distance Attenuation, dB(A)		0					
			Attenuation (dB)						
3 Facade effect		Yes	3						
		Barrier Correction		3					
Consturction Noise Level = 1+2+3 dB(A)				121.2					
		Distance	Attenuation	Noise Level					
		4	-20	101					
		5	-22	99					
		6	-24	97					
		7	-25	96					
		8	-26	95					
		9	-27	94					
		10	-28	93					
		11	-29	92					
		12	-30	91					
		13	-30	91					
		14	-31	90					
		15-16	-32	89					
		17-18	-33	88					
		19-21	-34	87					
		22-23	-35	86					
		24-26	-36	85					
		27-29	-37	84					
		30-32	-38	83					
		33-37	-39	82					
		38-41	-40	81					
		42-47	-41	80					
		48-52	-42	79					
		53-59	-43	78					
		60-66	-44	77					
		67-74	-45	76					
		75-83	-46	75					
		84-93	-47	74					
		94-105	-48	73					
		106-118	-49	72					
		119-132	-50	71					
		133-148	-51	70					
		149-166	-52	69					
		167-187	-53	68					
		188-210	-54	67					
		211-234	-55	66					
		235-264	-56	65					
		265-297	-57	64					
		298-334	-58	63					
		335-375	-59	62					
		376-421	-60	61					
		422-475	-61	60					
Distance attenuation is calculated based on standard acoustic principle and Practices									

Construction Noise : Slope Stabilisation									
Scenario: SS1									
		No Mitigation							
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL					
1 Rock Dowel Drill	183	1	116						
Compressor	003	1	104	116					
Total SWL				116.3					
2 Distance Attenuation		m	Attenuation (dB)						
Distance from source to NSR		(see below for various distance)							
(see below for various distance)		Distance Attenuation, dB(A)		0					
			Attenuation (dB)						
3 Facade effect		Yes	3						
		Barrier Correction		3					
Consturction Noise Level = 1+2+3 dB(A)				119.3					
		Distance	Attenuation	Noise Level					
		4	-20	99					
		5	-22	97					
		6	-24	95					
		7	-25	94					
		8	-26	93					
		9	-27	92					
		10	-28	91					
		11	-29	90					
		12	-30	89					
		13	-30	89					
		14	-31	88					
		15-16	-32	87					
		17-18	-33	86					
		19-21	-34	85					
		22-23	-35	84					
		24-26	-36	83					
		27-29	-37	82					
		30-32	-38	81					
		33-37	-39	80					
		38-41	-40	79					
		42-47	-41	78					
		48-52	-42	77					
		53-59	-43	76					
		60-66	-44	75					
		67-74	-45	74					
		75-83	-46	73					
		84-93	-47	72					
		94-105	-48	71					
		106-118	-49	70					
		119-132	-50	69					
		133-148	-51	68					
		149-166	-52	67					
		167-187	-53	66					
		188-210	-54	65					
		211-234	-55	64					
		235-264	-56	63					
		265-297	-57	62					
		298-334	-58	61					
		335-375	-59	60					
		376-421	-60	59					
		422-475	-61	58					
Distance attenuation is calculated based on standard acoustic principle and Practices									

Construction Noise : Construction of Permanent Noise Barrier												
Scenario: NB1A												
Name	CNP no.	No Mitigation			Silenced Equipment			Barrier constructed + Silenced Equipment				
		QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL		
1 Breaker, Hand Held	026	1	114		1	114		1	104			
Air Compressor	002	1	102	114	1	102	114	1	92	104		
			Total SWL	114.3		Total SWL	114.3		Total SWL	104.3		
2 Distance Attenuation	m	Attenuation (dB)			m	Attenuation (dB)			m	Attenuation (dB)		
(see below for various distance)												
(see below for various distance)												
Distance Attenuation, dB(A)												
0												
Distance Attenuation, dB(A)												
0												
Distance Attenuation, dB(A)												
0												
Attenuation (dB)												
3												
3 Facade effect	Yes	Barrier Correction			Yes	Barrier Correction			Yes	Barrier Correction		
3												
3												
3												
Consturction Noise Level = 1+2+3												
dB(A)												
117.3												
Consturction Noise Level = 1+2+3												
dB(A)												
117.3												
Consturction Noise Level = 1+2+3												
dB(A)												
107.3												
	Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level	
	4	-20	97		4	-20	97		4	-20	87	
	5	-22	95		5	-22	95		5	-22	85	
	6	-24	93		6	-24	93		6	-24	83	
	7	-25	92		7	-25	92		7	-25	82	
	8	-26	91		8	-26	91		8	-26	81	
	9	-27	90		9	-27	90		9	-27	80	
	10	-28	89		10	-28	89		10	-28	79	
	11	-29	88		11	-29	88		11	-29	78	
	12	-30	88		12	-30	87		12	-30	77	
	13	-30	87		13	-30	87		13	-30	77	
	14-15	-31	86		14-15	-31	86		14	-31	76	
	16-17	-32	85		16-17	-32	85		15-17	-32	75	
	18-19	-33	84		18-19	-33	84		18-19	-33	74	
	20-21	-34	83		20-21	-34	83		20-21	-34	73	
	22-24	-35	82		22-24	-35	82		22-23	-35	72	
	25-27	-36	81		25-27	-36	81		24-25	-36	71	
	28-30	-37	80		28-30	-37	80		26-30	-37	70	
	31-34	-38	79		31-34	-38	79		31-34	-38	69	
	35-38	-39	78		35-38	-39	78		35-38	-39	68	
	39-43	-40	77		39-43	-40	77		39-43	-40	67	
	44-48	-41	76		44-48	-41	76		44-46	-41	66	
	49-54	-42	75		49-54	-42	75		47-54	-42	65	
	55-61	-43	74		55-61	-43	74		55-61	-43	64	
	62-68	-44	73		62-68	-44	73		62-68	-44	63	
	69-77	-45	72		69-77	-45	72		69-77	-45	62	
	78-86	-46	71		78-86	-46	71		78-86	-46	61	
	87-97	-47	70		87-97	-47	70		87-97	-47	60	
	98-109	-48	69		98-109	-48	69		98-109	-48	59	
	110-122	-49	68		110-122	-49	68		110-122	-49	58	
	123-137	-50	67		123-137	-50	67		123-137	-50	57	
	138-154	-51	66		138-154	-51	66		138-154	-51	56	
	155-173	-52	65		155-173	-52	65		155-173	-52	55	
	174-194	-53	64		174-194	-53	64		174-194	-53	54	
	195-217	-54	63		195-217	-54	63		195-217	-54	53	
	218-244	-55	62		218-244	-55	62		218-244	-55	52	
	245-274	-56	61		245-274	-56	61		245-274	-56	51	
	275-307	-57	60		275-307	-57	60		275-307	-57	50	
	308-345	-58	59		308-345	-58	59		308-345	-58	49	
	346-387	-59	58		346-387	-59	58		346-387	-59	48	
	388-434	-60	57		388-434	-60	57		388-434	-60	47	
	435-487	-61	56		435-487	-61	56		435-487	-61	46	
Distance attenuation is calculated based on standard acoustic principle and Practices												

Construction Noise : Construction of Permanent Noise Barrier												
Scenario: NB1B												
Name	CNP no.	No Mitigation			Silenced Equipment			Barrier constructed + Silenced Equipment				
		QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL		
1 Excavator	081	1	112		1	107		1	102			
Water Pump	282	1	103	113	1	103	108	1	93	103		
			Total SWL	112.5		Total SWL	108.5		Total SWL	102.5		
2 Distance Attenuation	m	Attenuation (dB)			m	Attenuation (dB)			m	Attenuation (dB)		
		(see below for various distance)				(see below for various distance)				(see below for various distance)		
(see below for various distance)		Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)		
		Attenuation (dB)				Attenuation (dB)				Attenuation (dB)		
3 Facade effect	Yes	3			Yes	3			Yes	3		
		Barrier Correction			3	Barrier Correction			3	Barrier Correction		
		Consturction Noise Level = 1+2+3 dB(A)			115.5	Consturction Noise Level = 1+2+3 dB(A)			111.5	Consturction Noise Level = 1+2+3 dB(A)		
		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level
		4	-20	96		4	-20	91		4	-20	86
		5	-22	94		5	-22	89		5	-22	84
		6	-24	92		6	-24	87		6	-24	82
		7	-25	91		7	-25	86		7	-25	81
		8	-26	90		8	-26	85		8	-26	80
		9	-27	89		9	-27	84		9	-27	79
		10	-28	88		10	-28	83		10	-28	78
		11	-29	87		11	-29	82		11	-29	77
		12	-30	86		12	-30	81		12	-30	76
		13	-30	85		13	-30	80		13	-30	75
		14	-31	85		14	-31	80		14	-31	75
		15	-32	84		15	-32	79		15	-32	74
		16-17	-33	83		16-17	-33	78		16-17	-33	73
		18-19	-34	82		18-19	-34	77		18-19	-34	72
		20-22	-35	81		20-22	-35	76		20-22	-35	71
		23-25	-36	80		23-25	-36	75		23-25	-36	70
		26-28	-37	79		26-28	-37	74		26-28	-37	69
		29-31	-38	78		29-31	-38	73		29-31	-38	68
		32-35	-39	77		32-35	-39	72		32-35	-39	67
		36-39	-40	76		36-39	-40	71		36-39	-40	66
		40-44	-41	75		40-44	-41	70		40-44	-41	65
		45-50	-42	74		45-50	-42	69		45-50	-42	64
		51-56	-43	73		51-56	-43	68		51-56	-43	63
		57-63	-44	72		57-63	-44	67		57-63	-44	62
		64-70	-45	71		64-70	-45	66		64-70	-45	61
		71-79	-46	70		71-79	-46	65		71-79	-46	60
		80-89	-47	69		80-89	-47	64		80-89	-47	59
		90-100	-48	68		90-100	-48	63		90-100	-48	58
		101-112	-49	67		101-112	-49	62		101-112	-49	57
		113-126	-50	66		113-126	-50	61		113-126	-50	56
		127-141	-51	65		127-141	-51	60		127-141	-51	55
		142-158	-52	64		142-158	-52	59		142-158	-52	54
		159-178	-53	63		159-178	-53	58		159-178	-53	53
		179-199	-54	62		179-199	-54	57		179-199	-54	52
		200-224	-55	61		200-224	-55	56		200-224	-55	51
		225-251	-56	60		225-251	-56	55		225-251	-56	50
		252-282	-57	59		252-282	-57	54		252-282	-57	49
		283-316	-58	58		283-316	-58	53		283-316	-58	48
		317-355	-59	57		317-355	-59	52		317-355	-59	47
		356-398	-60	56		356-398	-60	51		356-398	-60	46
		399-447	-61	55		399-447	-61	50		399-447	-61	45
Distance attenuation is calculated based on standard acoustic principle and Practices												

NB1C

Construction Noise : Construction of Permanent Noise Barrier														
Scenario: NB1C														
Name	CNP no.	No Mitigation			Silenced Equipment			Barrier constructed + Silenced Equipment						
		QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL				
1 Lorry	141	1	112	112.0	1	107	107.0	1	102	102.0				
		Total SWL			Total SWL			Total SWL						
2 Distance Attenuation	m	Attenuation (dB)			m	Attenuation (dB)			m	Attenuation (dB)				
(see below for various distance)														
(see below for various distance)														
(see below for various distance)														
Distance Attenuation, dB(A)				0	Distance Attenuation, dB(A)				0	Distance Attenuation, dB(A)				0
Attenuation (dB)														
Attenuation (dB)														
Attenuation (dB)														
3 Facade effect	Yes	3			Yes	3			Yes	3				
Barrier Correction				3	Barrier Correction				3	Barrier Correction				3
Construction Noise Level = 1+2+3 dB(A)				115.0	Construction Noise Level = 1+2+3 dB(A)				110.0	Construction Noise Level = 1+2+3 dB(A)				105.0
Distance			Attenuation	Noise Level	Distance			Attenuation	Noise Level	Distance			Attenuation	Noise Level
4			-20	95	4			-20	90	4			-20	85
5			-22	93	5			-22	88	5			-22	83
6			-24	91	6			-24	86	6			-24	81
7			-25	90	7			-25	85	7			-25	80
8			-26	89	8			-26	84	8			-26	79
9			-27	88	9			-27	83	9			-27	78
10			-28	87	10			-28	82	10			-28	77
11			-29	86	11			-29	81	11			-29	76
12			-30	85	12			-30	80	12			-30	75
13			-30	85	13			-30	80	13			-30	75
14			-31	84	14			-31	79	14			-31	74
15-16			-32	83	15-16			-32	78	15-16			-32	73
17-18			-33	82	17-18			-33	77	17-18			-33	72
19-21			-34	81	19-21			-34	76	19-21			-34	71
22-23			-35	80	22-23			-35	75	22-23			-35	70
24-26			-36	79	24-26			-36	74	24-26			-36	69
27-29			-37	78	27-29			-37	73	27-29			-37	68
30-33			-38	77	30-33			-38	72	30-33			-38	67
34-37			-39	76	34-37			-39	71	34-37			-39	66
38-42			-40	75	38-42			-40	70	38-42			-40	65
43-47			-41	74	43-47			-41	69	43-47			-41	64
48-53			-42	73	48-53			-42	68	48-53			-42	63
54-59			-43	72	54-59			-43	67	54-59			-43	62
60-66			-44	71	60-66			-44	66	60-66			-44	61
67-74			-45	70	67-74			-45	65	67-74			-45	60
75-84			-46	69	75-84			-46	64	75-84			-46	59
85-94			-47	68	85-94			-47	63	85-94			-47	58
95-105			-48	67	95-105			-48	62	95-105			-48	57
106-118			-49	66	106-118			-49	61	106-118			-49	56
119-133			-50	65	119-133			-50	60	119-133			-50	55
134-149			-51	64	134-149			-51	59	134-149			-51	54
150-167			-52	63	150-167			-52	58	150-167			-52	53
168-188			-53	62	168-188			-53	57	168-188			-53	52
189-211			-54	61	189-211			-54	56	189-211			-54	51
212-237			-55	60	212-237			-55	55	212-237			-55	50
238-266			-56	59	238-266			-56	54	238-266			-56	49
267-298			-57	58	267-298			-57	53	267-298			-57	48
299-334			-58	57	299-334			-58	52	299-334			-58	47
335-375			-59	56	335-375			-59	51	335-375			-59	46
376-421			-60	55	376-421			-60	50	376-421			-60	45
422-473			-61	54	422-473			-61	49	422-473			-61	44
Distance attenuation is calculated based on standard acoustic principle and Practices														

Construction Noise : Construction of Permanent Noise Barrier																		
Scenario: NB2																		
No Mitigation				Silenced Equipment				Barrier constructed + Silenced Equipment										
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL							
1 Mini Piling Rig		1	113			1	113		1	103								
Water Pump	282	1	103	113	282	1	103	113	1	93	103							
Total SWL				113.4	Total SWL				113.4	Total SWL								
2 Distance Attenuation				m	Attenuation (dB)	m				Attenuation (dB)	m				Attenuation (dB)			
Distance from source to NSR				(see below for various distance)				(see below for various distance)				(see below for various distance)						
(see below for various distance)				Distance Attenuation, dB(A)				0	Distance Attenuation, dB(A)				0	Distance Attenuation, dB(A)				0
3 Facade effect				Yes	Attenuation (dB)	Yes				Attenuation (dB)	Yes				Attenuation (dB)			
Barrier Correction				3	Barrier Correction				3	Barrier Correction				3				
Consturction Noise Level = 1+2+3				Consturction Noise Level = 1+2+3				Consturction Noise Level = 1+2+3										
dB(A)				116.4	dB(A)				116.4	dB(A)				106.4				
			Distance	Attenuation	Noise Level				Distance	Attenuation	Noise Level				Distance	Attenuation	Noise Level	
			4	-20	96				4	-20	96				4	-20	86	
			5	-22	94				5	-22	94				5	-22	84	
			6	-24	92				6	-24	92				6	-24	82	
			7	-25	91				7	-25	91				7	-25	81	
			8	-26	90				8	-26	90				8	-26	80	
			9	-27	89				9	-27	89				9	-27	79	
			10	-28	88				10	-28	88				10	-28	78	
			11	-29	87				11	-29	87				11	-29	77	
			12	-30	86				12	-30	86				12	-30	76	
			13	-30	86				13	-30	86				13	-30	76	
			14-15	-31	85				14-15	-31	85				14-15	-31	75	
			16-17	-32	84				16-17	-32	84				16-17	-32	74	
			18-19	-33	83				18-19	-33	83				18-19	-33	73	
			20-21	-34	82				20-21	-34	82				20-21	-34	72	
			22-24	-35	81				22-24	-35	81				22-24	-35	71	
			25-27	-36	80				25-27	-36	80				25-27	-36	70	
			28-31	-37	79				28-31	-37	79				28-31	-37	69	
			32-35	-38	78				32-35	-38	78				32-35	-38	68	
			36-39	-39	77				36-39	-39	77				36-39	-39	67	
			40-43	-40	76				40-43	-40	76				40-43	-40	66	
			44-48	-41	75				44-48	-41	75				44-48	-41	65	
			49-54	-42	74				49-54	-42	74				49-54	-42	64	
			55-61	-43	73				55-61	-43	73				55-61	-43	63	
			62-68	-44	72				62-68	-44	72				62-68	-44	62	
			69-77	-45	71				69-77	-45	71				69-77	-45	61	
			78-86	-46	70				78-86	-46	70				78-86	-46	60	
			87-97	-47	69				87-97	-47	69				87-97	-47	59	
			98-109	-48	68				98-109	-48	68				98-109	-48	58	
			110-122	-49	67				110-122	-49	67				110-122	-49	57	
			123-137	-50	66				123-137	-50	66				123-137	-50	56	
			138-154	-51	65				138-154	-51	65				138-154	-51	55	
			155-173	-52	64				155-173	-52	64				155-173	-52	54	
			174-194	-53	63				174-194	-53	63				174-194	-53	53	
			195-217	-54	62				195-217	-54	62				195-217	-54	52	
			218-244	-55	61				218-244	-55	61				218-244	-55	51	
			245-274	-56	60				245-274	-56	60				245-274	-56	50	
			275-307	-57	59				275-307	-57	59				275-307	-57	49	
			308-345	-58	58				308-345	-58	58				308-345	-58	48	
			346-387	-59	57				346-387	-59	57				346-387	-59	47	
			388-434	-60	56				388-434	-60	56				388-434	-60	46	
			435-487	-61	55				435-487	-61	55				435-487	-61	45	
Distance attenuation is calculated based on standard acoustic principle and Practices																		

Construction Noise : Construction of Permanent Noise Barrier														
Scenario: NB3														
Name	CNP no.	No Mitigation			CNP no.	Silenced Equipment			Barrier constructed + Silenced Equipment					
		QTY	SWL (dB(A))	Cumulative SWL		QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL			
1 Concrete Lorry Mixer	044	1	109		044	1	104		1	99				
Poker	170	1	113	114	170	1	108	109	1	98	102			
Water Pump	282	1	103	115	282	1	103	110	1	93	102			
			Total SWL	114.8			Total SWL	110.3		Total SWL	102.1			
2 Distance Attenuation	m	Attenuation (dB)			m	Attenuation (dB)			m	Attenuation (dB)				
Distance from source to NSR	(see below for various distance)				(see below for various distance)				(see below for various distance)					
(see below for various distance)	Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)			0		
3 Facade effect	Yes	Attenuation (dB)			Yes	Attenuation (dB)			Yes	Attenuation (dB)				
		Barrier Correction			3	Barrier Correction			3	Barrier Correction			3	
Consturction Noise Level = 1+2+3				117.8	Consturction Noise Level = 1+2+3				113.3	Consturction Noise Level = 1+2+3				105.1
	Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level			
	4	-20	98		4	-20	93		4	-20	85			
	5	-22	96		5	-22	91		5	-22	83			
	6	-24	94		6	-24	89		6	-24	81			
	7	-25	93		7	-25	88		7	-25	80			
	8	-26	92		8	-26	87		8	-26	79			
	9	-27	91		9	-27	86		9	-27	78			
	10	-28	90		10	-28	85		10	-28	77			
	11	-29	89		11	-29	84		11	-29	76			
	12	-30	88		12	-30	83		12	-30	75			
	13	-30	87		13	-30	83		13	-30	75			
	14	-31	87		14	-31	82		14	-31	74			
	15	-32	86		15	-32	81		15	-32	74			
	16-18	-33	85		16-18	-33	80		16-18	-33	72			
	19-20	-34	84		19-20	-34	79		19-20	-34	71			
	21-23	-35	83		21-23	-35	78		21-24	-35	70			
	24-25	-36	82		24-25	-36	77		25-26	-36	69			
	26-28	-37	81		26-28	-37	76		27-28	-37	68			
	29-31	-38	80		29-31	-38	75		29-31	-38	67			
	32-35	-39	79		32-35	-39	74		32-35	-39	66			
	36-40	-40	78		36-40	-40	73		36-40	-40	65			
	41-46	-41	77		41-46	-41	72		41-47	-41	64			
	47-50	-42	76		47-50	-42	71		48-50	-42	63			
	51-56	-43	75		51-56	-43	70		51-56	-43	62			
	57-63	-44	74		57-63	-44	69		57-63	-44	61			
	64-70	-45	73		64-70	-45	68		64-70	-45	60			
	71-79	-46	72		71-79	-46	67		71-79	-46	59			
	80-89	-47	71		80-89	-47	66		80-89	-47	58			
	90-100	-48	70		90-100	-48	65		90-100	-48	57			
	101-112	-49	69		101-112	-49	64		101-112	-49	56			
	113-126	-50	68		113-126	-50	63		113-126	-50	55			
	127-141	-51	67		127-141	-51	62		127-141	-51	54			
	142-158	-52	66		142-158	-52	61		142-158	-52	53			
	159-178	-53	65		159-178	-53	60		159-178	-53	52			
	179-199	-54	64		179-199	-54	59		179-199	-54	51			
	200-224	-55	63		200-224	-55	58		200-224	-55	50			
	225-251	-56	62		225-251	-56	57		225-251	-56	49			
	252-282	-57	61		252-282	-57	56		252-282	-57	48			
	283-316	-58	60		283-316	-58	55		283-316	-58	47			
	317-355	-59	59		317-355	-59	54		317-355	-59	46			
	356-398	-60	58		356-398	-60	53		356-398	-60	45			
	399-447	-61	57		399-447	-61	52		399-447	-61	44			
Distance attenuation is calculated based on standard acoustic principle and Practices														

Construction Noise		Construction of Permanent Noise Barrier																		
Scenario: NB4																				
		No Mitigation																		
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL																
1 Compactor Vibratory	050	1	105																	
				Total SWL	105.0															
2 Distance Attenuation		m	Attenuation (dB)																	
Distance from source to NSR		(see below for various distance)																		
(see below for various distance)		Distance Attenuation, dB(A)			0															
		Attenuation (dB)																		
3 Facade effect		Yes	3																	
				Barrier Correction	3															
				Consturction Noise Level = 1+2+3																
				dB(A)	108.0															
		Distance	Attenuation	Noise Level																
		4	-20	88																
		5	-22	86																
		6	-24	84																
		7	-25	83																
		8	-26	82																
		9	-27	81																
		10	-28	80																
		11	-29	79																
		12	-30	78																
		13	-30	78																
		14	-31	77																
		15-16	-32	76																
		17-18	-33	75																
		19-21	-34	74																
		22-23	-35	73																
		24-26	-36	72																
		27-29	-37	71																
		30-33	-38	70																
		34-37	-39	69																
		38-42	-40	68																
		43-47	-41	67																
		48-53	-42	66																
		54-59	-43	65																
		60-66	-44	64																
		67-74	-45	63																
		75-84	-46	62																
		85-94	-47	61																
		95-105	-48	60																
		106-118	-49	59																
		119-133	-50	58																
		134-149	-51	57																
		150-167	-52	56																
		168-188	-53	55																
		189-211	-54	54																
		212-237	-55	53																
		238-266	-56	52																
		267-298	-57	51																
		299-334	-58	50																
		335-375	-59	49																
		376-421	-60	48																
		422-473	-61	47																
Distance attenuation is calculated based on standard acoustic principle and Practices																				

Construction Noise : Construction of Permanent Noise Barrier																	
Scenario: NB4																	
No Mitigation				Silenced Equipment				Barrier constructed + Silenced Equipment									
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL						
1	Lorry	141	112	112.0	050	1	107	107.0	1	102	102.0						
Total SWL				112.0	Total SWL				107.0	Total SWL				102.0			
2 Distance Attenuation				m	Attenuation (dB)	m				Attenuation (dB)	m				Attenuation (dB)		
Distance from source to NSR				(see below for various distance)				Distance from source to NSR				(see below for various distance)					
(see below for various distance)				Distance Attenuation, dB(A)	0	Distance Attenuation, dB(A)				0	Distance Attenuation, dB(A)				0		
3 Facade effect				Yes	3	Yes				3	Yes				3		
Barrier Correction				3	Barrier Correction				3	Barrier Correction				3			
Consturction Noise Level = 1+2+3				dB(A)	115.0	Consturction Noise Level = 1+2+3				dB(A)	110.0	Consturction Noise Level = 1+2+3				dB(A)	105.0
Distance				Attenuation	Noise Level	Distance				Attenuation	Noise Level	Distance				Attenuation	Noise Level
4				-20	95	4				-20	90	4				-20	85
5				-22	93	5				-22	88	5				-22	83
6				-24	91	6				-24	86	6				-24	81
7				-25	90	7				-25	85	7				-25	80
8				-26	89	8				-26	84	8				-26	79
9				-27	88	9				-27	83	9				-27	78
10				-28	87	10				-28	82	10				-28	77
11				-29	86	11				-29	81	11				-29	76
12				-30	85	12				-30	80	12				-30	75
13				-30	85	13				-30	80	13				-30	75
14				-31	84	14				-31	79	14				-31	74
15-16				-32	83	15-16				-32	78	15-16				-32	73
17-18				-33	82	17-18				-33	77	17-18				-33	72
19-21				-34	81	19-21				-34	76	19-21				-34	71
22-23				-35	80	22-23				-35	75	22-23				-35	70
24-26				-36	79	24-26				-36	74	24-26				-36	69
27-29				-37	78	27-29				-37	73	27-29				-37	68
30-33				-38	77	30-33				-38	72	30-33				-38	67
34-37				-39	76	34-37				-39	71	34-37				-39	66
38-42				-40	75	38-42				-40	70	38-42				-40	65
43-47				-41	74	43-47				-41	69	43-47				-41	64
48-53				-42	73	48-53				-42	68	48-53				-42	63
54-59				-43	72	54-59				-43	67	54-59				-43	62
60-66				-44	71	60-66				-44	66	60-66				-44	61
67-74				-45	70	67-74				-45	65	67-74				-45	60
75-84				-46	69	75-84				-46	64	75-84				-46	59
85-94				-47	68	85-94				-47	63	85-94				-47	58
95-105				-48	67	95-105				-48	62	95-105				-48	57
106-118				-49	66	106-118				-49	61	106-118				-49	56
119-133				-50	65	119-133				-50	60	119-133				-50	55
134-149				-51	64	134-149				-51	59	134-149				-51	54
150-167				-52	63	150-167				-52	58	150-167				-52	53
168-188				-53	62	168-188				-53	57	168-188				-53	52
189-211				-54	61	189-211				-54	56	189-211				-54	51
212-237				-55	60	212-237				-55	55	212-237				-55	50
238-266				-56	59	238-266				-56	54	238-266				-56	49
267-298				-57	58	267-298				-57	53	267-298				-57	48
299-334				-58	57	299-334				-58	52	299-334				-58	47
335-375				-59	56	335-375				-59	51	335-375				-59	46
376-421				-60	55	376-421				-60	50	376-421				-60	45
422-473				-61	54	422-473				-61	49	422-473				-61	44
Distance attenuation is calculated based on standard acoustic principle and Practices																	

Construction Noise : Construction of Permanent Noise Barrier																	
Scenario: NB5																	
No Mitigation				Silenced Equipment				Barrier constructed + Silenced Equipment									
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL						
1	Lorry	141	1	112		141	1	107		1	102						
Total SWL				112.0	Total SWL				107.0	Total SWL				102.0			
2 Distance Attenuation				m	Attenuation (dB)	m				Attenuation (dB)	m				Attenuation (dB)		
Distance from source to NSR				(see below for various distance)				Distance from source to NSR				(see below for various distance)					
(see below for various distance)				Distance Attenuation, dB(A)	0	Distance Attenuation, dB(A)				0	Distance Attenuation, dB(A)				0		
3 Facade effect				Yes	3	Yes				3	Yes				3		
Barrier Correction				3	Barrier Correction				3	Barrier Correction				3			
Consturction Noise Level = 1+2+3				dB(A)	115.0	Consturction Noise Level = 1+2+3				dB(A)	110.0	Consturction Noise Level = 1+2+3				dB(A)	105.0
		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level					
		4	-20	95		4	-20	90		4	-20	85					
		5	-22	93		5	-22	88		5	-22	83					
		6	-24	91		6	-24	86		6	-24	81					
		7	-25	90		7	-25	85		7	-25	80					
		8	-26	89		8	-26	84		8	-26	79					
		9	-27	88		9	-27	83		9	-27	78					
		10	-28	87		10	-28	82		10	-28	77					
		11	-29	86		11	-29	81		11	-29	76					
		12	-30	85		12	-30	80		12	-30	75					
		13	-30	85		13	-30	80		13	-30	75					
		14	-31	84		14	-31	79		14	-31	74					
		15-16	-32	83		15-16	-32	78		15-16	-32	73					
		17-18	-33	82		17-18	-33	77		17-18	-33	72					
		19-21	-34	81		19-21	-34	76		19-21	-34	71					
		22-23	-35	80		22-23	-35	75		22-23	-35	70					
		24-26	-36	79		24-26	-36	74		24-26	-36	69					
		27-29	-37	78		27-29	-37	73		27-29	-37	68					
		30-33	-38	77		30-33	-38	72		30-33	-38	67					
		34-37	-39	76		34-37	-39	71		34-37	-39	66					
		38-42	-40	75		38-42	-40	70		38-42	-40	65					
		43-47	-41	74		43-47	-41	69		43-47	-41	64					
		48-53	-42	73		48-53	-42	68		48-53	-42	63					
		54-59	-43	72		54-59	-43	67		54-59	-43	62					
		60-66	-44	71		60-66	-44	66		60-66	-44	61					
		67-74	-45	70		67-74	-45	65		67-74	-45	60					
		75-84	-46	69		75-84	-46	64		75-84	-46	59					
		85-94	-47	68		85-94	-47	63		85-94	-47	58					
		95-105	-48	67		95-105	-48	62		95-105	-48	57					
		106-118	-49	66		106-118	-49	61		106-118	-49	56					
		119-133	-50	65		119-133	-50	60		119-133	-50	55					
		134-149	-51	64		134-149	-51	59		134-149	-51	54					
		150-167	-52	63		150-167	-52	58		150-167	-52	53					
		168-188	-53	62		168-188	-53	57		168-188	-53	52					
		189-211	-54	61		189-211	-54	56		189-211	-54	51					
		212-237	-55	60		212-237	-55	55		212-237	-55	50					
		238-266	-56	59		238-266	-56	54		238-266	-56	49					
		267-298	-57	58		267-298	-57	53		267-298	-57	48					
		299-334	-58	57		299-334	-58	52		299-334	-58	47					
		335-375	-59	56		335-375	-59	51		335-375	-59	46					
		376-421	-60	55		376-421	-60	50		376-421	-60	45					
		422-473	-61	54		422-473	-61	49		422-473	-61	44					
Distance attenuation is calculated based on standard acoustic principle and Practices																	

Construction Noise : Construction of Permanent Noise Barrier												
Scenario: NB5												
No Mitigation				Silenced Equipment				Barrier constructed + Silenced Equipment				
Name	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	CNP no.	QTY	SWL (dB(A))	Cumulative SWL	QTY	SWL (dB(A))	Cumulative SWL	
1 Crane	048	1	112		141	1	107		1	102		
			Total SWL	112.0			Total SWL	107.0			Total SWL	
2 Distance Attenuation		m	Attenuation (dB)			m	Attenuation (dB)			m	Attenuation (dB)	
Distance from source to NSR	(see below for various distance)				(see below for various distance)				(see below for various distance)			
(see below for various distance)	Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)			0	Distance Attenuation, dB(A)			0
			Attenuation (dB)				Attenuation (dB)				Attenuation (dB)	
3 Facade effect		Yes	3			Yes	3			Yes	3	
			Barrier Correction	3			Barrier Correction	3			Barrier Correction	3
	Construction Noise Level = 1+2+3 dB(A)			115.0	Construction Noise Level = 1+2+3 dB(A)			110.0	Construction Noise Level = 1+2+3 dB(A)			105.0
	Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level		Distance	Attenuation	Noise Level	
	4	-20	95		4	-20	90		4	-20	85	
	5	-22	93		5	-22	88		5	-22	83	
	6	-24	91		6	-24	86		6	-24	81	
	7	-25	90		7	-25	85		7	-25	80	
	8	-26	89		8	-26	84		8	-26	79	
	9	-27	88		9	-27	83		9	-27	78	
	10	-28	87		10	-28	82		10	-28	77	
	11	-29	86		11	-29	81		11	-29	76	
	12	-30	85		12	-30	80		12	-30	75	
	13	-30	85		13	-30	80		13	-30	75	
	14	-31	84		14	-31	79		14	-31	74	
	15-16	-32	83		15-16	-32	78		15-16	-32	73	
	17-18	-33	82		17-18	-33	77		17-18	-33	72	
	19-21	-34	81		19-21	-34	76		19-21	-34	71	
	22-23	-35	80		22-23	-35	75		22-23	-35	70	
	24-26	-36	79		24-26	-36	74		24-26	-36	69	
	27-29	-37	78		27-29	-37	73		27-29	-37	68	
	30-33	-38	77		30-33	-38	72		30-33	-38	67	
	34-37	-39	76		34-37	-39	71		34-37	-39	66	
	38-42	-40	75		38-42	-40	70		38-42	-40	65	
	43-47	-41	74		43-47	-41	69		43-47	-41	64	
	48-53	-42	73		48-53	-42	68		48-53	-42	63	
	54-59	-43	72		54-59	-43	67		54-59	-43	62	
	60-66	-44	71		60-66	-44	66		60-66	-44	61	
	67-74	-45	70		67-74	-45	65		67-74	-45	60	
	75-84	-46	69		75-84	-46	64		75-84	-46	59	
	85-94	-47	68		85-94	-47	63		85-94	-47	58	
	95-105	-48	67		95-105	-48	62		95-105	-48	57	
	106-118	-49	66		106-118	-49	61		106-118	-49	56	
	119-133	-50	65		119-133	-50	60		119-133	-50	55	
	134-149	-51	64		134-149	-51	59		134-149	-51	54	
	150-167	-52	63		150-167	-52	58		150-167	-52	53	
	168-188	-53	62		168-188	-53	57		168-188	-53	52	
	189-211	-54	61		189-211	-54	56		189-211	-54	51	
	212-237	-55	60		212-237	-55	55		212-237	-55	50	
	238-266	-56	59		238-266	-56	54		238-266	-56	49	
	267-298	-57	58		267-298	-57	53		267-298	-57	48	
	299-334	-58	57		299-334	-58	52		299-334	-58	47	
	335-375	-59	56		335-375	-59	51		335-375	-59	46	
	376-421	-60	55		376-421	-60	50		376-421	-60	45	
	422-473	-61	54		422-473	-61	49		422-473	-61	44	
Distance attenuation is calculated based on standard acoustic principle and Practices												