

Appendix 4.4.4

Unmitigated Airborne Construction Noise Impacts

Title : Construction Noise Calculation

Table 1: Notional Distance from Construction Sites to NSRs, m

NSRs	Work Site	
	Fresh Water Trunk Mains	
	FM1	FM2
NTM01	45	
NTM02	90	
NTM03	50	
NTM04	110	
NTM05	280	
SW01		40
SW02		14
LH01		13

Table 2: Distance Attenuation and Façade Correction, dB(A)

NSRs	Work Site	
	Fresh Water Trunk Mains	
	FM1	FM2
NTM01	-38	
NTM02	-44	
NTM03	-39	
NTM04	-46	
NTM05	-54	
SW01		-37
SW02		-28
LH01		-27

Formula for Calculating Distance Attenuation and Façade Correction

Distance Attenuation, in dB(A) = - 20 log D - 8 + 3 (where D is the distance in metres)

Title : Unmitigated Airborne Construction Noise Impact

Scenario : Unmitigated Scenario

Activities	SWL	2025												2026											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
FM1 Mainlaying works along access road between NTM WTW & FWPSR by Open Cut Method																									
FM1 Mainlaying	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	
FM2 Mainlaying works between Ching Yau Road and San Tam Road (Within CA zone only) by Open Cut Method																									
FM2 Mainlaying works from FWPSR to Tan Kwai Tsuen (Within CA zone only) by Open Cut Method	121																								

Predicted Construction Noise from Project itself, dB(A)

NSR	Max																								
NTM01	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	
NTM02	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	
NTM03	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	
NTM04	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	
NTM05	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	
SW01	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SW02	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LH01	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Note:

[1] For the modification of Chamber G, as activities G1 to G3 will be located underground, airborne construction noise is not anticipated.

Title : Unmitigated Airborne Construction Noise Impact

Scenario : Unmitigated Scenario

Activities	SWL	2027												2028											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
FM1 Mainlaying works along access road between NTM WTW & FWPSR by Open Cut Method																									
FM1 Mainlaying	121	121	121	121	121	121																			
FM2 Mainlaying works between Ching Yau Road and San Tam Road (Within CA zone only) by Open Cut Method																									
FM2 Mainlaying works from FWPSR to Tan Kwai Tsuen (Within CA zone only) by Open Cut Method	121							121	121	121	121	121	121	121	121	121	121	121							

Predicted Construction Noise from Project itself, dB(A)

NSR	Max																						
NTM01	83	83	83	83	83	83	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NTM02	77	77	77	77	77	77	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NTM03	82	82	82	82	82	82	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NTM04	75	75	75	75	75	75	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NTM05	67	67	67	67	67	67	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SW01	84	0	0	0	0	0	0	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84
SW02	93	0	0	0	0	0	0	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
LH01	94	0	0	0	0	0	0	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94

Note:

[1] For the modification of Chamber G, as activities G1 to G3 will be located underground, airborne construction noise is not anticipated.