

Appendix 5.19

Fixed Plant Noise Assessment

Receiver	ASR	Noise Levels / Criteria, dB(A)			Contributing Noise Sources	Permissible SWL, dB(A)	Propagation					Corrections, dB(A)					SPL, dB(A)	Remarks	
		ANL-5 (a)	Prevailing (b)	Design (c) = min of (a) & (b)			Distance, m	Directivity, deg	Facade	Distance	Directivity	Tonality	Intermittency	Distance	Directivity	Tonality			Intermittency
W-N1A (Yau Ma Tei Catholic Primary School) (No sensitive use during nighttime)																			
Daytime	B	60	64	60	WVSF-1	104	250	0	3	-56	0	3	0	54					
					WVSF-2	104	250	0	3	-56	0	3	0	54					
					WVSF-3	104	305	90	3	-58	-5	3	0	-					
					WVSF-4	104	295	90	3	-57	-5	3	0	48					
					WVSF-5	104	275	0	3	-57	0	3	0	53					
					XRL10A	100	700	180	3	-65	-10	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRL10B	100	665	90	3	-64	-5	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRL10C	100	635	90	3	-64	-5	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRLMKA	100	205	0	3	-54	0	3	0	52	Sourced from EIA-169/2009 - MTR XRL				
					XRLMKB	101	200	0	3	-54	0	3	0	53	Sourced from EIA-169/2009 - MTR XRL				
					XRLS1	99	365	90	3	-59	-5	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
Total SPL, dB(A)															60				
W-N2 (Charming Garden)																			
Daytime	B	60	64	60	WVSF-1	104	330	0	3	-58	0	3	0	-					
					WVSF-2	104	320	0	3	-58	0	3	0	-					
					WVSF-3	104	365	90	3	-59	-5	3	0	-					
					WVSF-4	104	365	180	3	-59	-10	3	0	-					
					WVSF-5	104	345	0	3	-59	0	3	0	-					
					XRL10A	100	710	180	3	-65	-10	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRL10B	100	680	90	3	-65	-5	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRL10C	100	645	90	3	-64	-5	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRLMKA	100	245	0	3	-56	0	3	0	50	Sourced from EIA-169/2009 - MTR XRL				
					XRLMKB	101	245	0	3	-56	0	3	0	51	Sourced from EIA-169/2009 - MTR XRL				
					XRLS1	99	365	0	3	-59	0	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
Total SPL, dB(A)															54				
Night-time	B	50	60	50	WVSF-1	104	330	0	3	-58	0	3	0	-					
					WVSF-2	104	320	0	3	-58	0	3	0	-					
					WVSF-3	104	365	90	3	-59	-5	3	0	-					
					WVSF-4	104	365	180	3	-59	-10	3	0	-					
					WVSF-5	104	345	0	3	-59	0	3	0	-					
					XRL10A	90	710	180	3	-65	-10	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRL10B	90	680	90	3	-65	-5	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRL10C	90	645	90	3	-64	-5	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRLMKA	90	245	0	3	-56	0	3	0	40	Sourced from EIA-169/2009 - MTR XRL				
					XRLMKB	91	245	0	3	-56	0	3	0	41	Sourced from EIA-169/2009 - MTR XRL				
					XRLS1	89	365	0	3	-59	0	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
Total SPL, dB(A)															44				
W-P8 (Planned Hindu Temple) (No sensitive use during nighttime)																			
Daytime	C	65	65	65	WVSF-1	104	360	180	3	-59	-10	3	0	-					
					WVSF-2	104	305	90	3	-58	-5	3	0	-					
					WVSF-3	104	250	0	3	-56	0	3	0	54					
					WVSF-4	104	305	90	3	-58	-5	3	0	-					
					WVSF-5	104	295	0	3	-57	0	3	0	53					
					XRL10A	100	265	180	3	-56	-10	3	0	40	Sourced from EIA-169/2009 - MTR XRL				
					XRL10B	100	235	180	3	-55	-10	3	0	41	Sourced from EIA-169/2009 - MTR XRL				
					XRL10C	100	210	180	3	-54	-10	3	0	42	Sourced from EIA-169/2009 - MTR XRL				
					XRLMKA	100	310	180	3	-58	-10	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRLMKB	101	315	180	3	-58	-10	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRLS1	99	265	180	3	-56	-10	3	0	39	Sourced from EIA-169/2009 - MTR XRL				
Total SPL, dB(A)															57				
W-N14 (Charming Garden Block 1)																			
Daytime	C	65	64	64	WVSF-1	104	270	0	3	-57	0	3	0	53					
					WVSF-2	104	305	0	3	-58	0	3	0	-					
					WVSF-3	104	365	180	3	-59	-10	3	0	-					
					WVSF-4	104	330	90	3	-58	-5	3	0	-					
					WVSF-5	104	325	0	3	-58	0	3	0	-					
					XRL10A	100	825	180	3	-66	-10	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRL10B	100	790	0	3	-66	0	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRL10C	100	760	0	3	-66	0	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRLMKA	100	320	0	3	-58	0	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRLMKB	101	310	0	3	-58	0	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRLS1	99	510	180	3	-62	-10	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
Total SPL, dB(A)															53				
Night-time	C	55	55	55	WVSF-1	104	270	0	3	-57	0	3	0	53					
					WVSF-2	104	305	0	3	-58	0	3	0	-					
					WVSF-3	104	365	180	3	-59	-10	3	0	-					
					WVSF-4	104	330	90	3	-58	-5	3	0	-					
					WVSF-5	104	325	0	3	-58	0	3	0	-					
					XRL10A	90	825	180	3	-66	-10	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRL10B	90	790	0	3	-66	0	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRL10C	90	760	0	3	-66	0	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRLMKA	90	320	0	3	-58	0	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRLMKB	91	310	0	3	-58	0	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
					XRLS1	89	510	180	3	-62	-10	3	0	-	Sourced from EIA-169/2009 - MTR XRL				
Total SPL, dB(A)															53				

Note: Fixed plant noise sources at a distance of over 300m from a noise sensitive receiver are considered to have an insignificant noise impact and are therefore not assessed.

Summary	Daytime, dB(A)	Night-time, dB(A)
WVSF-1	104	104
WVSF-2	104	104
WVSF-3	104	104
WVSF-4	104	104
WVSF-5	104	104

Receiver	ASR	Noise Levels / Criteria, dB(A)			Contributing Noise Sources	Permissible SWL, dB(A)	Propagation		Corrections, dB(A)				SPL, dB(A)	Remarks	
		ANL-5 (a)	Prevailing (b)	Design (c) = min of (a) & (b)			Distance, m	Directivity, deg	Facade	Distance	Directivity	Tonality			Intermittency
M-N1 (Kar Man House)															
Daytime	B	60	73	60	CVSF-1	90	240	180	3	-56	-10	3	0	30	
					CVSF-2	88	230	180	3	-55	-10	3	0	29	
					CVSF-3	88	220	180	3	-55	-10	3	0	29	
					CVSF-4	90	205	90	3	-54	-5	3	0	37	
					CVSF-5	95	175	0	3	-53	0	3	0	48	
					CVSF-6	90	195	90	3	-54	-5	3	0	37	
					CVSF-7	90	210	180	3	-54	-10	3	0	32	
					CVSF-8	90	225	180	3	-55	-10	3	0	31	
					CVSF-9	90	200	0	3	-54	0	3	0	42	
													Total SPL, dB(A)	50	
Night-time	B	50	69	50	CVSF-1	80	240	180	3	-56	-10	3	0	20	
					CVSF-2	78	230	180	3	-55	-10	3	0	19	
					CVSF-3	78	220	180	3	-55	-10	3	0	19	
					CVSF-4	80	205	90	3	-54	-5	3	0	27	
					CVSF-5	85	175	0	3	-53	0	3	0	38	
					CVSF-6	80	195	90	3	-54	-5	3	0	27	
					CVSF-7	80	210	180	3	-54	-10	3	0	22	
					CVSF-8	80	225	180	3	-55	-10	3	0	21	
					CVSF-9	80	200	0	3	-54	0	3	0	32	
													Total SPL, dB(A)	40	
M-N3 SKH (Secondary School) (No sensitive use during nighttime)															
Daytime	B	60	72	60	CVSF-1	90	80	0	3	-46	0	3	0	50	
					CVSF-2	88	95	180	3	-48	-10	3	0	36	
					CVSF-3	88	105	180	3	-48	-10	3	0	36	
					CVSF-4	90	125	180	3	-50	-10	3	0	36	
					CVSF-5	95	95	90	3	-48	-5	3	0	48	
					CVSF-6	90	50	0	3	-42	0	3	0	54	
					CVSF-7	90	55	0	3	-43	0	3	0	53	
					CVSF-8	90	65	0	3	-44	0	3	0	52	
					CVSF-9	90	85	0	3	-47	0	3	0	49	
													Total SPL, dB(A)	59	
M-N6 (Ko Fai House)															
Daytime	B	60	73	60	CVSF-1	90	50	0	3	-42	0	3	0	54	
					CVSF-2	88	45	0	3	-41	0	3	0	53	
					CVSF-3	88	50	0	3	-42	0	3	0	52	
					CVSF-4	90	70	0	3	-45	0	3	0	51	
					CVSF-5	95	95	90	3	-48	-5	3	0	48	
					CVSF-6	90	105	90	3	-48	-5	3	0	43	
					CVSF-7	90	85	90	3	-47	-5	3	0	44	
					CVSF-8	90	65	90	3	-44	-5	3	0	47	
					CVSF-9	90	75	0	3	-46	0	3	0	50	
													Total SPL, dB(A)	60	
Night-time	B	50	69	50	CVSF-1	80	50	0	3	-42	0	3	0	44	
					CVSF-2	78	45	0	3	-41	0	3	0	43	
					CVSF-3	78	50	0	3	-42	0	3	0	42	
					CVSF-4	80	70	0	3	-45	0	3	0	41	
					CVSF-5	85	95	90	3	-48	-5	3	0	38	
					CVSF-6	80	105	90	3	-48	-5	3	0	33	
					CVSF-7	80	85	90	3	-47	-5	3	0	34	
					CVSF-8	80	65	90	3	-44	-5	3	0	37	
					CVSF-9	80	75	0	3	-46	0	3	0	40	
													Total SPL, dB(A)	50	
M-P2 (Planned Residential Building)															
Daytime	B	60	73	60	CVSF-1	90	140	90	3	-51	-5	3	0	40	
					CVSF-2	88	120	0	3	-50	0	3	0	44	
					CVSF-3	88	105	90	3	-48	-5	3	0	41	
					CVSF-4	90	80	0	3	-46	0	3	0	50	
					CVSF-5	95	115	0	3	-49	0	3	0	52	
					CVSF-6	90	155	180	3	-52	-10	3	0	34	
					CVSF-7	90	150	180	3	-52	-10	3	0	34	
					CVSF-8	90	145	180	3	-51	-10	3	0	35	
					CVSF-9	90	120	0	3	-50	0	3	0	46	
													Total SPL, dB(A)	55	
Night-time	B	50	69	50	CVSF-1	80	140	90	3	-51	-5	3	0	30	
					CVSF-2	78	120	0	3	-50	0	3	0	34	
					CVSF-3	78	105	90	3	-48	-5	3	0	31	
					CVSF-4	80	80	0	3	-46	0	3	0	40	
					CVSF-5	85	115	0	3	-49	0	3	0	42	
					CVSF-6	80	155	180	3	-52	-10	3	0	24	
					CVSF-7	80	150	180	3	-52	-10	3	0	24	
					CVSF-8	80	145	180	3	-51	-10	3	0	25	
					CVSF-9	80	120	0	3	-50	0	3	0	36	
													Total SPL, dB(A)	45	

Receiver	ASR	Noise Levels / Criteria, dB(A)			Contributing Noise Sources	Permissible SWL, dB(A)	Propagation		Corrections, dB(A)				SPL, dB(A)	Remarks	
		ANL-5 (a)	Prevailing (b)	Design (c) = min of (a) & (b)			Distance, m	Directivity, deg	Facade	Distance	Directivity	Tonality			Intermittency
M-P3 (Planned Residential Building)															
Daytime	B	60	73	60	CVSF-1	90	165	90	3	-52	-5	3	0	39	
					CVSF-2	88	145	0	3	-51	0	3	0	43	
					CVSF-3	88	130	90	3	-50	-5	3	0	39	
					CVSF-4	90	105	0	3	-48	0	3	0	48	
					CVSF-5	95	130	0	3	-50	0	3	0	51	
					CVSF-6	90	175	180	3	-53	-10	3	0	33	
					CVSF-7	90	170	180	3	-53	-10	3	0	33	
					CVSF-8	90	165	180	3	-52	-10	3	0	34	
					CVSF-9	90	140	0	3	-51	0	3	0	45	
Night-time	B	50	69	50	CVSF-1	80	165	90	3	-52	-5	3	0	29	
					CVSF-2	78	145	0	3	-51	0	3	0	33	
					CVSF-3	78	130	90	3	-50	-5	3	0	29	
					CVSF-4	80	105	0	3	-48	0	3	0	38	
					CVSF-5	85	130	0	3	-50	0	3	0	41	
					CVSF-6	80	175	180	3	-53	-10	3	0	23	
					CVSF-7	80	170	180	3	-53	-10	3	0	23	
					CVSF-8	80	165	180	3	-52	-10	3	0	24	
					CVSF-9	80	140	0	3	-51	0	3	0	35	
M-N4 (Man Fuk House Block A)															
Daytime	B	60	72	60	CVSF-1	90	180	90	3	-53	-5	3	0	38	
					CVSF-2	88	190	180	3	-54	-10	3	0	30	
					CVSF-3	88	200	90	3	-54	-5	3	0	35	
					CVSF-4	90	215	180	3	-55	-10	3	0	31	
					CVSF-5	95	175	90	3	-53	-5	3	0	43	
					CVSF-6	90	135	0	3	-51	0	3	0	45	
					CVSF-7	90	150	0	3	-52	0	3	0	44	
					CVSF-8	90	160	0	3	-52	0	3	0	44	
					CVSF-9	90	175	0	3	-53	0	3	0	43	
Night-time	B	50	70	50	CVSF-1	80	180	90	3	-53	-5	3	0	28	
					CVSF-2	78	190	180	3	-54	-10	3	0	20	
					CVSF-3	78	200	90	3	-54	-5	3	0	25	
					CVSF-4	80	215	180	3	-55	-10	3	0	21	
					CVSF-5	85	175	90	3	-53	-5	3	0	33	
					CVSF-6	80	135	0	3	-51	0	3	0	35	
					CVSF-7	80	150	0	3	-52	0	3	0	34	
					CVSF-8	80	160	0	3	-52	0	3	0	34	
					CVSF-9	80	175	0	3	-53	0	3	0	33	
M-N2 (Carmel on the Hill)															
Daytime	B	60	72	60	CVSF-1	90	215	180	3	-55	-10	3	0	31	
					CVSF-2	88	215	180	3	-55	-10	3	0	29	
					CVSF-3	88	215	180	3	-55	-10	3	0	29	
					CVSF-4	90	215	90	3	-55	-5	3	0	36	
					CVSF-5	95	170	0	3	-53	0	3	0	48	
					CVSF-6	90	160	0	3	-52	0	3	0	44	
					CVSF-7	90	180	180	3	-53	-10	3	0	33	
					CVSF-8	90	195	90	3	-54	-5	3	0	37	
					CVSF-9	90	185	0	3	-53	0	3	0	43	
Night-time	B	50	70	50	CVSF-1	80	215	180	3	-55	-10	3	0	21	
					CVSF-2	78	215	180	3	-55	-10	3	0	19	
					CVSF-3	78	215	180	3	-55	-10	3	0	19	
					CVSF-4	80	215	90	3	-55	-5	3	0	26	
					CVSF-5	85	170	0	3	-53	0	3	0	38	
					CVSF-6	80	160	0	3	-52	0	3	0	34	
					CVSF-7	80	180	180	3	-53	-10	3	0	23	
					CVSF-8	80	195	90	3	-54	-5	3	0	27	
					CVSF-9	80	185	0	3	-53	0	3	0	33	

Note: Fixed plant noise sources at a distance of over 300m from a noise sensitive receiver are considered to have an insignificant noise impact and are therefore not assessed.

Summary	Daytime, dB(A)	Night-time
CVSF-1	90	80
CVSF-2	88	78
CVSF-3	88	78
CVSF-4	90	80
CVSF-5	95	85
CVSF-6	90	80
CVSF-7	90	80
CVSF-8	90	80
CVSF-9	90	80

Project CKR - Central Kowloon Route
 Title Fixed Noise (East Portion)
 Date 19-Jul-12

Receiver	ASR	Noise Levels / Criteria, dB(A)			Contributing Noise Sources	Permissible SWL, dB(A)	Propagation			Corrections, dB(A)				SPL, dB(A)	Remarks
		ANL-5 (a)	Prevailing (b)	Design (c) = min of (a) & (b)			Distance, m	Directivity, deg	Facade	Distance	Directivity	Tonality	Intermittency		
E-P8 (Planned Residential area 1L3)															
Daytime	C	65	69	65	KTD-KTT	93	155	0	3	-52	0	0	0	44	EIA-157/2008 - KTD. Tonality accounted for in KTD EIA
					KTD-PS1A	90	360	0	3	-59	0	0	0	-	
					KTD-PS2	66	45	0	3	-41	0	0	0	28	
					KTD-1P4	80	90	0	3	-47	0	0	0	36	
					EVSF-1	105	190	0	3	-54	0	3	0	57	
					EVSF-2	110	220	90	3	-55	-5	3	0	56	
					EVSF-3	110	230	180	3	-55	-10	3	0	51	
					EVSF-4	110	210	90	3	-54	-5	3	0	57	
					EVSF-5	110	215	0	3	-55	0	3	0	61	
					Total SPL, dB(A)										
Night-time	C	55	68	55	KTD-KTT	93	155	0	3	-52	0	0	0	44	EIA-157/2008 - KTD. Tonality accounted for in KTD EIA
					KTD-PS1A	80	360	0	3	-59	0	0	0	-	
					KTD-PS2	61	45	0	3	-41	0	0	0	23	
					KTD-1P4	80	90	0	3	-47	0	0	0	36	
					EVSF-1	95	190	0	3	-54	0	3	0	47	
					EVSF-2	100	220	90	3	-55	-5	3	0	46	
					EVSF-3	100	230	180	3	-55	-10	3	0	41	
					EVSF-4	100	210	90	3	-54	-5	3	0	47	
					EVSF-5	100	215	0	3	-55	0	3	0	51	
					Total SPL, dB(A)										
E-P14A (Planned Secondary School) (No sensitive use during nighttime)															
Daytime	C	65	69	65	KTD-KTT	93	315	0	3	-58	0	0	0	-	EIA-157/2008 - KTD. Tonality accounted for in KTD EIA
					KTD-PS1A	90	610	0	3	-64	0	0	0	-	
					KTD-PS2	66	505	0	3	-62	0	0	0	-	
					KTD-1P4	80	380	0	3	-60	0	0	0	-	
					EVSF-1	105	305	90	3	-58	-5	3	0	-	
					EVSF-2	110	265	0	3	-56	0	3	0	60	
					EVSF-3	110	280	0	3	-57	0	3	0	59	
					EVSF-4	110	315	90	3	-58	-5	3	0	-	
					EVSF-5	110	290	0	3	-57	0	3	0	59	
					Total SPL, dB(A)										

Note: Fixed plant noise sources at a distance of over 300m from a noise sensitive receiver are considered to have an insignificant noise impact and are therefore not assessed.

Summary	Daytime, dB(A)	Night-time, dB(A)
EVSF-1	105	95
EVSF-2	110	100
EVSF-3	110	100
EVSF-4	110	100
EVSF-5	110	100