Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: IPS
Assessment Floor: G/F
Floor Height (mPD): 5.2

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2023				2024												2025												2026												2027												2028												2029												2030											
										S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																																																																																													
Civil Construction & Architectural Building Works Finishes																																																																																																
Demolition & Site Clearance																																																																																																
Pet Garden																																																																																															
Site Clearance of WS3.5	WS3.5	PG-2	104	224	0	224	-55		3						52	52	52	52																																																																												
Viaducts between TUM & A16																																																																																															
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	7	0	7	-25		3					**78**	**78**	**78**	**78**	**78**	**78**																																																																															
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	7	0	7	-25		3																																																																					**76**	**76**	**76**	**76**	**76**	**76**									
Zone 3a																																																																																															
Construction of temporary platform	Z3a	Z3a-1	108	278	0	278	-57		3																												54	54	54	54																																																											
Piling works	Z3a	Z3a-2	109	278	0	278	-57		3																															55	55	55	55	55	55	55	55	55																																																		
Construction of pile caps	Z3a	Z3a-3	106	278	0	278	-57		3																																											52	52	52	52																																																
Construction of Piers	Z3a	Z3a-4	109	278	0	278	-57		3																																											55	55	55	55	55	55	55	55																																												
Construction of viaduct structure	Z3a	Z3a-5	108	278	0	278	-57		3																																																	54	54	54	54	54	54	54																																																		
Zone 2b.1																																																																																																
Construction of temporary platform	Z2b.1	Z2b-1	103	168	0	168	-52		3																												54	54	54	54																																																														
Piling Works	Z2b.1	Z2b-2	103	168	0	168	-52		3																														54	54	54	54	54	54																																																												
Construction of pile caps	Z2b.1	Z2b-3	101	168	0	168	-52		3																																					52	52																																																																
Construction of Pier	Z2b.1	Z2b-4	99	168	0	168	-52		3																																					50	50	50	50	50	50	50	50																																																					
Construction of viaduct structure	Z2b.1	Z2b-5	102	168	0	168	-52		3																																											53	53	53	53	53	53	53	53	53																																																		
Zone 2b.2																																																																																																
Construction of temporary platform	Z2b.2	Z2b-1	103	76	0	76	-46		3																												60	60	60	60																																																														
Piling Works	Z2b.2	Z2b-2	103	76	0	76	-46		3																														60	60	60	60	60	60																																																												
Construction of pile caps	Z2b.2	Z2b-3	101	76	0	76	-46		3																																					58	58																																																																
Construction of Pier	Z2b.2	Z2b-4	99	76	0	76	-46		3																																					56	56	56	56	56	56	56	56																																																					
Construction of viaduct structure	Z2b.2	Z2b-5	102	76	0	76	-46		3																																											59	59	59	59	59	59	59	59	59																																																		
Zone 2a.1																																																																																																
Construction of temporary platform	Z2a.1	Z2a-1	103	23	0	23	-35		3															**71**	**71**	**71**	**71**																																																																															
Piling Works	Z2a.1	Z2a-2	103	23	0	23	-35		3																			**71**	**71**	**71**	**71**	**71**	**71**																																																																										
Construction of pile caps	Z2a.1	Z2a-3	99	23	0	23	-35		3																										67	67																																																																						
Construction of Pier	Z2a.1	Z2a-4	99	23	0	23	-35		3																												67	67	67	67	67	67	67	67	67	67	67																																																											
Construcion of viaduct structure	Z2a.1	Z2a-5	100	23	0	23	-35		3																																							68	68	68	68	68	68	68	68	68	68																																																			
Zone 2a.2																																																																																																
Construction of temporary platform	Z2a.2	Z2a-1	103	50	0	50	-42		3															64	64	64	64																																																																														
Construction of temporary bridge	WS3.3	Z2a-6	100	98	0	98	-48		3																								55	55	55	55																																																																	
Piling Works	Z2a.2	Z2a-2	103	50	0	50	-42		3																			64	64	64	64	64	64																																																																											
Construction of pile caps	Z2a.2	Z2a-3	99	50	0	50	-42		3																										60	60																																																																					
Construction of Pier	Z2a.2	Z2a-4	99	50	0	50	-42		3																												60	60	60	60	60	60	60	60	60	60	60																																																									
Construcion of viaduct structure	Z2a.2	Z2a-5	100	50	0	50	-42		3																																							61	61	61	61	61	61	61	61	61	61																																																			
Zone 1																																																																																																	
Zone 1-North.1																																																																																																
Construction of temporary platform	Z1-N.1	Z1-N-1	101	139	0	139	-51		3															53	53	53	53	53																																																																									
Piling Works	Z1-N.1	Z1-N-2	103	139	0	139	-51		3																		55	55	55	55																																																																									
Construction of pile caps	Z1-N.1	Z1-N-3	99	139	0	139	-51		3																							51	51																																																																					
Construction of pier	Z1-N.1	Z1-N-4	102	139	0	139	-51		3																									54	54	54	54	54	54	54	54	54	54	54	54	54	54																																																										
Construction of viaduct structure	Z1-N.1	Z1-N-5	102	139	0	139	-51		3																																							54	54	54	54	54	54	54	54	54	54																																																			
Zone 1-North.2																																																																																																
Construction of temporary platform	Z1-N.2	Z1-N-1	101	221	0	221	-55		3															49	49	49	49	49																																																																									
Piling Works	Z1-N.2	Z1-N-2	103	221	0	221	-55		3																		51	51	51	51																																																																									
Construction of pile caps	Z1-N.2	Z1-N-3	99	221	0	221	-55		3																							47	47																																																																					
Construction of pier	Z1-N.2	Z1-N-4	102	221	0	221	-55		3																									50	50	50	50	50	50	50	50	50	50	50	50	50	50																																																										
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	221	0	221	-55		3																																							50	50	50	50	50	50	50	50	50	50																																																			
Degree 1 Completion																																																																																																		
ABWF works for Degree 1	V1	V1-1	100	22	0	22	-35		3																																																							68	68	68																																																
Removal of Temporary Platform																																																																																																	
Remove upstream and downstream temporary platform at Zone 3a	Z3a	V1-2	100	278	0	278	-57		3																																																									46	46	46	46																																								
Remove upstream and downstream temporary platform at Zone 2b	Z2b	V1-2	100	83	0	83	-46		3																																																								57	57	57	57																																								
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2	100	23	0	23	-35		3																																																								68	68	68	68																																								
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	149	0	149	-51		3																																																								52	52	52	52																																								
Predicted Noise Level, Leq (30mins), dB(A)														**78**	**78**	**78**	**78**	**78**	**78**					**72**	**72**	**72**	**72**	**72**	**72**	**72**	**72**	**72**	**72**	58	68	68	69	69	70	70	69	69	69	69	68	69	69	69	69	69	69	70	70	70	70	70	70	61	61	61	54	54	68	68	68	68	68	68	68														**76**	**76**	**76**	**76**	**76**	**76**									
Predicted Noise Level, Leq (30mins) (with implementation of Further Mitigation Measures), dB(A)														70	70	70	70	70	70					70	70	70	70	70	70	70	70	70	70																																																				70	70	70	70	70	70									
Concurrent Project																																																																																																	
Reprovision of Pet Garden	WS3.5	RPG-1	104	224	0	224.0	-55		3																																																																				52	52	52	52	52	52	52																						
Public Housing Developments at Yip Wong Road*														60	60	60	60	60	60																																																																																			
Predicted Cumulative Noise Level, Leq (30mins), dB(A)														70	70	70	70	70	70																																																					52	52	52	52	52	52	52																						

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: OT0
Assessment Floor: G/F
Floor Height (mPD): 5.7

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2023	2024	2025	2026	2027	2028	2029	2030
										S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																	
Civil Construction & Architectural Building Works Finishes																	
Demolition & Site Clearance																	
Pet Garden																	
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	269	0	269	-57		3		56 56 56 56 56 56						
Site Clearance of WS3.5	WS3.5	PG-2	104	136	0	136	-51		3		56 56 56 56						
Viaducts between TUM & A16																	
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	37	0	37	-39		3		64 64 64 64 64 64						
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	37	0	37	-39		3								62 62 62 62 62 62
Zone 2b.1																	
Construction of temporary platform	Z2b.1	Z2b-1	103	284	0	284	-57		3			49 49 49 49					
Piling Works	Z2b.1	Z2b-2	103	284	0	284	-57		3			49 49 49 49 49 49					
Construction of pile caps	Z2b.1	Z2b-3	101	284	0	284	-57		3			47 47					
Construction of Pier	Z2b.1	Z2b-4	99	284	0	284	-57		3			45 45 45 45 45 45 45 45					
Construction of viaduct structure	Z2b.1	Z2b-5	102	284	0	284	-57		3			48 48 48 48 48 48 48 48					
Zone 2b.2																	
Construction of temporary platform	Z2b.2	Z2b-1	103	193	0	193	-54		3			52 52 52 52					
Piling Works	Z2b.2	Z2b-2	103	193	0	193	-54		3			52 52 52 52 52 52					
Construction of pile caps	Z2b.2	Z2b-3	101	193	0	193	-54		3			50 50					
Construction of Pier	Z2b.2	Z2b-4	99	193	0	193	-54		3			48 48 48 48 48 48 48 48					
Construction of viaduct structure	Z2b.2	Z2b-5	102	193	0	193	-54		3			51 51 51 51 51 51 51 51					
Zone 2a.1																	
Construction of temporary platform	Z2a.1	Z2a-1	103	108	0	108	-49		3		57 57 57 57						
Piling Works	Z2a.1	Z2a-2	103	108	0	108	-49		3		57 57 57 57 57 57						
Construction of pile caps	Z2a.1	Z2a-3	99	108	0	108	-49		3		53 53						
Construction of Pier	Z2a.1	Z2a-4	99	108	0	108	-49		3		53 53 53 53 53 53 53 53 53 53						
Construcion of viaduct structure	Z2a.1	Z2a-5	100	108	0	108	-49		3		54 54 54 54 54 54 54 54						
Zone 2a.2																	
Construction of temporary platform	Z2a.2	Z2a-1	103	58	0	58	-43		3		63 63 63 63						
Construction of temporary bridge	WS3.3	Z2a-6	100	120	0	120	-50		3		53 53 53 53						
Piling Works	Z2a.2	Z2a-2	103	58	0	58	-43		3		63 63 63 63 63 63						
Construction of pile caps	Z2a.2	Z2a-3	99	58	0	58	-43		3		59 59						
Construction of Pier	Z2a.2	Z2a-4	99	58	0	58	-43		3		59 59 59 59 59 59 59 59 59 59						
Construcion of viaduct structure	Z2a.2	Z2a-5	100	58	0	58	-43		3		60 60 60 60 60 60 60 60						
Zone 1																	
Zone 1-North.1																	
Construction of temporary platform	Z1-N.1	Z1-N-1	101	77	0	77	-46		3		58 58 58 58 58 58						
Piling Works	Z1-N.1	Z1-N-2	103	77	0	77	-46		3		60 60 60 60 60						
Construction of pile caps	Z1-N.1	Z1-N-3	99	77	0	77	-46		3		56 56						
Construction of pier	Z1-N.1	Z1-N-4	102	77	0	77	-46		3		59 59 59 59 59 59 59 59 59 59 59 59						
Construction of viaduct structure	Z1-N.1	Z1-N-5	102	77	0	77	-46		3		59 59 59 59 59 59 59 59						
Zone 1-North.2																	
Construction of temporary platform	Z1-N.2	Z1-N-1	101	150	0	150	-52		3		52 52 52 52 52 52						
Piling Works	Z1-N.2	Z1-N-2	103	150	0	150	-52		3		54 54 54 54 54						
Construction of pile caps	Z1-N.2	Z1-N-3	99	150	0	150	-52		3		50 50						
Construction of pier	Z1-N.2	Z1-N-4	102	150	0	150	-52		3		53 53 53 53 53 53 53 53 53 53 53 53						
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	150	0	150	-52		3		53 53 53 53 53 53 53 53						
Zone 1-South																	
Construction of temporary platform	Z1-S	Z1-S-1	106	262	0	262	-56		3		53 53 53 53 53 53						
Piling Works	Z1-S	Z1-S-2	107	262	0	262	-56		3		54 54 54 54 54 54						
Construction of pile caps	Z1-S	Z1-S-3	106	262	0	262	-56		3		53 53						
Construction of Pier	Z1-S	Z1-S-4	109	262	0	262	-56		3		56 56 56 56 56 56 56 56 56 56						
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	262	0	262	-56		3		50 50 50 50 50 50 50 50 50 50						
Degree 1 Completion																	
ABWF works for Degree 1	V1	V1-1	100	55	0	55	-43		3						60 60 60		
Removal of Temporary Platform																	
Remove upstream and downstream temporary platform at Zone 2b	Z2b	V1-2	100	200	0	200	-54		3						49 49 49 49		
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2	100	61	0	61	-44		3						59 59 59 59		
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	85	0	85	-47		3						56 56 56 56		
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	262	0	262	-56		3						47 47 47 47		
Feeder Substation																	
SSHP works	FS	FS-1	105	265	0	265	-56		3		52 52 52 52 52 52						
Construction of pile caps	FS	FS-2	107	265	0	265	-56		3				54 54 54 54 54 54				
Construction of building structures	FS	FS-3	110	265	0	265	-56		3				57 57 57 57 57 57 57 57				
ABWF works for Degree 1	FS	FS-4	111	265	0	265	-56		3						58 58		
Predicted Noise Level, Leq (30mins), dB(A)											65 65 65 65 65 65 66 66	66 67 67 66 66 64 65 65 61 64 64 64	64 65 65 64 64 64 64 63 64 64 64 64	64 64 65 65 65 65 65 65 58 58 58 57	58 62 60 60 61 61 61 61		62 62 62 62 62 62
Concurrent Project																	
Reprovision of Pet Garden	WS3.5	RPG-1	104	136	0	136.0	-51		3							56 56 56 56 56 56 56	
Public Housing Developments at Yip Wong Road*										68 68 62 62	62 62 62 62 62 62 58 57						
Predicted Cumulative Noise Level, Leq (30mins), dB(A)										68 68 62 62	67 67 67 67 67 67 58 57					56 56 56 56 56 56 56 56	

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: OT1
Assessment Floor: 1/F
Floor Height (mPD): 9.2

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)									
Civil Construction & Architectural Building Works Finishes									
Demolition & Site Clearance									
Pet Garden									
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	293	0	293	-57		3
Site Clearance of WS3.5	WS3.5	PG-2	104	165	0	165	-52		3
Viaducts between TUM & A16									
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	12	0	12	-30		3
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	12	0	12	-30		3
Zone 2b.1									
Construction of temporary platform	Z2b.1	Z2b-1	103	246	0	246	-56		3
Piling Works	Z2b.1	Z2b-2	103	246	0	246	-56		3
Construction of pile caps	Z2b.1	Z2b-3	101	246	0	246	-56		3
Construction of Pier	Z2b.1	Z2b-4	99	246	0	246	-56		3
Construction of viaduct structure	Z2b.1	Z2b-5	102	246	0	246	-56		3
Zone 2b.2									
Construction of temporary platform	Z2b.2	Z2b-1	103	153	0	153	-52		3
Piling Works	Z2b.2	Z2b-2	103	153	0	153	-52		3
Construction of pile caps	Z2b.2	Z2b-3	101	153	0	153	-52		3
Construction of Pier	Z2b.2	Z2b-4	99	153	0	153	-52		3
Construction of viaduct structure	Z2b.2	Z2b-5	102	153	0	153	-52		3
Zone 2a.1									
Construction of temporary platform	Z2a.1	Z2a-1	103	66	0	66	-44		3
Piling Works	Z2a.1	Z2a-2	103	66	0	66	-44		3
Construction of pile caps	Z2a.1	Z2a-3	99	66	0	66	-44		3
Construction of Pier	Z2a.1	Z2a-4	99	66	0	66	-44		3
Construcion of viaduct structure	Z2a.1	Z2a-5	100	66	0	66	-44		3
Zone 2a.2									
Construction of temporary platform	Z2a.2	Z2a-1	103	28	0	28	-37		3
Construction of temporary bridge	WS3.3	Z2a-6	100	87	0	87	-47		3
Piling Works	Z2a.2	Z2a-2	103	28	0	28	-37		3
Construction of pile caps	Z2a.2	Z2a-3	99	28	0	28	-37		3
Construction of Pier	Z2a.2	Z2a-4	99	28	0	28	-37		3
Construcion of viaduct structure	Z2a.2	Z2a-5	100	28	0	28	-37		3
Zone 1									
Zone 1-North.1									
Construction of temporary platform	Z1-N.1	Z1-N-1	101	84	0	84	-46		3
Piling Works	Z1-N.1	Z1-N-2	103	84	0	84	-46		3
Construction of pile caps	Z1-N.1	Z1-N-3	99	84	0	84	-46		3
Construction of pier	Z1-N.1	Z1-N-4	102	84	0	84	-46		3
Construction of viaduct structure	Z1-N.1	Z1-N-5	102	84	0	84	-46		3
Zone 1-North.2									
Construction of temporary platform	Z1-N.2	Z1-N-1	101	166	0	166	-52		3
Piling Works	Z1-N.2	Z1-N-2	103	166	0	166	-52		3
Construction of pile caps	Z1-N.2	Z1-N-3	99	166	0	166	-52		3
Construction of pier	Z1-N.2	Z1-N-4	102	166	0	166	-52		3
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	166	0	166	-52		3
Zone 1-South									
Construction of temporary platform	Z1-S	Z1-S-1	106	280	0	280	-57		3
Piling Works	Z1-S	Z1-S-2	107	280	0	280	-57		3
Construction of pile caps	Z1-S	Z1-S-3	106	280	0	280	-57		3
Construction of Pier	Z1-S	Z1-S-4	109	280	0	280	-57		3
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	280	0	280	-57		3
Degree 1 Completion									
ABWF works for Degree 1	V1	V1-1	100	25	0	25	-36		3
Removal of Temporary Platform									
Remove upstream and downstream temporary platform at Zone 2b	Z2b	V1-2	100	161	0	161	-52		3
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2	100	29	0	29	-37		3
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	94	0	94	-47		3
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	280	0	280	-57		3
Predicted Noise Level, Leq (30mins), dB(A)									
Concurrent Project									
Reprovision of Pet Garden	WS3.5	RPG-1	104	165	0	165.0	-52		3
Public Housing Developments at Yip Wong Road*									
Predicted Cumulative Noise Level, Leq (30mins), dB(A)									

Activity Index (Work Zone)	2023				2024												2025											
	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
PG-1 (PG)					56	56	56	56	56	56																		
PG-2 (WS3.5)						55	55	55	55																			
W1-1 (W1)					73	73	73	73	73	73																		
Z2b-1 (Z2b.1)																												50
Z2b-1 (Z2b.2)																												54
Z2a-1 (Z2a.1)															62	62	62	62										
Z2a-2 (Z2a.1)																			62	62	62	62	62	62				
Z2a-3 (Z2a.1)																										58	58	
Z2a-4 (Z2a.1)																												58
Z2a-1 (Z2a.2)															69	69	69	69										
Z2a-6 (WS3.3)																								56	56	56	56	
Z2a-2 (Z2a.2)																			69	69	69	69	69	69				
Z2a-3 (Z2a.2)																										65	65	
Z2a-4 (Z2a.2)																												65
Z1-N-1 (Z1-N.1)															58	58	58	58	58									
Z1-N-2 (Z1-N.1)																		60	60	60	60							
Z1-N-3 (Z1-N.1)																							56	56				
Z1-N-4 (Z1-N.1)																									59	59	59	59
Z1-N-1 (Z1-N.2)															52	52	52	52	52									
Z1-N-2 (Z1-N.2)																		54	54	54	54							
Z1-N-3 (Z1-N.2)																							50	50				
Z1-N-4 (Z1-N.2)																									53	53	53	53
Z1-S-1 (Z1-S)															52	52	52	52	52									
Z1-S-2 (Z1-S)																		53	53	53	53	53						
Z1-S-3 (Z1-S)																								52	52			
Z1-S-4 (Z1-S)																										55	55	55
Predicted Noise Level, Leq (30mins), dB(A)					73	73	73	73	73	73					70	70	70	71	71	70	70	70	70	70	62	67	67	67
Public Housing Developments at Yip Wong Road*	68	68	62	62	62	62	62	62	62	62	58	57																
Predicted Cumulative Noise Level, Leq (30mins), dB(A)	68	68	62	62	73	73	73	73	73	73	58	57																

Activity Index (Work Zone)	2026												2027											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Z2b-1 (Z2b.1)	50	50	50																					
Z2b-2 (Z2b.1)		50	50	50	50	50	50																	
Z2b-3 (Z2b.1)									48	48														
Z2b-4 (Z2b.1)									46	46	46	46	46	46	46	46								
Z2b-5 (Z2b.1)															49	49	49	49	49	49	49	49	49	
Z2b-1 (Z2b.2)	54	54	54																					
Z2b-2 (Z2b.2)		54	54	54	54	54	54																	
Z2b-3 (Z2b.2)									52	52														
Z2b-4 (Z2b.2)									50	50	50	50	50	50	50	50								
Z2b-5 (Z2b.2)															53	53	53	53	53	53	53	53	53	
Z2a-4 (Z2a.1)	58	58	58	58	58	58	58	58	58	58														
Z2a-5 (Z2a.1)											59	59	59	59	59	59	59	59	59	59				
Z2a-4 (Z2a.2)	65	65	65	65	65	65	65	65	65	65														
Z2a-5 (Z2a.2)											66	66	66	66	66	66	66	66	66	66				
Z1-N-4 (Z1-N.1)	59	59	59	59	59	59	59	59	59	59														
Z1-N-5 (Z1-N.1)											59	59	59	59	59	59	59	59	59	59				
Z1-N-4 (Z1-N.2)	53	53	53	53	53	53	53	53	53	53														
Z1-N-5 (Z1-N.2)											53	53	53	53	53	53	53	53	53	53				
Z1-S-4 (Z1-S)	55	55	55	55	55	55	55																	
Z1-S-5 (Z1-S)								49	49	49	49	49	49	49	49	49	49	49	49					
Predicted Noise Level, Leq (30mins), dB(A)	67	68	68	67	67	67	67	67	67	67	68	68	68	68	68	68	68	68	68	68	58	58	58	56

Activity Index (Work Zone)	2028												2029												2030											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
W1-2 (W1)																						71	71	71	71	71	71									
V1-1 (V1)		67	67	67																																
V1-2 (Z2b)					51	51	51	51																												
V1-2 (Z2a)					66	66	66	66																												
V1-2 (Z1-N)					56	56	56	56																												
V1-2 (Z1-S)					46	46	46	46																												
Predicted Noise Level, Leq (30mins), dB(A)	57	67	67	67	67	67	67	67														71	71	71	71	71	71									
RPG-1 (WS3.5)												55	55	55	55	55	55	55																		
Predicted Cumulative Noise Level, Leq (30mins), dB(A)												55	55	55	55	55	55	55																		

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: OT2
Assessment Floor: 1/F
Floor Height (mPD): 9.2

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2023	2024	2025	2026	2027	2028	2029	2030
										S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																	
Civil Construction & Architectural Building Works Finishes																	
Demolition & Site Clearance																	
Pet Garden																	
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	268	0	268	-57		3		56 56 56 56 56 56						
Site Clearance of WS3.5	WS3.5	PG-2	104	137	0	137	-51		3		56 56 56 56						
Viaducts between TUM & A16																	
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	20	0	20	-34		3		69 69 69 69 69 69						
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	20	0	20	-34		3								67 67 67 67 67 67
Zone 2b.1																	
Construction of temporary platform	Z2b.1	Z2b-1	103	275	0	275	-57		3				49 49 49 49				
Piling Works	Z2b.1	Z2b-2	103	275	0	275	-57		3				49 49 49 49 49 49				
Construction of pile caps	Z2b.1	Z2b-3	101	275	0	275	-57		3				47 47				
Construction of Pier	Z2b.1	Z2b-4	99	275	0	275	-57		3				45 45 45 45 45 45 45 45				
Construction of viaduct structure	Z2b.1	Z2b-5	102	275	0	275	-57		3				48 48 48 48 48 48 48 48				
Zone 2b.2																	
Construction of temporary platform	Z2b.2	Z2b-1	103	183	0	183	-53		3				53 53 53 53				
Piling Works	Z2b.2	Z2b-2	103	183	0	183	-53		3				53 53 53 53 53 53				
Construction of pile caps	Z2b.2	Z2b-3	101	183	0	183	-53		3				51 51				
Construction of Pier	Z2b.2	Z2b-4	99	183	0	183	-53		3				49 49 49 49 49 49 49 49				
Construction of viaduct structure	Z2b.2	Z2b-5	102	183	0	183	-53		3				52 52 52 52 52 52 52 52				
Zone 2a.1																	
Construction of temporary platform	Z2a.1	Z2a-1	103	96	0	96	-48		3		58 58	58 58					
Piling Works	Z2a.1	Z2a-2	103	96	0	96	-48		3		58 58	58 58 58 58					
Construction of pile caps	Z2a.1	Z2a-3	99	96	0	96	-48		3			54 54					
Construction of Pier	Z2a.1	Z2a-4	99	96	0	96	-48		3			54	54 54 54 54 54 54 54 54				
Construcion of viaduct structure	Z2a.1	Z2a-5	100	96	0	96	-48		3				55 55	55 55 55 55 55 55 55 55			
Zone 2a.2																	
Construction of temporary platform	Z2a.2	Z2a-1	103	40	0	40	-40		3		66 66	66 66					
Construction of temporary bridge	WS3.3	Z2a-6	100	102	0	102	-48		3			55 55 55 55					
Piling Works	Z2a.2	Z2a-2	103	40	0	40	-40		3			66 66 66 66 66 66					
Construction of pile caps	Z2a.2	Z2a-3	99	40	0	40	-40		3			62 62					
Construction of Pier	Z2a.2	Z2a-4	99	40	0	40	-40		3			62	62 62 62 62 62 62 62 62				
Construcion of viaduct structure	Z2a.2	Z2a-5	100	40	0	40	-40		3				63 63	63 63 63 63 63 63 63 63			
Zone 1																	
Zone 1-North.1																	
Construction of temporary platform	Z1-N.1	Z1-N-1	101	67	0	67	-45		3		59 59	59 59 59					
Piling Works	Z1-N.1	Z1-N-2	103	67	0	67	-45		3			61 61 61 61					
Construction of pile caps	Z1-N.1	Z1-N-3	99	67	0	67	-45		3			57 57					
Construction of pier	Z1-N.1	Z1-N-4	102	67	0	67	-45		3			60 60 60 60	60 60 60 60 60 60 60 60				
Construction of viaduct structure	Z1-N.1	Z1-N-5	102	67	0	67	-45		3				60 60	60 60 60 60 60 60 60 60			
Zone 1-North.2																	
Construction of temporary platform	Z1-N.2	Z1-N-1	101	145	0	145	-51		3		53 53	53 53 53					
Piling Works	Z1-N.2	Z1-N-2	103	145	0	145	-51		3			55 55 55 55					
Construction of pile caps	Z1-N.2	Z1-N-3	99	145	0	145	-51		3			51 51					
Construction of pier	Z1-N.2	Z1-N-4	102	145	0	145	-51		3			54 54 54 54	54 54 54 54 54 54 54 54				
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	145	0	145	-51		3				54 54	54 54 54 54 54 54 54 54			
Zone 1-South																	
Construction of temporary platform	Z1-S	Z1-S-1	106	258	0	258	-56		3		53 53	53 53 53					
Piling Works	Z1-S	Z1-S-2	107	258	0	258	-56		3			54 54 54 54 54					
Construction of pile caps	Z1-S	Z1-S-3	106	258	0	258	-56		3			53 53					
Construction of Pier	Z1-S	Z1-S-4	109	258	0	258	-56		3			56 56 56	56 56 56 56 56 56				
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	258	0	258	-56		3				50 50 50 50	50 50 50 50 50 50 50 50			
Degree 1 Completion																	
ABWF works for Degree 1	V1	V1-1	100	37	0	37	-39		3						64 64 64		
Removal of Temporary Platform																	
Remove upstream and downstream temporary platform at Zone 2b	Z2b	V1-2	100	190	0	190	-54		3							49 49 49 49		
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2	100	44	0	44	-41		3							62 62 62 62		
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	75	0	75	-45		3							58 58 58 58		
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	258	0	258	-56		3							47 47 47 47		
Feeder Substation																	
SSHP works	FS	FS-1	105	264	0	264	-56		3		52 52	52 52 52 52					
Construction of pile caps	FS	FS-2	107	264	0	264	-56		3				54 54 54	54 54 54			
Construction of building structures	FS	FS-3	110	264	0	264	-56		3					57 57 57 57 57 57 57 57			
ABWF works for Degree 1	FS	FS-4	111	264	0	264	-56		3						58 58		
Predicted Noise Level, Leq (30mins), dB(A)											69 69 69 69 69 69 68 68	68 69 69 68 68 67 67 68	62 66 66 66 66 66 66 66 66 65	65 66 66 66 66 66 66 67 66 66 66 66	59 59 59 57 58 65 64 64 64 64 64 64		67 67 67 67 67 67
Concurrent Project																	
Reprovision of Pet Garden	WS3.5	RPG-1	104	137	0	137.0	-51		3							56 56 56 56 56 56	
Public Housing Developments at Yip Wong Road*										68 68 62 62	62 62 62 62 62 62 58 57						
Predicted Cumulative Noise Level, Leq (30mins), dB(A)										68 68 62 62	70 70 70 70 70 70 58 57					56 56 56 56 56 56	

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: OL0
Assessment Floor: G/F
Floor Height (mPD): 5.7

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2023	2024	2025	2026	2027	2028	2029	2030
										S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																	
Civil Construction & Architectural Building Works Finishes																	
Demolition & Site Clearance																	
Pet Garden																	
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	245	0	245	-56		3		57 57 57 57 57 57						
Site Clearance of WS3.5	WS3.5	PG-2	104	111	0	111	-49		3		58 58 58 58						
Viaducts between TUM & A16																	
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	36	0	36	-39		3		64 64 64 64 64 64						
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	36	0	36	-39		3								62 62 62 62 62 62
Zone 2b.1																	
Construction of temporary platform	Z2b.1	Z2b-1	103	307	0	307	-58		3				48 48 48 48				
Piling Works	Z2b.1	Z2b-2	103	307	0	307	-58		3				48 48 48 48 48 48 48				
Construction of pile caps	Z2b.1	Z2b-3	101	307	0	307	-58		3				46 46				
Construction of Pier	Z2b.1	Z2b-4	99	307	0	307	-58		3				44 44 44 44 44 44 44 44				
Construction of viaduct structure	Z2b.1	Z2b-5	102	307	0	307	-58		3				47 47 47 47 47 47 47 47				
Zone 2b.2																	
Construction of temporary platform	Z2b.2	Z2b-1	103	215	0	215	-55		3				51 51 51 51				
Piling Works	Z2b.2	Z2b-2	103	215	0	215	-55		3				51 51 51 51 51 51 51				
Construction of pile caps	Z2b.2	Z2b-3	101	215	0	215	-55		3				49 49				
Construction of Pier	Z2b.2	Z2b-4	99	215	0	215	-55		3				47 47 47 47 47 47 47 47				
Construction of viaduct structure	Z2b.2	Z2b-5	102	215	0	215	-55		3				50 50 50 50 50 50 50 50				
Zone 2a.1																	
Construction of temporary platform	Z2a.1	Z2a-1	103	128	0	128	-50		3		56 56	56 56					
Piling Works	Z2a.1	Z2a-2	103	128	0	128	-50		3			56 56 56 56 56 56					
Construction of pile caps	Z2a.1	Z2a-3	99	128	0	128	-50		3				52 52				
Construction of Pier	Z2a.1	Z2a-4	99	128	0	128	-50		3				52 52 52 52 52 52 52 52				
Construcion of viaduct structure	Z2a.1	Z2a-5	100	128	0	128	-50		3				53 53	53 53 53 53 53 53 53 53			
Zone 2a.2																	
Construction of temporary platform	Z2a.2	Z2a-1	103	61	0	61	-44		3		62 62	62 62					
Construction of temporary bridge	WS3.3	Z2a-6	100	128	0	128	-50		3				53 53 53 53				
Piling Works	Z2a.2	Z2a-2	103	61	0	61	-44		3			62 62 62 62 62 62					
Construction of pile caps	Z2a.2	Z2a-3	99	61	0	61	-44		3				58 58				
Construction of Pier	Z2a.2	Z2a-4	99	61	0	61	-44		3				58 58 58 58 58 58 58 58				
Construcion of viaduct structure	Z2a.2	Z2a-5	100	61	0	61	-44		3				59 59	59 59 59 59 59 59 59 59			
Zone 1																	
Zone 1-North.1																	
Construction of temporary platform	Z1-N.1	Z1-N-1	101	64	0	64	-44		3		60 60	60 60 60					
Piling Works	Z1-N.1	Z1-N-2	103	64	0	64	-44		3			62 62 62 62					
Construction of pile caps	Z1-N.1	Z1-N-3	99	64	0	64	-44		3			58 58					
Construction of pier	Z1-N.1	Z1-N-4	102	64	0	64	-44		3				61 61 61 61	61 61 61 61 61 61 61 61			
Construction of viaduct structure	Z1-N.1	Z1-N-5	102	64	0	64	-44		3				61 61	61 61 61 61 61 61 61 61			
Zone 1-North.2																	
Construction of temporary platform	Z1-N.2	Z1-N-1	101	129	0	129	-50		3		54 54	54 54 54					
Piling Works	Z1-N.2	Z1-N-2	103	129	0	129	-50		3			56 56 56 56					
Construction of pile caps	Z1-N.2	Z1-N-3	99	129	0	129	-50		3			52 52					
Construction of pier	Z1-N.2	Z1-N-4	102	129	0	129	-50		3				55 55 55 55	55 55 55 55 55 55 55 55			
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	129	0	129	-50		3				55 55	55 55 55 55 55 55 55 55			
Zone 1-South																	
Construction of temporary platform	Z1-S	Z1-S-1	106	239	0	239	-56		3		53 53	53 53 53					
Piling Works	Z1-S	Z1-S-2	107	239	0	239	-56		3			54 54 54 54 54					
Construction of pile caps	Z1-S	Z1-S-3	106	239	0	239	-56		3				53 53				
Construction of Pier	Z1-S	Z1-S-4	109	239	0	239	-56		3				56 56 56	56 56 56 56 56 56			
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	239	0	239	-56		3				50	50 50 50 50	50 50 50 50 50 50 50 50		
Degree 1 Completion																	
ABWF works for Degree 1	V1	V1-1	100	58	0	58	-43		3						60 60 60		
Removal of Temporary Platform																	
Remove upstream and downstream temporary platform at Zone 2b	Z2b	V1-2	100	223	0	223	-55		3						48 48 48 48		
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2	100	67	0	67	-45		3						58 58 58 58		
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	70	0	70	-45		3						58 58 58 58		
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	239	0	239	-56		3						47 47 47 47		
A16 Northern (GL10-22)																	
Temp Platform																	
Construction of temporary platform	A16N	A16N-2	103	337	0	337	-59		3		47 47	47 47 47					
Remove Temporary Platform	A16N	A16N-1	108	337	0	337	-59		3				52 52 52				
A16 Northern																	
Piling Works	A16N	A16N-3	109	337	0	337	-59		3		53 53 53	53 53 53 53 53 53	53 53 53 53				
Construction of pile caps	A16N	A16N-4	111	337	0	337	-59		3			55 55 55 55	55 55 55 55	55 55 55			
Construction of Station Structure	A16N	A16N-5	109	337	0	337	-59		3				53 53	53 53 53 53 53 53 53 53	53 53 53 53		
Degree 1 Completion																	
ABWF works for Degree 1	A16N	A16N-6	109	337	0	337	-59		3				53 53 53 53	53 53 53 53	53 53 53 53		
A16 Southern (GL1-10)																	
Demolition of existing swimming pool and plant room																	
Demolition of existing swimming pool and plant room	TMSP	A16S-4	114	335	0	335	-58		3				59 59 59				
Feeder Substation																	
SSHP works	FS	FS-1	105	241	0	241	-56		3		52 52	52 52 52					
Construction of pile caps	FS	FS-2	107	241	0	241	-56		3				54 54 54	54 54 54			
Construction of building structures	FS	FS-3	110	241	0	241	-56		3					57 57 57 57 57 57 57 57			
ABWF works for Degree 1	FS	FS-4	111	241	0	241	-56		3						58 58		
Architectural Finishing Works																	
A16 Station																	
ABWF & BS works - A16 Station Northern	A16N	A16N-7	103	337	0	337	-59		3				47 47	47 47 47 47 47 47 47 47	47 47 47 47		
Predicted Noise Level, Leq (30mins), dB(A)											65 66 66 66 66 65 53 53 53 53 66 66	66 68 68 67 67 64 65 66 64 65 65 65	65 66 66 65 65 65 65 66 66 66 66 65	85 65 65 66 65 65 65 65 58 58 58 57	58 62 60 60 61 61 61 61		62 62 62 62 62 62
Concurrent Project																	
Reprovision of Pet Garden	WS3.5	RPG-1	104	111	0	111.0	-49		3							58 58 58 58 58 58	
Public Housing Developments at Yip Wong Road*										67 67 63 63	63 63 63 63 63 63 58 57						
Predicted Cumulative Noise Level, Leq (30mins), dB(A)										67 67 63 63	67 68 68 68 68 67 59 58					58 58 58 58 58 58	

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: OL1
Assessment Floor: 1/F
Floor Height (mPD): 9.2

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2023	2024	2025	2026	2027	2028	2029	2030
										S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																	
Civil Construction & Architectural Building Works Finishes																	
Demolition & Site Clearance																	
Pet Garden																	
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	199	0	199	-54		3		59 59 59 59 59 59						
Site Clearance of WS3.5	WS3.5	PG-2	104	70	0	70	-45		3		62 62 62 62						
Viaducts between TUM & A16																	
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	7	0	7	-25		3		**78 78 78 78 78 78**						
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	7	0	7	-25		3								**76 76 76 76 76 76**
Zone 2b.2																	
Construction of temporary platform	Z2b.2	Z2b-1	103	244	0	244	-56		3				50 50 50 50				
Piling Works	Z2b.2	Z2b-2	103	244	0	244	-56		3				50 50 50 50 50 50 50				
Construction of pile caps	Z2b.2	Z2b-3	101	244	0	244	-56		3				48 48				
Construction of Pier	Z2b.2	Z2b-4	99	244	0	244	-56		3				46 46 46 46 46 46 46 46				
Construction of viaduct structure	Z2b.2	Z2b-5	102	244	0	244	-56		3				49 49 49 49 49 49 49 49				
Zone 2a.1																	
Construction of temporary platform	Z2a.1	Z2a-1	103	155	0	155	-52		3		54 54	54 54					
Piling Works	Z2a.1	Z2a-2	103	155	0	155	-52		3			54 54 54 54 54 54					
Construction of pile caps	Z2a.1	Z2a-3	99	155	0	155	-52		3			50 50					
Construction of Pier	Z2a.1	Z2a-4	99	155	0	155	-52		3			50 50 50 50 50 50 50 50 50 50					
Construcion of viaduct structure	Z2a.1	Z2a-5	100	155	0	155	-52		3			51 51 51 51 51 51 51 51 51 51					
Zone 2a.2																	
Construction of temporary platform	Z2a.2	Z2a-1	103	69	0	69	-45		3		61 61	61 61					
Construction of temporary bridge	WS3.3	Z2a-6	100	128	0	128	-50		3			53 53 53 53					
Piling Works	Z2a.2	Z2a-2	103	69	0	69	-45		3			61 61 61 61 61 61					
Construction of pile caps	Z2a.2	Z2a-3	99	69	0	69	-45		3			57 57					
Construction of Pier	Z2a.2	Z2a-4	99	69	0	69	-45		3			57 57 57 57 57 57 57 57 57 57					
Construcion of viaduct structure	Z2a.2	Z2a-5	100	69	0	69	-45		3			58 58 58 58 58 58 58 58 58 58					
Zone 1																	
Zone 1-North.1																	
Construction of temporary platform	Z1-N.1	Z1-N-1	101	32	0	32	-38		3		66 66	66 66 66					
Piling Works	Z1-N.1	Z1-N-2	103	32	0	32	-38		3			68 68 68 68					
Construction of pile caps	Z1-N.1	Z1-N-3	99	32	0	32	-38		3			64 64					
Construction of pier	Z1-N.1	Z1-N-4	102	32	0	32	-38		3			67 67 67 67	67 67 67 67 67 67 67 67 67 67				
Construction of viaduct structure	Z1-N.1	Z1-N-5	102	32	0	32	-38		3			67 67	67 67 67 67 67 67 67 67 67 67				
Zone 1-North.2																	
Construction of temporary platform	Z1-N.2	Z1-N-1	101	80	0	80	-46		3		58 58	58 58 58					
Piling Works	Z1-N.2	Z1-N-2	103	80	0	80	-46		3			60 60 60 60					
Construction of pile caps	Z1-N.2	Z1-N-3	99	80	0	80	-46		3			56 56					
Construction of pier	Z1-N.2	Z1-N-4	102	80	0	80	-46		3			59 59 59 59	59 59 59 59 59 59 59 59 59 59				
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	80	0	80	-46		3			59 59	59 59 59 59 59 59 59 59 59 59				
Zone 1-South																	
Construction of temporary platform	Z1-S	Z1-S-1	106	190	0	190	-54		3		55 55	55 55 55					
Piling Works	Z1-S	Z1-S-2	107	190	0	190	-54		3			56 56 56 56 56					
Construction of pile caps	Z1-S	Z1-S-3	106	190	0	190	-54		3			55 55					
Construction of Pier	Z1-S	Z1-S-4	109	190	0	190	-54		3			58 58 58 58 58 58 58 58 58 58					
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	190	0	190	-54		3			52 52 52 52 52	52 52 52 52 52 52 52 52 52 52				
Degree 1 Completion																	
ABWF works for Degree 1	V1	V1-1	100	29	0	29	-37		3						66 66 66		
Removal of Temporary Platform																	
Remove upstream and downstream temporary platform at Zone 2b	Z2b	V1-2	100	252	0	252	-56		3						47 47 47 47		
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2	100	78	0	78	-46		3						57 57 57 57		
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	35	0	35	-39		3						64 64 64 64		
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	190	0	190	-54		3						49 49 49 49		
A16 Northern (GL10-22)																	
Temp Platform																	
Construction of temporary platform	A16N	A16N-2	103	289	0	289	-57		3		49 49	49 49 49					
Remove Temporary Platform	A16N	A16N-1	108	289	0	289	-57		3			54 54 54					
A16 Northern																	
Piling Works	A16N	A16N-3	109	289	0	289	-57		3		55 55 55 55 55 55 55	55 55 55 55 55 55 55 55					
Construction of pile caps	A16N	A16N-4	111	289	0	289	-57		3			57 57 57 57 57 57 57 57 57 57					
Construction of Station Structure	A16N	A16N-5	109	289	0	289	-57		3			55 55 55 55 55 55 55 55 55 55	55 55 55 55 55 55 55 55 55 55				
Degree 1 Completion																	
ABWF works for Degree 1	A16N	A16N-6	109	289	0	289	-57		3				55 55 55 55 55 55 55 55 55 55				
Demolition of existing swimming pool and plant room																	
Demolition of existing swimming pool and plant room	TMSP	A16S-4	114	293	0	293	-57		3				60 60 60 60				
Feeder Substation																	
SSHP works	FS	FS-1	105	195	0	195	-54		3		54 54	54 54 54 54					
Construction of pile caps	FS	FS-2	107	195	0	195	-54		3			56 56 56	56 56 56				
Construction of building structures	FS	FS-3	110	195	0	195	-54		3			59 59 59 59	59 59 59 59				
ABWF works for Degree 1	FS	FS-4	111	195	0	195	-54		3				60 60				
Architectural Finishing Works																	
A16 Station																	
ABWF & BS works - A16 Station Northern	A16N	A16N-7	103	289	0	289	-57		3			49 49	49 49 49 49	49 49 49 49	49		
Predicted Noise Level, Leq (30mins), dB(A)											**78 78 78 78 78 78** 55 55 55 55 69 69	69 72 72 70 70 64 67 68 69 69 69 69	69 69 69 69 69 69 69 69 69 69	69 69 69 69 69 69 69 69 60 60 60 59	60 67 66 66 65 65 65 65		**76 76 76 76 76 76**	
Predicted Noise Level, Leq (30mins) (with implementation of Further Mitigation Measures), dB(A)											74 75 75 75 75 74 55 55 55 55 69 69	69 72 72 70 70 64 67 68 69 69 69 69	69 69 69 69 69 69 69 69 69 69	69 69 69 69 69 69 69 69 60 60 60 59	60 67 66 66 65 65 65 65		74 74 74 74 74 74
Concurrent Project																	
Reprovision of Pet Garden	WS3.5	RPG-1	104	70	0	70.0	-45		3							62 62 62 62 62 62		
Public Housing Developments at Yip Wong Road*										67 67 63 63	63 63 63 63 63 63 58 57							
Predicted Cumulative Noise Level, Leq (30mins), dB(A)										67 67 63 63	75 75 75 75 75 75 60 59					62 62 62 62 62 62		

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: OL2
Assessment Floor: 1/F
Floor Height (mPD): 9.2

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)									
Civil Construction & Architectural Building Works Finishes									
Demolition & Site Clearance									
Pet Garden									
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	175	0	175	-53		3
Site Clearance of WS3.5	WS3.5	PG-2	104	42	0	42	-40		3
Viaducts between TUM & A16									
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	24	0	24	-36		3
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	24	0	24	-36		3
Zone 2b.2									
Construction of temporary platform	Z2b.2	Z2b-1	103	274	0	274	-57		3
Piling Works	Z2b.2	Z2b-2	103	274	0	274	-57		3
Construction of pile caps	Z2b.2	Z2b-3	101	274	0	274	-57		3
Construction of Pier	Z2b.2	Z2b-4	99	274	0	274	-57		3
Construction of viaduct structure	Z2b.2	Z2b-5	102	274	0	274	-57		3
Zone 2a.1									
Construction of temporary platform	Z2a.1	Z2a-1	103	184	0	184	-53		3
Piling Works	Z2a.1	Z2a-2	103	184	0	184	-53		3
Construction of pile caps	Z2a.1	Z2a-3	99	184	0	184	-53		3
Construction of Pier	Z2a.1	Z2a-4	99	184	0	184	-53		3
Construcion of viaduct structure	Z2a.1	Z2a-5	100	184	0	184	-53		3
Zone 2a.2									
Construction of temporary platform	Z2a.2	Z2a-1	103	99	0	99	-48		3
Construction of temporary bridge	WS3.3	Z2a-6	100	156	0	156	-52		3
Piling Works	Z2a.2	Z2a-2	103	99	0	99	-48		3
Construction of pile caps	Z2a.2	Z2a-3	99	99	0	99	-48		3
Construction of Pier	Z2a.2	Z2a-4	99	99	0	99	-48		3
Construcion of viaduct structure	Z2a.2	Z2a-5	100	99	0	99	-48		3
Zone 1									
Zone 1-North.1									
Construction of temporary platform	Z1-N.1	Z1-N-1	101	48	0	48	-42		3
Piling Works	Z1-N.1	Z1-N-2	103	48	0	48	-42		3
Construction of pile caps	Z1-N.1	Z1-N-3	99	48	0	48	-42		3
Construction of pier	Z1-N.1	Z1-N-4	102	48	0	48	-42		3
Construction of viaduct structure	Z1-N.1	Z1-N-5	102	48	0	48	-42		3
Zone 1-North.2									
Construction of temporary platform	Z1-N.2	Z1-N-1	101	70	0	70	-45		3
Piling Works	Z1-N.2	Z1-N-2	103	70	0	70	-45		3
Construction of pile caps	Z1-N.2	Z1-N-3	99	70	0	70	-45		3
Construction of pier	Z1-N.2	Z1-N-4	102	70	0	70	-45		3
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	70	0	70	-45		3
Zone 1-South									
Construction of temporary platform	Z1-S	Z1-S-1	106	171	0	171	-53		3
Piling Works	Z1-S	Z1-S-2	107	171	0	171	-53		3
Construction of pile caps	Z1-S	Z1-S-3	106	171	0	171	-53		3
Construction of Pier	Z1-S	Z1-S-4	109	171	0	171	-53		3
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	171	0	171	-53		3
Degree 1 Completion									
ABWF works for Degree 1	V1	V1-1	100	46	0	46	-41		3
Removal of Temporary Platform									
Remove upstream and downstream temporary platform at Zone 2b	Z2b	V1-2	100	282	0	282	-57		3
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2	100	108	0	108	-49		3
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	49	0	49	-42		3
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	171	0	171	-53		3
A16 station									
A16 Northern (GL10-22)									
Temp Platform									
Construction of temporary platform	A16N	A16N-2	103	268	0	268	-57		3
Remove Temporary Platform	A16N	A16N-1	108	268	0	268	-57		3
A16 Northern									
Piling Works	A16N	A16N-3	109	268	0	268	-57		3
Construction of pile caps	A16N	A16N-4	111	268	0	268	-57		3
Construction of Station Structure	A16N	A16N-5	109	268	0	268	-57		3
Degree 1 Completion									
ABWF works for Degree 1	A16N	A16N-6	109	268	0	268	-57		3
A16 Southern (GL1-10)									
Demolition of existing swimming pool and plant room									
Demolition of existing swimming pool and plant room	TMSP	A16S-4	114	266	0	266	-56		3
Feeder Substation									
SSHP works	FS	FS-1	105	171	0	171	-53		3
Construction of pile caps	FS	FS-2	107	171	0	171	-53		3
Construction of building structures	FS	FS-3	110	171	0	171	-53		3
ABWF works for Degree 1	FS	FS-4	111	171	0	171	-53		3
Architectural Finishing Works									
A16 Station									
ABWF & BS works - A16 Station Northern	A16N	A16N-7	103	268	0	268	-57		3
Predicted Noise Level, Leq (30mins), dB(A)									
Concurrent Project									
Reprovision of Pet Garden	WS3.5	RPG-1	104	42	0	42.0	-40		3
Public Housing Developments at Yip Wong Road*									
Predicted Cumulative Noise Level, Leq (30mins), dB(A)									

Activity Name	Work Zone	Activity Index	2023				2024											
			S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1					60	60	60	60	60	60						
Site Clearance of WS3.5	WS3.5	PG-2						67	67	67	67							
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1					67	67	67	67	67	67						
Construction of temporary platform	Z2a.1	Z2a-1															53	53
Construction of temporary platform	Z2a.2	Z2a-1															58	58
Construction of temporary platform	Z1-N.1	Z1-N-1															62	62
Construction of temporary platform	Z1-N.2	Z1-N-1															59	59
Construction of temporary platform	Z1-S	Z1-S-1															56	56
Construction of temporary platform	A16N	A16N-2															49	49
Piling Works	A16N	A16N-3										55	55	55	55	55	55	55
SSHP works	FS	FS-1															55	55
Predicted Noise Level, Leq (30mins), dB(A)							68	70	70	70	70	68	55	55	55	55	66	66
Public Housing Developments at Yip Wong Road*			67	67	63	63	63	63	63	63	63	63	58	57				
Predicted Cumulative Noise Level, Leq (30mins), dB(A)			67	67	63	63	69	71	71	71	71	69	60	59				

Activity Name	Work Zone	Activity Index	2025											
			J	F	M	A	M	J	J	A	S	O	N	D
Construction of temporary platform	Z2b.2	Z2b-1												49
Construction of temporary platform	Z2a.1	Z2a-1	53	53										
Piling Works	Z2a.1	Z2a-2			53	53	53	53	53	53				
Construction of pile caps	Z2a.1	Z2a-3										49	49	
Construction of Pier	Z2a.1	Z2a-4												49
Construction of temporary platform	Z2a.2	Z2a-1	58	58										
Construction of temporary bridge	WS3.3	Z2a-6								51	51	51	51	
Piling Works	Z2a.2	Z2a-2			58	58	58	58	58	58				
Construction of pile caps	Z2a.2	Z2a-3										54	54	
Construction of Pier	Z2a.2	Z2a-4												54
Construction of temporary platform	Z1-N.1	Z1-N-1	62	62	62									
Piling Works	Z1-N.1	Z1-N-2		64	64	64	64							
Construction of pile caps	Z1-N.1	Z1-N-3							60	60				
Construction of pier	Z1-N.1	Z1-N-4									63	63	63	63
Construction of temporary platform	Z1-N.2	Z1-N-1	59	59	59									
Piling Works	Z1-N.2	Z1-N-2		61	61	61	61							
Construction of pile caps	Z1-N.2	Z1-N-3							57	57				
Construction of pier	Z1-N.2	Z1-N-4									60	60	60	60
Construction of temporary platform	Z1-S	Z1-S-1	56	56	56									
Piling Works	Z1-S	Z1-S-2		57	57	57	57	57						
Construction of pile caps	Z1-S	Z1-S-3								56	56			
Construction of Pier	Z1-S	Z1-S-4										59	59	59
Construction of temporary platform	A16N	A16N-2	49	49	49									
Piling Works	A16N	A16N-3	55	55	55	55	55	55	55	55	55			
Construction of pile caps	A16N	A16N-4					57	57	57	57	57	57	57	57
Construction of Station Structure	A16N	A16N-5											55	55
SSHP works	FS	FS-1	55	55	55	55								
Predicted Noise Level, Leq (30mins), dB(A)			66	69	69	68	68	63	65	66	66	67	67	67

Activity Name	Work Zone	Activity Index	2026											
			J	F	M	A	M	J	J	A	S	O	N	D
Construction of temporary platform	Z2b.2	Z2b-1	49	49	49									
Piling Works	Z2b.2	Z2b-2		49	49	49	49	49	49					
Construction of pile caps	Z2b.2	Z2b-3									47	47		
Construction of Pier	Z2b.2	Z2b-4									45	45	45	45
Construction of Pier	Z2a.1	Z2a-4	49	49	49	49	49	49	49	49	49	49		
Construcion of viaduct structure	Z2a.1	Z2a-5											50	50
Construction of Pier	Z2a.2	Z2a-4	54	54	54	54	54	54	54	54	54	54		
Construcion of viaduct structure	Z2a.2	Z2a-5											55	55
Construction of pier	Z1-N.1	Z1-N-4	63	63	63	63	63	63	63	63	63	63		
Construction of viaduct structure	Z1-N.1	Z1-N-5											63	63
Construction of pier	Z1-N.2	Z1-N-4	60	60	60	60	60	60	60	60	60	60		
Construction of viaduct structure	Z1-N.2	Z1-N-5											60	60
Construction of Pier	Z1-S	Z1-S-4	59	59	59	59	59	59	59					
Construction of Viaduct Structure	Z1-S	Z1-S-5								53	53	53	53	53
Remove Temporary Platform	A16N	A16N-1				54	54	54						
Construction of pile caps	A16N	A16N-4	57	57	57									
Construction of Station Structure	A16N	A16N-5	55	55	55	55	55	55	55	55	55	55	55	55
ABWF works for Degree 1	A16N	A16N-6					55	55	55	55	55	55	55	55
Demolition of existing swimming pool and plant room	TMSP	A16S-4								61	61	61	61	
Construction of pile caps	FS	FS-2										57	57	57
ABWF & BS works - A16 Station Northern	A16N	A16N-7							49	49	49	49	49	49
Predicted Noise Level, Leq (30mins), dB(A)			67	67	67	67	67	67	67	67	67	68	68	67

Activity Name	Work Zone	Activity Index	2027											
			J	F	M	A	M	J	J	A	S	O	N	D
Construction of Pier	Z2b.2	Z2b-4	45	45	45	45								
Construction of viaduct structure	Z2b.2	Z2b-5			48	48	48	48	48	48	48	48	48	
Construcion of viaduct structure	Z2a.1	Z2a-5	50	50	50	50	50	50	50	50				
Construcion of viaduct structure	Z2a.2	Z2a-5	55	55	55	55	55	55	55	55				
Construction of viaduct structure	Z1-N.1	Z1-N-5	63	63	63	63	63	63	63	63				
Construction of viaduct structure	Z1-N.2	Z1-N-5	60	60	60	60	60	60	60	60				
Construction of Viaduct Structure	Z1-S	Z1-S-5	53	53	53	53	53	53	53					
Construction of Station Structure	A16N	A16N-5	55	55										
ABWF works for Degree 1	A16N	A16N-6	55	55	55	55								
Construction of pile caps	FS	FS-2	57	57	57									
Construction of building structures	FS	FS-3				60	60	60	60	60	60	60	60	60
ABWF & BS works - A16 Station Northern	A16N	A16N-7	49	49	49	49	49	49	49	49	49	49	49	49
Predicted Noise Level, Leq (30mins), dB(A)			67	67	67	67	67	67	67	67	61	61	61	60

Activity Name	Work Zone	Activity Index	2028												2029												2030											
			J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2																						65	65	65	65	65	65									
ABWF works for Degree 1	V1	V1-1		62	62	62																																
Remove upstream and downstream temporary platform at Zone 2b	Z2b	V1-2					46	46	46	46																												
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2					54	54	54	54																												
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2					61	61	61	61																												
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2					50	50	50	50																												
ABWF works for Degree 1	FS	FS-4	61	61																																		
ABWF & BS works - A16 Station Northern	A16N	A16N-7	49																																			
Predicted Noise Level, Leq (30mins), dB(A)			61	65	62	62	62	62	62	62														65	65	65	65	65	65									
Reprovision of Pet Garden	WS3.5	RPG-1												67	67	67	67	67	67	67																		
Predicted Cumulative Noise Level, Leq (30mins), dB(A)														67	67	67	67	67	67	67																		

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: SCCMC
Assessment Floor: G/F
Floor Height (mPD): 8.7

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2023	2024	2025	2026	2027	2028	2029	2030
										S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																	
Civil Construction & Architectural Building Works Finishes																	
Demolition & Site Clearance																	
Pet Garden																	
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	222	0	222	-55		3		58 58 58 58 58 58						
Site Clearance of WS3.5	WS3.5	PG-2	104	83	0	83	-46		3		61 61 61 61						
Viaducts between TUM & A16																	
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	105	0	105	-48		3		55 55 55 55 55 55						
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	105	0	105	-48		3								53 53 53 53 53 53
Zone 2b.2																	
Construction of temporary platform	Z2b.2	Z2b-1	103	293	0	293	-57		3			49 49 49 49					
Piling Works	Z2b.2	Z2b-2	103	293	0	293	-57		3			49 49 49 49 49 49 49					
Construction of pile caps	Z2b.2	Z2b-3	101	293	0	293	-57		3			47 47					
Construction of Pier	Z2b.2	Z2b-4	99	293	0	293	-57		3			45 45 45 45 45 45 45 45					
Construction of viaduct structure	Z2b.2	Z2b-5	102	293	0	293	-57		3			48 48 48 48 48 48 48 48					
Zone 2a.1																	
Construction of temporary platform	Z2a.1	Z2a-1	103	211	0	211	-54		3		52 52	52 52					
Piling Works	Z2a.1	Z2a-2	103	211	0	211	-54		3			52 52 52 52 52 52					
Construction of pile caps	Z2a.1	Z2a-3	99	211	0	211	-54		3			48 48					
Construction of Pier	Z2a.1	Z2a-4	99	211	0	211	-54		3			48 48 48 48 48 48 48 48 48 48					
Construcion of viaduct structure	Z2a.1	Z2a-5	100	211	0	211	-54		3			49 49					
Zone 2a.2																	
Construction of temporary platform	Z2a.2	Z2a-1	103	144	0	144	-51		3		55 55	55 55					
Construction of temporary bridge	WS3.3	Z2a-6	100	210	0	210	-54		3			49 49 49 49					
Piling Works	Z2a.2	Z2a-2	103	144	0	144	-51		3			55 55 55 55 55 55					
Construction of pile caps	Z2a.2	Z2a-3	99	144	0	144	-51		3			51 51					
Construction of Pier	Z2a.2	Z2a-4	99	144	0	144	-51		3			51 51 51 51 51 51 51 51 51 51					
Construcion of viaduct structure	Z2a.2	Z2a-5	100	144	0	144	-51		3			52 52	52 52 52 52 52 52 52 52				
Zone 1																	
Zone 1-North.1																	
Construction of temporary platform	Z1-N.1	Z1-N-1	101	127	0	127	-50		3		54 54	54 54 54					
Piling Works	Z1-N.1	Z1-N-2	103	127	0	127	-50		3			56 56 56 56 56					
Construction of pile caps	Z1-N.1	Z1-N-3	99	127	0	127	-50		3			52 52					
Construction of pier	Z1-N.1	Z1-N-4	102	127	0	127	-50		3			55 55 55 55 55 55 55 55 55 55	55 55 55 55 55 55 55 55 55 55				
Construction of viaduct structure	Z1-N.1	Z1-N-5	102	127	0	127	-50		3			55 55	55 55 55 55 55 55 55 55				
Zone 1-North.2																	
Construction of temporary platform	Z1-N.2	Z1-N-1	101	150	0	150	-52		3		52 52	52 52 52					
Piling Works	Z1-N.2	Z1-N-2	103	150	0	150	-52		3			54 54 54 54					
Construction of pile caps	Z1-N.2	Z1-N-3	99	150	0	150	-52		3			50 50					
Construction of pier	Z1-N.2	Z1-N-4	102	150	0	150	-52		3			53 53 53 53	53 53 53 53 53 53 53 53 53 53				
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	150	0	150	-52		3			53 53	53 53 53 53 53 53 53 53				
Zone 1-South																	
Construction of temporary platform	Z1-S	Z1-S-1	106	231	0	231	-55		3		54 54	54 54 54					
Piling Works	Z1-S	Z1-S-2	107	231	0	231	-55		3			55 55 55 55 55					
Construction of pile caps	Z1-S	Z1-S-3	106	231	0	231	-55		3			54 54					
Construction of Pier	Z1-S	Z1-S-4	109	231	0	231	-55		3			57 57 57	57 57 57 57 57 57 57				
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	231	0	231	-55		3				51 51 51 51 51	51 51 51 51 51 51 51			
Degree 1 Completion																	
ABWF works for Degree 1	V1	V1-1	100	124	0	124	-50		3						53 53 53		
Removal of Temporary Platform																	
Remove upstream and downstream temporary platform at Zone 2b	Z2b	V1-2	100	300	0	300	-58		3						45 45 45 45		
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2	100	150	0	150	-52		3						51 51 51 51		
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	128	0	128	-50		3						53 53 53 53		
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	231	0	231	-55		3						48 48 48 48		
A16 Northern (GL10-22)																	
Temp Platform																	
Construction of temporary platform	A16N	A16N-2	103	317	0	317	-58		3		48 48	48 48 48					
Remove Temporary Platform	A16N	A16N-1	108	317	0	317	-58		3				53 53 53				
A16 Northern																	
Piling Works	A16N	A16N-3	109	317	0	317	-58		3		54 54 54	54 54 54 54 54 54 54 54	54 54 54 54 54 54 54 54 54 54				
Construction of pile caps	A16N	A16N-4	111	317	0	317	-58		3			56 56 56 56	56 56 56 56 56 56 56 56 56 56				
Construction of Station Structure	A16N	A16N-5	109	317	0	317	-58		3			54 54	54 54 54 54 54 54 54 54 54 54	54 54			
Degree 1 Completion																	
ABWF works for Degree 1	A16N	A16N-6	109	317	0	317	-58		3				54 54 54 54 54 54 54 54	54 54 54 54			
A16 Southern (GL1-10)																	
Demolition of existing swimming pool and plant room																	
Demolition of existing swimming pool and plant room	TMSP	A16S-4	114	297	0	297	-57		3				60 60 60 60				
Feeder Substation																	
SSHP works	FS	FS-1	105	217	0	217	-55		3		53 53	53 53 53 53					
Construction of pile caps	FS	FS-2	107	217	0	217	-55		3				55 55 55	55 55 55			
Construction of building structures	FS	FS-3	110	217	0	217	-55		3					58 58 58 58 58 58 58 58			
ABWF works for Degree 1	FS	FS-4	111	217	0	217	-55		3						59 59		
Architectural Finishing Works																	
A16 Station																	
ABWF & BS works - A16 Station Northern	A16N	A16N-7	103	317	0	317	-58		3				48 48 48 48 48 48	48 48 48 48 48 48 48 48 48 48	48		
Predicted Noise Level, Leq (30mins), dB(A)											60 63 63 63 61 54 54 54 54 62 62	62 64 64 63 63 62 61 62 62 62 63 63	63 63 63 62 63 63 63 64 64 64 64 63	63 63 62 63 62 62 62 62 59 59 59 58	59 60 53 53 56 56 56 56		53 53 53 53 53 53
Concurrent Project																	
Reprovision of Pet Garden	WS3.5	RPG-1	104	83	0	83.0	-46		3							61 61 61 61 61 61	
Public Housing Developments at Yip Wong Road*										63 63 59 59	59 59 59 59 59 59 54 54						
Predicted Cumulative Noise Level, Leq (30mins), dB(A)										63 63 59 59	62 65 65 65 65 63 57 57					61 61 61 61 61 61	

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: TE1
Assessment Floor: 1/F
Floor Height (mPD): 30.6

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)									
Civil Construction & Architectural Building Works Finishes									
Demolition & Site Clearance									
Pet Garden									
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	149	11	149	-51		3
Site Clearance of WS3.5	WS3.5	PG-2	104	205	11	205	-54		3
Viaducts between TUM & A16									
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	132	11	132	-50		3
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	132	11	132	-50		3
Zone 2a.2									
Construction of temporary platform	Z2a.2	Z2a-1	103	276	11	276	-57		3
Construction of temporary bridge	WS3.3	Z2a-6	100	276	11	276	-57		3
Piling Works	Z2a.2	Z2a-2	103	276	11	276	-57		3
Construction of pile caps	Z2a.2	Z2a-3	99	276	11	276	-57		3
Construction of Pier	Z2a.2	Z2a-4	99	276	11	276	-57		3
Construcion of viaduct structure	Z2a.2	Z2a-5	100	276	11	276	-57		3
Zone 1									
Zone 1-North.1									
Construction of temporary platform	Z1-N.1	Z1-N-1	101	199	11	199	-54		3
Piling Works	Z1-N.1	Z1-N-2	103	199	11	199	-54		3
Construction of pile caps	Z1-N.1	Z1-N-3	99	199	11	199	-54		3
Construction of pier	Z1-N.1	Z1-N-4	102	199	11	199	-54		3
Construction of viaduct structure	Z1-N.1	Z1-N-5	102	199	11	199	-54		3
Zone 1-North.2									
Construction of temporary platform	Z1-N.2	Z1-N-1	101	131	11	131	-50		3
Piling Works	Z1-N.2	Z1-N-2	103	131	11	131	-50		3
Construction of pile caps	Z1-N.2	Z1-N-3	99	131	11	131	-50		3
Construction of pier	Z1-N.2	Z1-N-4	102	131	11	131	-50		3
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	131	11	131	-50		3
Zone 1-South									
Construction of temporary platform	Z1-S	Z1-S-1	106	93	11	94	-47		3
Piling Works	Z1-S	Z1-S-2	107	93	11	94	-47		3
Construction of pile caps	Z1-S	Z1-S-3	106	93	11	94	-47		3
Construction of Pier	Z1-S	Z1-S-4	109	93	11	94	-47		3
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	93	11	94	-47		3
Degree 1 Completion									
ABWF works for Degree 1	V1	V1-1	100	92	11	93	-47		3
Removal of Temporary Platform									
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2	100	276	11	276	-57		3
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	139	11	139	-51		3
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	93	11	94	-47		3
A16 Northern (GL10-22)									
Temp Platform									
Construction of temporary platform	A16N	A16N-2	103	129	11	129	-50		3
Remove Temporary Platform	A16N	A16N-1	108	129	11	129	-50		3
A16 Northern									
Piling Works	A16N	A16N-3	109	129	11	129	-50		3
Construction of pile caps	A16N	A16N-4	111	129	11	129	-50		3
Construction of Station Structure	A16N	A16N-5	109	129	11	129	-50		3
Degree 1 Completion									
ABWF works for Degree 1	A16N	A16N-6	109	129	11	129	-50		3
A16 Southern (GL1-10)									
Temp Platform									
Construction of temporary platform	A16S	A16S-3	103	275	11	275	-57		3
Remove Temporary Platform	A16S	A16S-1	112	275	11	275	-57		3
Demolition of existing swimming pool and plant room									
Demolition of existing swimming pool and plant room	TMSP	A16S-4	114	189	11	189	-54		3
A16 Station Southern									
GI Works	A16S	A16S-2	110	275	11	275	-57		3
Piling Works	A16S	A16S-5	110	275	11	275	-57		3
Construction of pile caps	A16S	A16S-6	110	275	11	275	-57		3
Construction of Station Structure	A16S	A16S-7	110	275	11	275	-57		3
Other external works	A16S	A16S-9	111	275	11	275	-57		3
Degree 1 Completion									
ABWF works for Degree 1	A16S	A16S-8	114	275	11	275	-57		3
Feeder Substation									
SSHP works	FS	FS-1	105	151	11	151	-52		3
Construction of pile caps	FS	FS-2	107	151	11	151	-52		3
Construction of building structures	FS	FS-3	110	151	11	151	-52		3
ABWF works for Degree 1	FS	FS-4	111	151	11	151	-52		3
Architectural Finishing Works									
A16 Station									
ABWF & BS works - A16 Station Northern	A16N	A16N-7	103	129	11	129	-50		3
ABWF & BS works - A16 Station Southern	A16S	A16S-10	103	275	11	275	-57		3
Predicted Noise Level, Leq (30mins), dB(A)									
Concurrent Project									
Reprovision of Pet Garden	WS3.5	RPG-1	104	205	11	205.3	-54		3
Public Housing Developments at Yip Wong Road*									
Predicted Cumulative Noise Level, Leq (30mins), dB(A)									

Noise levels by month, 2023–2025 (rows identified by Work Zone / Activity Index)

Work Zone / Activity Index	2023				2024												2025											
	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
PG / PG-1					62	62	62	62	62	62																		
WS3.5 / PG-2						53	53	53	53																			
W1 / W1-1					53	53	53	53	53	53																		
Z2a.2 / Z2a-1															49	49	49	49										
WS3.3 / Z2a-6																								46	46	46	46	
Z2a.2 / Z2a-2																			49	49	49	49	49	49				
Z2a.2 / Z2a-3																										45	45	
Z2a.2 / Z2a-4																												45
Z1-N.1 / Z1-N-1															50	50	50	50	50									
Z1-N.1 / Z1-N-2																		52	52	52	52							
Z1-N.1 / Z1-N-3																							48	48				
Z1-N.1 / Z1-N-4																									51	51	51	51
Z1-N.2 / Z1-N-1															54	54	54	54	54									
Z1-N.2 / Z1-N-2																		56	56	56	56							
Z1-N.2 / Z1-N-3																							52	52				
Z1-N.2 / Z1-N-4																									55	55	55	55
Z1-S / Z1-S-1															62	62	62	62	62									
Z1-S / Z1-S-2																		63	63	63	63	63						
Z1-S / Z1-S-3																								62	62			
Z1-S / Z1-S-4																										65	65	65
A16N / A16N-2															56	56	56	56	56									
A16N / A16N-3										62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62			
A16N / A16N-4																					64	64	64	64	64	64	64	64
A16N / A16N-5																											62	62
A16S / A16S-3															49	49	49	49										
A16S / A16S-5															56	56	56	56	56	56	56	56	56	56	56	56	56	56
FS / FS-1															56	56	56	56	56	56								
Predicted Noise Level, Leq (30mins), dB(A)					63	63	63	63	63	65	62	62	62	62	67	67	67	69	69	67	69	68	67	68	68	68	69	69
Public Housing Developments at Yip Wong Road*	70	70	68	68	68	68	68	67	67	67	66	65	59	59	59	59												
Predicted Cumulative Noise Level, Leq (30mins), dB(A)	70	70	68	68	69	69	69	68	68	69	67	67	64	64	68	68												

Noise levels by month, 2026–2027

Work Zone / Activity Index	2026												2027											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Z2a.2 / Z2a-4	45	45	45	45	45	45	45	45	45	45														
Z2a.2 / Z2a-5											46	46	46	46	46	46	46	46	46	46				
Z1-N.1 / Z1-N-4	51	51	51	51	51	51	51	51	51	51														
Z1-N.1 / Z1-N-5											51	51	51	51	51	51	51	51	51	51				
Z1-N.2 / Z1-N-4	55	55	55	55	55	55	55	55	55	55														
Z1-N.2 / Z1-N-5											55	55	55	55	55	55	55	55	55	55				
Z1-S / Z1-S-4	65	65	65	65	65	65	65																	
Z1-S / Z1-S-5								59	59	59	59	59	59	59	59	59	59	59	59					
A16N / A16N-1				61	61	61																		
A16N / A16N-4	64	64	64																					
A16N / A16N-5	62	62	62	62	62	62	62	62	62	62	62	62	62	62										
A16N / A16N-6					62	62	62	62	62	62	62	62	62	62	62	62								
TMSP / A16S-4								63	63	63	63													
A16S / A16S-2									56	56														
A16S / A16S-5	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56			
A16S / A16S-6																						56	56	56
A16S / A16S-7																							56	56
FS / FS-2										58	58	58	58	58	58									
FS / FS-3																61	61	61	61	61	61	61	61	61
A16N / A16N-7							56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Predicted Noise Level, Leq (30mins), dB(A)	69	69	69	68	69	69	69	69	69	69	69	68	68	68	66	67	65	65	65	64	63	63	64	64

Noise levels by month, 2028–2030

Work Zone / Activity Index	2028												2029												2030											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
W1 / W1-2																						51	51	51	51	51	51									
V1 / V1-1		56	56	56																																
Z2a / V1-2					46	46	46	46																												
Z1-N / V1-2					52	52	52	52																												
Z1-S / V1-2					56	56	56	56																												
A16S / A16S-1							58	58	58																											
A16S / A16S-6	56																																			
A16S / A16S-7	56	56	56	56	56	56	56	56	56	56	56	56																								
A16S / A16S-9													57	57	57	57	57																			
A16S / A16S-8							60	60	60	60	60	60	60	60																						
FS / FS-4	62	62																																		
A16N / A16N-7	56																																			
A16S / A16S-10									49	49	49	49	49	49	49	49	49	49	49	49	49	49	49													
Predicted Noise Level, Leq (30mins), dB(A)	64	64	59	59	60	60	64	64	63	62	62	62	62	62	58	58	58	49	49	49	49	53	53	51	51	51	51									
WS3.5 / RPG-1												53	53	53	53	53	53	53																		
Predicted Cumulative Noise Level, Leq (30mins), dB(A)												62	63	63	59	59	59	54																		

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: HFTPS
Assessment Floor: G/F
Floor Height (mPD): 5.8

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)									
Civil Construction & Architectural Building Works Finishes									
Demolition & Site Clearance									
Pet Garden									
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	293	0	293	-57		3
Viaducts between TUM & A16									
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	294	0	294	-57		3
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	294	0	294	-57		3
Zone 1									
Zone 1-North.1									
Zone 1-South									
Construction of temporary platform	Z1-S	Z1-S-1	106	251	0	251	-56		3
Piling Works	Z1-S	Z1-S-2	107	251	0	251	-56		3
Construction of pile caps	Z1-S	Z1-S-3	106	251	0	251	-56		3
Construction of Pier	Z1-S	Z1-S-4	109	251	0	251	-56		3
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	251	0	251	-56		3
Degree 1 Completion									
ABWF works for Degree 1	V1	V1-1	100	251	0	251	-56		3
Removal of Temporary Platform									
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	251	0	251	-56		3
A16 station									
A16 Northern (GL10-22)									
Temp Platform									
Construction of temporary platform	A16N	A16N-2	103	239	0	239	-56		3
Remove Temporary Platform	A16N	A16N-1	108	239	0	239	-56		3
A16 Northern									
Piling Works	A16N	A16N-3	109	239	0	239	-56		3
Construction of pile caps	A16N	A16N-4	111	239	0	239	-56		3
Construction of Station Structure	A16N	A16N-5	109	239	0	239	-56		3
Degree 1 Completion									
ABWF works for Degree 1	A16N	A16N-6	109	239	0	239	-56		3
A16 Southern (GL1-10)									
Temp Platform									
Construction of temporary platform	A16S	A16S-3	103	281	0	281	-57		3
Remove Temporary Platform	A16S	A16S-1	112	281	0	281	-57		3
Demolition of existing swimming pool and plant room									
Demolition of existing swimming pool and plant room	TMSP	A16S-4	114	302	0	302	-58		3
A16 Station Southern									
GI Works	A16S	A16S-2	110	281	0	281	-57		3
Piling Works	A16S	A16S-5	110	281	0	281	-57		3
Construction of pile caps	A16S	A16S-6	110	281	0	281	-57		3
Construction of Station Structure	A16S	A16S-7	110	281	0	281	-57		3
Other external works	A16S	A16S-9	111	281	0	281	-57		3
Degree 1 Completion									
ABWF works for Degree 1	A16S	A16S-8	114	281	0	281	-57		3
Architectural Finishing Works									
A16 Station									
ABWF & BS works - A16 Station Northern	A16N	A16N-7	103	239	0	239	-56		3
ABWF & BS works - A16 Station Southern	A16S	A16S-10	103	281	0	281	-57		3
Predicted Noise Level, Leq (30mins), dB(A)									
Concurrent Project									
Public Housing Developments at Yip Wong Road*									
Predicted Cumulative Noise Level, Leq (30mins), dB(A)									

Activity Name	Activity Index	2023				2024											
		S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Demolition of Pet Garden and Hoi Wong Road Garden	PG-1					56	56	56	56	56	56						
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1-1					46	46	46	46	46	46						
Construction of temporary platform	Z1-S-1															53	53
Construction of temporary platform	A16N-2															50	50
Piling Works	A16N-3											56	56	56	56	56	56
Construction of temporary platform	A16S-3															49	49
Piling Works	A16S-5															56	56
Predicted Noise Level, Leq (30mins), dB(A)						56	56	56	56	56	59	56	56	56	56	61	61
Public Housing Developments at Yip Wong Road*		66	66	66	66	66	66	66	65	65	65	64	61	59	59	59	59
Predicted Cumulative Noise Level, Leq (30mins), dB(A)		66	66	66	66	66	66	66	66	66	66	65	62	61	61	63	63

Activity Name	Activity Index	2025												2026											
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Construction of temporary platform	Z1-S-1	53	53	53																					
Piling Works	Z1-S-2		54	54	54	54	54																		
Construction of pile caps	Z1-S-3								53	53															
Construction of Pier	Z1-S-4										56	56	56	56	56	56	56	56	56	56					
Construction of Viaduct Structure	Z1-S-5																				50	50	50	50	50
Construction of temporary platform	A16N-2	50	50	50																					
Remove Temporary Platform	A16N-1																55	55	55						
Piling Works	A16N-3	56	56	56	56	56	56	56	56	56															
Construction of pile caps	A16N-4					58	58	58	58	58	58	58	58	58	58	58									
Construction of Station Structure	A16N-5											56	56	56	56	56	56	56	56	56	56	56	56	56	56
ABWF works for Degree 1	A16N-6																	56	56	56	56	56	56	56	56
Construction of temporary platform	A16S-3	49	49																						
Demolition of existing swimming pool and plant room	A16S-4																				59	59	59	59	
GI Works	A16S-2																					56	56		
Piling Works	A16S-5	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
ABWF & BS works - A16 Station Northern	A16N-7																			50	50	50	50	50	50
Predicted Noise Level, Leq (30mins), dB(A)		61	62	61	60	62	62	62	62	62	62	63	63	63	63	63	62	63	63	62	63	64	64	63	61

Activity Name	Activity Index	2027												2028											
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Construction of Viaduct Structure	Z1-S-5	50	50	50	50	50	50	50																	
ABWF works for Degree 1	V1-1														47	47	47								
Remove upstream and downstream temporary platform at Zone 1-South	V1-2																	47	47	47	47				
Construction of Station Structure	A16N-5	56	56																						
ABWF works for Degree 1	A16N-6	56	56	56	56																				
Remove Temporary Platform	A16S-1																			58	58	58			
Piling Works	A16S-5	56	56	56	56	56	56	56	56	56															
Construction of pile caps	A16S-6										56	56	56	56											
Construction of Station Structure	A16S-7											56	56	56	56	56	56	56	56	56	56	56	56	56	56
ABWF works for Degree 1	A16S-8																			60	60	60	60	60	60
ABWF & BS works - A16 Station Northern	A16N-7	50	50	50	50	50	50	50	50	50	50	50	50	50											
ABWF & BS works - A16 Station Southern	A16S-10																					49	49	49	49
Predicted Noise Level, Leq (30mins), dB(A)		61	61	60	60	58	58	58	57	57	57	60	60	60	57	57	57	57	57	63	63	63	62	62	62

Activity Name	Activity Index	2029												2030											
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1-2										44	44	44	44	44	44									
Other external works	A16S-9	57	57	57	57	57																			
ABWF works for Degree 1	A16S-8	60	60																						
ABWF & BS works - A16 Station Southern	A16S-10	49	49	49	49	49	49	49	49	49	49	49													
Predicted Noise Level, Leq (30mins), dB(A)		62	62	58	58	58	49	49	49	49	50	50	44	44	44	44									

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: THRPH2a
Assessment Floor: 2/F
Floor Height (mPD): 17.8

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2023				2024												2025												2026												2027												2028												2029												2030											
										S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																																																																																														
Civil Construction & Architectural Building Works Finishes																																																																																														
Demolition & Site Clearance																																																																																																
Pet Garden																																																																																																
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	237	0	237	-55		3					58	58	58	58	58	58																																																																											
Site Clearance of WS3.5	WS3.5	PG-2	104	166	0	166	-52		3						55	55	55	55																																																																												
Viaducts between TUM & A16																																																																																															
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	27	0	27	-37		3					66	66	66	66	66	66																																																																												
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	27	0	27	-37		3																																																																								64	64	64	64	64	64									
Zone 2b.1																																																																																																
Construction of temporary platform	Z2b.1	Z2b-1	103	311	0	311	-58		3																												48	48	48	48																																																				
Piling Works	Z2b.1	Z2b-2	103	311	0	311	-58		3																														48	48	48	48	48	48																																														
Construction of pile caps	Z2b.1	Z2b-3	101	311	0	311	-58		3																																					46	46																																												
Construction of Pier	Z2b.1	Z2b-4	99	311	0	311	-58		3																																					44	44	44	44	44	44	44	44																																								
Construction of viaduct structure	Z2b.1	Z2b-5	102	311	0	311	-58		3																																											47	47	47	47	47	47	47	47	47																																		
Zone 2b.2																																																																																																
Construction of temporary platform	Z2b.2	Z2b-1	103	228	0	228	-55		3																												51	51	51	51																																																				
Piling Works	Z2b.2	Z2b-2	103	228	0	228	-55		3																														51	51	51	51	51	51																																														
Construction of pile caps	Z2b.2	Z2b-3	101	228	0	228	-55		3																																					49	49																																												
Construction of Pier	Z2b.2	Z2b-4	99	228	0	228	-55		3																																					47	47	47	47	47	47	47	47																																								
Construction of viaduct structure	Z2b.2	Z2b-5	102	228	0	228	-55		3																																											50	50	50	50	50	50	50	50	50																																		
Zone 2a.1																																																																																																	
Construction of temporary platform	Z2a.1	Z2a-1	103	160	0	160	-52		3															54	54	54	54																																																																						
Piling Works	Z2a.1	Z2a-2	103	160	0	160	-52		3																			54	54	54	54	54	54																																																																		
Construction of pile caps	Z2a.1	Z2a-3	99	160	0	160	-52		3																										50	50																																																													
Construction of Pier	Z2a.1	Z2a-4	99	160	0	160	-52		3																												50	50	50	50	50	50	50	50	50	50	50																																																
Construcion of viaduct structure	Z2a.1	Z2a-5	100	160	0	160	-52		3																																							51	51	51	51	51	51	51	51	51	51																																								
Zone 2a.2																																																																																																		
Construction of temporary platform	Z2a.2	Z2a-1	103	106	0	106	-48		3															58	58	58	58																																																																					
Construction of temporary bridge	WS3.3	Z2a-6	100	83	0	83	-46		3																								57	57	57	57																																																														
Piling Works	Z2a.2	Z2a-2	103	106	0	106	-48		3																			58	58	58	58	58	58																																																																		
Construction of pile caps	Z2a.2	Z2a-3	99	106	0	106	-48		3																										54	54																																																													
Construction of Pier	Z2a.2	Z2a-4	99	106	0	106	-48		3																												54	54	54	54	54	54	54	54	54	54	54																																																
Construcion of viaduct structure	Z2a.2	Z2a-5	100	106	0	106	-48		3																																							55	55	55	55	55	55	55	55	55	55																																								
Zone 1																																																																																																			
Zone 1-North.1																																																																																																		
Construction of temporary platform	Z1-N.1	Z1-N-1	101	94	0	94	-47		3															57	57	57	57	57																																																																			
Piling Works	Z1-N.1	Z1-N-2	103	94	0	94	-47		3																		59	59	59	59																																																																		
Construction of pile caps	Z1-N.1	Z1-N-3	99	94	0	94	-47		3																							55	55																																																																
Construction of pier	Z1-N.1	Z1-N-4	102	94	0	94	-47		3																									58	58	58	58	58	58	58	58	58	58	58	58	58	58																																																
Construction of viaduct structure	Z1-N.1	Z1-N-5	102	94	0	94	-47		3																																							58	58	58	58	58	58	58	58	58	58																																								
Zone 1-North.2																																																																																																		
Construction of temporary platform	Z1-N.2	Z1-N-1	101	113	0	113	-49		3															55	55	55	55	55																																																																			
Piling Works	Z1-N.2	Z1-N-2	103	113	0	113	-49		3																		57	57	57	57																																																																		
Construction of pile caps	Z1-N.2	Z1-N-3	99	113	0	113	-49		3																							53	53																																																																
Construction of pier	Z1-N.2	Z1-N-4	102	113	0	113	-49		3																									56	56	56	56	56	56	56	56	56	56	56	56	56	56																																																
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	113	0	113	-49		3																																							56	56	56	56	56	56	56	56	56	56																																								
Zone 1-South																																																																																																			
Construction of temporary platform	Z1-S	Z1-S-1	106	201	0	201	-54		3															55	55	55	55	55																																																																		
Piling Works	Z1-S	Z1-S-2	107	201	0	201	-54		3																		56	56	56	56	56																																																															
Construction of pile caps	Z1-S	Z1-S-3	106	201	0	201	-54		3																								55	55																																																														
Construction of Pier	Z1-S	Z1-S-4	109	201	0	201	-54		3																										58	58	58	58	58	58	58	58	58	58																																																			
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	201	0	201	-54		3																																				52	52	52	52	52	52	52	52	52	52	52	52																																								
Degree 1 Completion																																																																																																				
ABWF works for Degree 1	V1	V1-1	100	100	0	100	-48		3																																																								55	55	55																																
Removal of Temporary Platform																																																																																																					
Remove upstream and downstream temporary platform at Zone 2b	Z2b	V1-2	100	235	0	235	-55		3																																																											48	48	48	48																												
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2	100	83	0	83	-46		3																																																											57	57	57	57																												
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	93	0	93	-47		3																																																											56	56	56	56																												
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	201	0	201	-54		3																																																											49	49	49	49																												
A16 station																																																																																																		
A16 Northern (GL10-22)																																																																																																		
Temp Platform																																																																																																			
Construction of temporary platform	A16N	A16N-2	103	292	0	292	-57		3															49	49	49	49	49																																																																		
Remove Temporary Platform	A16N	A16N-1	108	292	0	292	-57		3																																54	54	54																																																				
A16 Northern																																																																																																			
Piling Works	A16N	A16N-3	109	292	0	292	-57		3										55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55																																																														
Construction of pile caps	A16N	A16N-4	111	292	0	292	-57		3																					57	57	57	57	57	57	57	57	57	57	57																																																								
Construction of Station Structure	A16N	A16N-5	109	292	0	292	-57		3																											55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55																																												
Degree 1 Completion																																																																																																			
ABWF works for Degree 1	A16N	A16N-6	109	292	0	292	-57		3																																	55	55	55	55	55	55	55	55	55	55	55	55																																										
A16 Southern (GL1-10)																																																																																																			
Demolition of existing swimming pool and plant room																																																																																																			
Demolition of existing swimming pool and plant room	TMSP	A16S-4	114	334	0	334	-58		3																																				59	59	59	59																																																
Feeder Substation																																																																																																				
SSHP works	FS	FS-1	105	234	0	234	-55		3															53	53	53	53	53	53																																																																
Construction of pile caps	FS	FS-2	107	234	0	234	-55		3																																						55	55	55	55	55	55																																												
Construction of building structures	FS	FS-3	110	234	0	234	-55		3																																												58	58	58	58	58	58	58	58	58																																								
ABWF works for Degree 1	FS	FS-4	111	234	0	234	-55		3																																																								59	59																																			
Architectural Finishing Works																																																																																																					
A16 Station																																																																																																						
ABWF & BS works - A16 Station Northern	A16N	A16N-7	103	292	0	292	-57		3																																			49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49																																						
Predicted Noise Level, Leq (30mins), dB(A)														67	67	67	67	67	67	55	55	55	55	64	64	64	66	66	65	65	63	63	65	64	65	65	65	65	65	65	64	65	65	65	65	65	66	65	64	64	64	64	65	64	64	64	64	59	59	59	59	59	60	55	55	60	60	60	60																64	64	64	64	64	64									
Concurrent Project																																																																																																							
Reprovision of Pet Garden	WS3.5	RPG-1	104	166	0	166.0	-52		3																																																																			55	55	55	55	55	55	55																					
Predicted Cumulative Noise Level, Leq (30mins), dB(A)																																																																												55	55	55	55	55	55	55																					

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: THRPH2b
Assessment Floor: 4/F
Floor Height (mPD): 27.4

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2023	2024	2025	2026	2027	2028	2029	2030
										S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																	
Civil Construction & Architectural Building Works Finishes																	
Demolition & Site Clearance																	
Pet Garden																	
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	242	7	242	-56		3		57 57 57 57 57 57						
Site Clearance of WS3.5	WS3.5	PG-2	104	171	7	171	-53		3		54 54 54 54						
Viaducts between TUM & A16																	
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	16	7	18	-33		3		70 70 70 70 70 70						
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	16	7	18	-33		3								68 68 68 68 68 68
Zone 2b.1																	
Construction of temporary platform	Z2b.1	Z2b-1	103	307	7	307	-58		3			48 48 48 48					
Piling Works	Z2b.1	Z2b-2	103	307	7	307	-58		3			48 48 48 48 48 48 48					
Construction of pile caps	Z2b.1	Z2b-3	101	307	7	307	-58		3			46 46					
Construction of Pier	Z2b.1	Z2b-4	99	307	7	307	-58		3			44 44 44 44 44 44 44 44					
Construction of viaduct structure	Z2b.1	Z2b-5	102	307	7	307	-58		3			47 47 47 47 47 47 47 47					
Zone 2b.2																	
Construction of temporary platform	Z2b.2	Z2b-1	103	225	7	225	-55		3			51 51 51 51					
Piling Works	Z2b.2	Z2b-2	103	225	7	225	-55		3			51 51 51 51 51 51 51					
Construction of pile caps	Z2b.2	Z2b-3	101	225	7	225	-55		3			49 49					
Construction of Pier	Z2b.2	Z2b-4	99	225	7	225	-55		3			47 47 47 47 47 47 47 47					
Construction of viaduct structure	Z2b.2	Z2b-5	102	225	7	225	-55		3			50 50 50 50 50 50 50 50					
Zone 2a.1																	
Construction of temporary platform	Z2a.1	Z2a-1	103	157	7	157	-52		3		54 54	54 54					
Piling Works	Z2a.1	Z2a-2	103	157	7	157	-52		3			54 54 54 54 54 54					
Construction of pile caps	Z2a.1	Z2a-3	99	157	7	157	-52		3			50 50					
Construction of Pier	Z2a.1	Z2a-4	99	157	7	157	-52		3			50 50 50 50 50 50 50 50 50 50					
Construcion of viaduct structure	Z2a.1	Z2a-5	100	157	7	157	-52		3			51 51 51 51 51 51 51 51 51 51					
Zone 2a.2																	
Construction of temporary platform	Z2a.2	Z2a-1	103	106	7	106	-49		3		57 57	57 57					
Construction of temporary bridge	WS3.3	Z2a-6	100	81	7	81	-46		3			57 57 57 57					
Piling Works	Z2a.2	Z2a-2	103	106	7	106	-49		3			57 57 57 57 57 57					
Construction of pile caps	Z2a.2	Z2a-3	99	106	7	106	-49		3			53 53					
Construction of Pier	Z2a.2	Z2a-4	99	106	7	106	-49		3			53 53 53 53 53 53 53 53 53 53					
Construcion of viaduct structure	Z2a.2	Z2a-5	100	106	7	106	-49		3			54 54 54 54 54 54 54 54 54 54					
Zone 1																	
Zone 1-North.1																	
Construction of temporary platform	Z1-N.1	Z1-N-1	101	96	7	96	-48		3		56 56	56 56 56					
Piling Works	Z1-N.1	Z1-N-2	103	96	7	96	-48		3			58 58 58 58					
Construction of pile caps	Z1-N.1	Z1-N-3	99	96	7	96	-48		3			54 54					
Construction of pier	Z1-N.1	Z1-N-4	102	96	7	96	-48		3			57 57 57 57	57 57 57 57 57 57 57 57				
Construction of viaduct structure	Z1-N.1	Z1-N-5	102	96	7	96	-48		3			57 57 57 57 57 57 57 57 57 57					
Zone 1-North.2																	
Construction of temporary platform	Z1-N.2	Z1-N-1	101	118	7	118	-49		3		55 55	55 55 55					
Piling Works	Z1-N.2	Z1-N-2	103	118	7	118	-49		3			57 57 57 57					
Construction of pile caps	Z1-N.2	Z1-N-3	99	118	7	118	-49		3			53 53					
Construction of pier	Z1-N.2	Z1-N-4	102	118	7	118	-49		3			56 56 56 56	56 56 56 56 56 56 56 56 56 56				
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	118	7	118	-49		3			56 56	56 56 56 56 56 56 56 56				
Zone 1-South																	
Construction of temporary platform	Z1-S	Z1-S-1	106	206	7	206	-54		3		55 55	55 55 55					
Piling Works	Z1-S	Z1-S-2	107	206	7	206	-54		3			56 56 56 56 56					
Construction of pile caps	Z1-S	Z1-S-3	106	206	7	206	-54		3			55 55					
Construction of Pier	Z1-S	Z1-S-4	109	206	7	206	-54		3			58 58 58	58 58 58 58 58 58 58				
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	206	7	206	-54		3			52 52 52 52 52	52 52 52 52 52 52 52 52				
Degree 1 Completion																	
ABWF works for Degree 1	V1	V1-1	100	104	7	104	-48		3						55 55 55		
Removal of Temporary Platform																	
Remove upstream and downstream temporary platform at Zone 2b	Z2b	V1-2	100	231	7	231	-55		3						48 48 48 48		
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2	100	81	7	81	-46		3						57 57 57 57		
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	97	7	97	-48		3						55 55 55 55		
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	206	7	206	-54		3						49 49 49 49		
A16 station																	
A16 Northern (G(L)0-22)																	
Temp Platform																	
Construction of temporary platform	A16N	A16N-2	103	297	7	297	-57		3		49 49	49 49 49					
Remove Temporary Platform	A16N	A16N-1	108	297	7	297	-57		3				54 54 54				
A16 Northern																	
Piling Works	A16N	A16N-3	109	297	7	297	-57		3		55 55 55	55 55 55 55 55 55 55 55					
Construction of pile caps	A16N	A16N-4	111	297	7	297	-57		3			57 57 57 57 57 57 57 57	57 57 57				
Construction of Station Structure	A16N	A16N-5	109	297	7	297	-57		3			55 55	55 55 55 55 55 55 55 55 55 55				
Degree 1 Completion																	
ABWF works for Degree 1	A16N	A16N-6	109	297	7	297	-57		3				55 55 55 55 55 55 55 55 55 55				
A16 Southern (G(L)-10)																	
Demolition of existing swimming pool and plant room																	
Demolition of existing swimming pool and plant room	TMSP	A16S-4	114	339	7	339	-59		3				58 58 58 58				
Feeder Substation																	
SSHP works	FS	FS-1	105	239	7	239	-56		3		52 52	52 52 52 52					
Construction of pile caps	FS	FS-2	107	239	7	239	-56		3				54 54 54 54 54 54				
Construction of building structures	FS	FS-3	110	239	7	239	-56		3				57 57 57 57 57 57 57 57				
ABWF works for Degree 1	FS	FS-4	111	239	7	239	-56		3						58 58		
Architectural Finishing Works																	
A16 Station																	
ABWF & BS works - A16 Station Northern	A16N	A16N-7	103	297	7	297	-57		3				49 49 49 49 49 49 49 49	49 49 49 49 49 49 49 49 49 49	49		
Predicted Noise Level, Leq (30mins), dB(A)											70 70 70 70 70 70 55 55 55 55 64 64	64 66 66 64 65 63 63 65 64 65 65 65	65 65 65 64 65 64 64 64 65 65 65 64	64 64 64 64 63 63 63 63 59 59 59 58	59 60 55 55 60 60 60 60		68 68 68 68 68 68
Concurrent Project																	
Reprovision of Pet Garden	WS3.5	RPG-1	104	171	7	171.2	-53		3							54 54 54 54 54 54 54	
Predicted Cumulative Noise Level, Leq (30mins), dB(A)																54 54 54 54 54 54 54	

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: HSNPS
Assessment Floor: G/F
Floor Height (mPD): 6

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2023	2024	2025	2026	2027	2028	2029	2030
										S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																	
Civil Construction & Architectural Building Works Finishes																	
Demolition & Site Clearance																	
Pet Garden																	
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	107	0	107	-49		3		64 64 64 64 64 64						
Site Clearance of WS3.5	WS3.5	PG-2	104	143	0	143	-51		3		56 56 56 56						
Viaducts between TUM & A16																	
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	144	0	144	-51		3		52 52 52 52 52 52						
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	144	0	144	-51		3								50 50 50 50 50 50
Zone 2a.2																	
Construction of temporary platform	Z2a.2	Z2a-1	103	320	0	320	-58		3		48 48	48 48					
Piling Works	Z2a.2	Z2a-2	103	320	0	320	-58		3			48 48 48 48 48 48					
Construction of pile caps	Z2a.2	Z2a-3	99	320	0	320	-58		3			44 44					
Construction of Pier	Z2a.2	Z2a-4	99	320	0	320	-58		3			44	44 44 44 44 44 44 44 44 44 44				
Construcion of viaduct structure	Z2a.2	Z2a-5	100	320	0	320	-58		3				45 45	45 45 45 45 45 45 45 45			
Zone 1																	
Zone 1-North.1																	
Construction of temporary platform	Z1-N.1	Z1-N-1	101	246	0	246	-56		3		48 48	48 48 48 48					
Piling Works	Z1-N.1	Z1-N-2	103	246	0	246	-56		3			50 50 50 50					
Construction of pile caps	Z1-N.1	Z1-N-3	99	246	0	246	-56		3			46 46					
Construction of pier	Z1-N.1	Z1-N-4	102	246	0	246	-56		3			49 49 49 49	49 49 49 49 49 49 49 49 49 49				
Construction of viaduct structure	Z1-N.1	Z1-N-5	102	246	0	246	-56		3				49 49	49 49 49 49 49 49 49 49			
Zone 1-North.2																	
Construction of temporary platform	Z1-N.2	Z1-N-1	101	196	0	196	-54		3		50 50	50 50 50 50					
Piling Works	Z1-N.2	Z1-N-2	103	196	0	196	-54		3			52 52 52 52					
Construction of pile caps	Z1-N.2	Z1-N-3	99	196	0	196	-54		3			48 48					
Construction of pier	Z1-N.2	Z1-N-4	102	196	0	196	-54		3			51 51 51 51	51 51 51 51 51 51 51 51 51 51				
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	196	0	196	-54		3				51 51	51 51 51 51 51 51 51 51			
Zone 1-South																	
Construction of temporary platform	Z1-S	Z1-S-1	106	167	0	167	-52		3		57 57	57 57 57 57					
Piling Works	Z1-S	Z1-S-2	107	167	0	167	-52		3			58 58 58 58 58 58					
Construction of pile caps	Z1-S	Z1-S-3	106	167	0	167	-52		3			57 57					
Construction of Pier	Z1-S	Z1-S-4	109	167	0	167	-52		3			60 60 60	60 60 60 60 60 60				
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	167	0	167	-52		3				54 54 54 54 54	54 54 54 54 54 54 54 54			
Degree 1 Completion																	
ABWF works for Degree 1	V1	V1-1	100	167	0	167	-52		3						51 51 51		
Removal of Temporary Platform																	
Remove upstream and downstream temporary platform at Zone 2a and WS 3.3	Z2a	V1-2	100	329	0	329	-58		3						45 45 45 45		
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	198	0	198	-54		3						49 49 49 49		
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	167	0	167	-52		3						51 51 51 51		
A16 station																	
A16 Northern (GL10-22)																	
Temp Platform																	
Construction of temporary platform	A16N	A16N-2	103	184	0	184	-53		3		53 53	53 53 53					
Remove Temporary Platform	A16N	A16N-1	108	184	0	184	-53		3			58 58 58					
A16 Northern																	
Piling Works	A16N	A16N-3	109	184	0	184	-53		3		59 59 59 59 59 59 59	59 59 59 59 59 59 59					
Construction of pile caps	A16N	A16N-4	111	184	0	184	-53		3			61 61 61 61 61 61 61 61 61 61					
Construction of Station Structure	A16N	A16N-5	109	184	0	184	-53		3			59 59	59 59 59 59 59 59 59 59 59 59	59 59			
Degree 1 Completion																	
ABWF works for Degree 1	A16N	A16N-6	109	184	0	184	-53		3				59 59 59 59 59 59 59 59 59 59	59 59 59 59			
A16 Southern (GL1-10)																	
Temp Platform																	
Construction of temporary platform	A16S	A16S-3	103	291	0	291	-57		3		49 49	49 49					
Remove Temporary Platform	A16S	A16S-1	112	291	0	291	-57		3						58 58 58		
Demolition of existing swimming pool and plant room																	
Demolition of existing swimming pool and plant room	TMSP	A16S-4	114	143	0	143	-51		3				66 66 66 66				
A16 Station Southern																	
GI Works	A16S	A16S-2	110	291	0	291	-57		3				56 56				
Piling Works	A16S	A16S-5	110	291	0	291	-57		3		56 56	56 56 56 56 56 56 56 56	56 56 56 56 56 56 56 56 56 56	56 56 56 56 56 56 56 56 56 56			
Construction of pile caps	A16S	A16S-6	110	291	0	291	-57		3					56 56 56	56		
Construction of Station Structure	A16S	A16S-7	110	291	0	291	-57		3					56 56	56 56 56 56 56 56 56 56 56		
Other external works	A16S	A16S-9	111	291	0	291	-57		3							57 57 57 57 57	
Degree 1 Completion																	
ABWF works for Degree 1	A16S	A16S-8	114	291	0	291	-57		3						60 60 60 60 60 60	60 60	
Feeder Substation																	
SSHP works	FS	FS-1	105	121	0	121	-50		3		58 58	58 58 58 58					
Construction of pile caps	FS	FS-2	107	121	0	121	-50		3				60 60 60	60 60 60			
Construction of building structures	FS	FS-3	110	121	0	121	-50		3					63 63 63 63 63 63 63 63			
ABWF works for Degree 1	FS	FS-4	111	121	0	121	-50		3						64 64		
Architectural Finishing Works																	
A16 Station																	
ABWF & BS works - A16 Station Northern	A16N	A16N-7	103	184	0	184	-53		3				53 53 53 53 53 53	53 53 53 53 53 53 53 53 53 53	53		
ABWF & BS works - A16 Station Southern	A16S	A16S-10	103	291	0	291	-57		3							49 49 49 49	49 49 49 49 49 49 49 49 49 49
Predicted Noise Level, Leq (30mins), dB(A)											64 65 65 65 65 65 59 59 59 65 65	65 66 66 64 65 65 64 65 65 65 66 66	66 66 66 65 66 66 65 68 68 69 69 66	66 66 65 66 65 65 65 65 64 64 65 65	65 65 57 57 58 58 64 64 63 62 62 62	62 62 58 58 58 49 49 49 49 53 53 50	50 50 50
Concurrent Project																	
Reprovision of Pet Garden	WS3.5	RPG-1	104	143	0	143.0	-51		3							56	56 56 56 56 56 56
Public Housing Developments at Hang Fu Road*										58 58 58 58	43 43 43 43 43 43 43 43						
Predicted Cumulative Noise Level, Leq (30mins), dB(A)										58 58 58 58	64 65 65 65 65 65 59 59					63	63 63 60 60 60 57

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: OH1
Assessment Floor: 1/F
Floor Height (mPD): 28.3

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)									
Civil Construction & Architectural Building Works Finishes									
Demolition & Site Clearance									
Pet Garden									
Demolition of Pet Garden and Hoi Wong Road Garden	PG	PG-1	110	175	8	175	-53		3
Site Clearance of WS3.5	WS3.5	PG-2	104	272	8	272	-57		3
Community Green Site									
Demolition of Community Green Station	WS4.10	WS4.10	114	257	8	257	-56		3
Viaducts between TUM & A16									
Site Clearance of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-1	100	227	8	227	-55		3
Reinstatement of WS 2.1, 2.3, 2.4, 2.4a, 2.4b, 2.5, 3.1, 3.2, 3.4, 3.6, 4.2a	W1	W1-2	98	227	8	227	-55		3
Zone 1-North.2									
Construction of temporary platform	Z1-N.2	Z1-N-1	101	305	8	305	-58		3
Piling Works	Z1-N.2	Z1-N-2	103	305	8	305	-58		3
Construction of pile caps	Z1-N.2	Z1-N-3	99	305	8	305	-58		3
Construction of pier	Z1-N.2	Z1-N-4	102	305	8	305	-58		3
Construction of viaduct structure	Z1-N.2	Z1-N-5	102	305	8	305	-58		3
Zone 1-South									
Construction of temporary platform	Z1-S	Z1-S-1	106	228	8	228	-55		3
Piling Works	Z1-S	Z1-S-2	107	228	8	228	-55		3
Construction of pile caps	Z1-S	Z1-S-3	106	228	8	228	-55		3
Construction of Pier	Z1-S	Z1-S-4	109	228	8	228	-55		3
Construction of Viaduct Structure	Z1-S	Z1-S-5	103	228	8	228	-55		3
Degree 1 Completion									
ABWF works for Degree 1	V1	V1-1	100	227	8	227	-55		3
Removal of Temporary Platform									
Remove upstream and downstream temporary platform at Zone 1 - North	Z1-N	V1-2	100	309	8	309	-58		3
Remove upstream and downstream temporary platform at Zone 1-South	Z1-S	V1-2	100	228	8	228	-55		3
A16 station									
Cooling Tower									
Socketed H-pile Works	CT	CT-1	104	268	8	268	-57		3
Construction of pile cap	CT	CT-2	107	268	8	268	-57		3
Construction of Cooling Tower Structure	CT	CT-3	105	268	8	268	-57		3
ABWF works for Degree 1	CT	CT-4	97	268	8	268	-57		3
A16 Northern (GL10-22)									
Temp Platform									
Construction of temporary platform	A16N	A16N-2	103	188	8	188	-53		3
Remove Temporary Platform	A16N	A16N-1	108	188	8	188	-53		3
A16 Northern									
Piling Works	A16N	A16N-3	109	188	8	188	-53		3
Construction of pile caps	A16N	A16N-4	111	188	8	188	-53		3
Construction of Station Structure	A16N	A16N-5	109	188	8	188	-53		3
Degree 1 Completion									
ABWF works for Degree 1	A16N	A16N-6	109	188	8	188	-53		3
A16 Southern (GL1-10)									
Temp Platform									
Construction of temporary platform	A16S	A16S-3	103	219	8	219	-55		3
Remove Temporary Platform	A16S	A16S-1	112	219	8	219	-55		3
Demolition of existing swimming pool and plant room									
Demolition of existing swimming pool and plant room	TMSP	A16S-4	114	89	8	89	-47		3
A16 Station Southern									
GI Works	A16S	A16S-2	110	219	8	219	-55		3
Piling Works	A16S	A16S-5	110	219	8	219	-55		3
Construction of pile caps	A16S	A16S-6	110	219	8	219	-55		3
Construction of Station Structure	A16S	A16S-7	110	219	8	219	-55		3
Other external works	A16S	A16S-9	111	219	8	219	-55		3
Degree 1 Completion									
ABWF works for Degree 1	A16S	A16S-8	114	219	8	219	-55		3
Feeder Substation									
SSHP works	FS	FS-1	105	203	8	203	-54		3
Construction of pile caps	FS	FS-2	107	203	8	203	-54		3
Construction of building structures	FS	FS-3	110	203	8	203	-54		3
ABWF works for Degree 1	FS	FS-4	111	203	8	203	-54		3
Viaducts between A16 & Tuen Mun River Bridge									
Site Clearance and Reinstatement									
Site clearance (incl tree felling works) for WS 4.14	WS4.14	V2-1	115	271	8	271	-57		3
Reinstatement for WS 4.14	WS4.14	V2-2	114	271	8	271	-57		3
Temporary Platform									
Construction of temporary platform	V2	V2-3	111	291	8	291	-57		3
Remove temporary platform	V2	V2-4	112	291	8	291	-57		3
Foundation & Piers and Crosshead									
Piling works (Land)	V2	V2-5	104	291	8	291	-57		3
Piling works (River)	V2	V2-5	104	291	8	291	-57		3
Construction of land pier	V2	V2-6	113	291	8	291	-57		3
Construction of river pier	V2	V2-6	113	291	8	291	-57		3
Construction of Viaduct structure (excl. last span connecting to A16)	V2.2	V2-7a	114	297	8	297	-57		3
Construction of Viaduct structure (last span connecting to A16)	V2.1	V2-7b	111	268	8	268	-57		3
Degree 1 Completion									
ABWF works for Degree 1 (excl. last span connecting to A16)	V2.2	V2-8	111	297	8	297	-57		3
ABWF works for Degree 1 (last span connecting to A16)	V2.1	V2-8	111	268	8	268	-57		3
Architectural Finishing Works									
A16 Station									
ABWF & BS works - A16 Station Northern	A16N	A16N-7	103	188	8	188	-53		3
ABWF & BS works - A16 Station Southern	A16S	A16S-10	103	219	8	219	-55		3
Predicted Noise Level, Leq (30mins), dB(A)									
Concurrent Project									
Reprovision of Pet Garden	WS3.5	RPG-1	104	272	8	272.1	-57		3
Public Housing Developments at Hang Fu Road*									
Predicted Cumulative Noise Level, Leq (30mins), dB(A)									

2023

Activity	S	O	N	D
Public Housing Developments at Hang Fu Road*	63	63	63	63
Predicted Cumulative Noise Level, Leq (30mins), dB(A)	63	63	63	63

2024

Activity	J	F	M	A	M	J	J	A	S	O	N	D
PG-1	60	60	60	60	60	60						
PG-2		50	50	50	50							
WS4.10							61	61	61			
W1-1	48	48	48	48	48	48						
Z1-N-1											46	46
Z1-S-1											54	54
A16N-2											53	53
A16N-3						59	59	59	59	59	59	59
A16S-3											51	51
A16S-5											58	58
FS-1											54	54
V2-1	61	61	61	61								
V2-3											57	57
V2-5 (Piling works (Land))				50	50	50	50	50	50	50	50	50
Predicted Noise Level, Leq (30mins), dB(A)	64	64	64	64	61	63	63	63	63	60	65	65
Public Housing Developments at Hang Fu Road*	52	52	52	52	52	52	52	52				
Predicted Cumulative Noise Level, Leq (30mins), dB(A)	64	64	64	64	62	63	64	64				

2025

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Z1-N-1	46	46	46									
Z1-N-2		48	48	48	48							
Z1-N-3							44	44				
Z1-N-4									47	47	47	47
Z1-S-1	54	54	54									
Z1-S-2		55	55	55	55	55						
Z1-S-3								54	54			
Z1-S-4										57	57	57
CT-1			50	50	50							
CT-2							53	53	53			
CT-3										51	51	51
A16N-2	53	53	53									
A16N-3	59	59	59	59	59	59	59	59	59			
A16N-4					61	61	61	61	61	61	61	61
A16N-5											59	59
A16S-3	51	51										
A16S-5	58	58	58	58	58	58	58	58	58	58	58	58
FS-1	54	54	54	54								
V2-3	57											
V2-5 (Piling works (Land))	50											
V2-5 (Piling works (River))		50	50	50	50	50	50					
V2-6 (Construction of land pier)			59	59	59	59	59	59				
V2-6 (Construction of river pier)									59	59	59	59
V2-7a											60	60
Predicted Noise Level, Leq (30mins), dB(A)	65	64	65	65	66	66	66	66	66	65	67	67

2026

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Z1-N-4	47	47	47	47	47	47	47	47	47	47		
Z1-N-5											47	47
Z1-S-4	57	57	57	57	57	57	57					
Z1-S-5								51	51	51	51	51
CT-3	51	51	51	51	51	51						
CT-4							43	43				
A16N-1				58	58	58						
A16N-4	61	61	61									
A16N-5	59	59	59	59	59	59	59	59	59	59	59	59
A16N-6					59	59	59	59	59	59	59	59
A16S-4								70	70	70	70	
A16S-2									58	58		
A16S-5	58	58	58	58	58	58	58	58	58	58	58	58
FS-2										56	56	56
V2-6 (Construction of river pier)	59	59										
V2-7a	60	60	60	60	60	60	60	60	60	60	60	60
A16N-7							53	53	53	53	53	53
Predicted Noise Level, Leq (30mins), dB(A)	67	67	66	66	67	67	66	71	72	72	71	66

2027

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Z1-N-5	47	47	47	47	47	47	47	47				
Z1-S-5	51	51	51	51	51	51	51					
A16N-5	59	59										
A16N-6	59	59	59	59								
A16S-5	58	58	58	58	58	58	58	58	58			
A16S-6										58	58	58
A16S-7											58	58
FS-2	56	56	56									
FS-3				59	59	59	59	59	59	59	59	59
V2-7a	60	60	60	60	60	60	60	60	60	60		
V2-8 (excl. last span connecting to A16)										57	57	57
A16N-7	53	53	53	53	53	53	53	53	53	53	53	53
Predicted Noise Level, Leq (30mins), dB(A)	66	66	65	66	64	64	64	64	64	65	64	64

2028

Activity	J	F	M	A	M	J	J	A	S	O	N	D
V1-1		48	48	48								
V1-2 (Zone 1 - North)					45	45	45	45				
V1-2 (Zone 1-South)					48	48	48	48				
A16S-1							60	60	60			
A16S-6	58											
A16S-7	58	58	58	58	58	58	58	58	58	58	58	58
A16S-8							62	62	62	62	62	62
FS-4	60	60										
V2-4								58	58			
V2-7b			57	57	57	57	57					
V2-8 (last span connecting to A16)							57	57				
A16N-7	53											
A16S-10									51	51	51	51
Predicted Noise Level, Leq (30mins), dB(A)	64	62	61	61	61	61	66	66	66	64	64	64
RPG-1												50
Predicted Cumulative Noise Level, Leq (30mins), dB(A)												64

2029

Activity	J	F	M	A	M	J	J	A	S	O	N	D
W1-2										46	46	46
A16S-9	59	59	59	59	59							
A16S-8	62	62										
V2-2										60	60	60
A16S-10	51	51	51	51	51	51	51	51	51	51	51	
Predicted Noise Level, Leq (30mins), dB(A)	64	64	60	60	60	51	51	51	51	61	61	60
RPG-1	50	50	50	50	50	50						
Predicted Cumulative Noise Level, Leq (30mins), dB(A)	64	64	60	60	60	54						

2030

Activity	J	F	M	A	M	J	J	A	S	O	N	D
W1-2	46	46	46									
V2-2	60											
Predicted Noise Level, Leq (30mins), dB(A)	60	46	46									

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: STM1
Assessment Floor: 1/F
Floor Height (mPD): 31.1

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)									
Civil Construction & Architectural Building Works Finishes									
Viaducts between A16 & Tuen Mun River Bridge									
Site Clearance and Reinstatement									
Site clearance (incl tree felling works) for WS 4.14	WS4.14	V2-1	115	249	11	249	-56		3
Reinstatement for WS 4.14	WS4.14	V2-2	114	249	11	249	-56		3
Temporary Platform									
Construction of temporary platform	V2	V2-3	111	242	11	242	-56		3
Remove temporary platform	V2	V2-4	112	242	11	242	-56		3
Foundation & Piers and Crosshead									
Piling works (Land)	V2	V2-5	104	242	11	242	-56		3
Piling works (River)	V2	V2-5	104	242	11	242	-56		3
Construction of land pier	V2	V2-6	113	242	11	242	-56		3
Construction of river pier	V2	V2-6	113	242	11	242	-56		3
Construction of Viaduct structure (excl. last span connecting to A16)	V2.2	V2-7a	114	244	11	244	-56		3
Degree 1 Completion									
ABWF works for Degree 1 (excl. last span connecting to A16)	V2.2	V2-8	111	244	11	244	-56		3
Tuen Mun River Bridge									
Temporary Platform									
Construction of temporary platform in 2nd dry season	TRB	TRB-1a	110	155	11	155	-52		3
Construction of temporary platform in 3rd dry season	TRB	TRB-1b	105	155	11	155	-52		3
Remove temporary platform	TRB	TRB-2	117	155	11	155	-52		3
Pylon									
Northern River End Pier									
Piling works	TRB	TRB-3	106	155	11	155	-52		3
Construction of pile caps	TRB	TRB-4	112	155	11	155	-52		3
Construction of Pier Structure	TRB	TRB-5	110	155	11	155	-52		3
Northern Pylon									
Piling works	TRB	TRB-3	106	155	11	155	-52		3
Construction of pile caps	TRB	TRB-4	112	155	11	155	-52		3
Construction of Pylon Structure	TRB	TRB-5	110	155	11	155	-52		3
Southern Pylon									
Piling works	TRB	TRB-3	106	155	11	155	-52		3
Construction of pile caps	TRB	TRB-4	112	155	11	155	-52		3
Construction of Pylon Structure	TRB	TRB-5	110	155	11	155	-52		3
Southern Land End Pier									
Piling works	TRB	TRB-3	106	155	11	155	-52		3
Construction of pile caps	TRB	TRB-4	112	155	11	155	-52		3
Construction of Pier Structure	TRB	TRB-5	110	155	11	155	-52		3
Deck Erection									
Construction of Bridge Structure	TRB	TRB-6	115	155	11	155	-52		3
Degree 1 Completion									
ABWF works for Degree 1	TRB	TRB-7	100	155	11	155	-52		3
Standard Viaduct between Tuen Mun River Bridge & Crossover									
Precast Loading and Unloading									
Tuen Mun Safety Town									
Site clearance and Tree felling (or transplant)	WS5.3	V3-3	105	182	11	182	-53		3
Reinstatement of Tuen Mun Safety Town	WS5.3	V3-4	111	182	11	182	-53		3
Construction of Viaducts between TRB & Crossover									
Piling works	V3	V3-5	106	198	11	198	-54		3
Construction of pile caps at Tuen Mun Safety Town	V3	V3-6	104	198	11	198	-54		3
Construction of Pier	V3	V3-7	110	198	11	198	-54		3
Construction of viaduct structure	V3	V3-8	103	198	11	198	-54		3
Degree 1 Completion									
ABWF works for Degree 1	V3	V3-9	97	198	11	198	-54		3
Predicted Noise Level, Leq (30mins), dB(A)									
Concurrent Project									
Public Housing Developments at Wu Shan Road*									
Predicted Cumulative Noise Level, Leq (30mins), dB(A)									

Activity Name	2023				2024												2025											
	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																												
Civil Construction & Architectural Building Works Finishes																												
Viaducts between A16 & Tuen Mun River Bridge																												
Site Clearance and Reinstatement																												
Site clearance (incl tree felling works) for WS 4.14					62	62	62	62																				
Reinstatement for WS 4.14																												
Temporary Platform																												
Construction of temporary platform															58	58	58											
Remove temporary platform																												
Foundation & Piers and Crosshead																												
Piling works (Land)								51	51	51	51	51	51	51	51	51	51											
Piling works (River)																		51	51	51	51	51	51					
Construction of land pier																			60	60	60	60	60	60				
Construction of river pier																									60	60	60	60
Construction of Viaduct structure (excl. last span connecting to A16)																											61	61
Degree 1 Completion																												
ABWF works for Degree 1 (excl. last span connecting to A16)																												
Tuen Mun River Bridge																												
Temporary Platform																												
Construction of temporary platform in 2nd dry season															61	61	61	61	61									
Construction of temporary platform in 3rd dry season																											56	56
Remove temporary platform																												
Pylon																												
Northern River End Pier																												
Piling works																												
Construction of pile caps																												
Construction of Pier Structure																												
Northern Pylon																												
Piling works																			57	57	57	57						
Construction of pile caps																											63	63
Construction of Pylon Structure																												
Southern Pylon																												
Piling works																	57	57	57	57	57							
Construction of pile caps																											63	63
Construction of Pylon Structure																												
Southern Land End Pier																												
Piling works																57	57	57	57									
Construction of pile caps																					63	63	63					
Construction of Pier Structure																								61	61	61	61	
Deck Erection																												
Construction of Bridge Structure																												
Degree 1 Completion																												
ABWF works for Degree 1																												
Standard Viaduct between Tuen Mun River Bridge & Crossover																												
Precast Loading and Unloading																												
Tuen Mun Safety Town																												
Site clearance and Tree felling (or transplant)			55	55	55	55	55																					
Reinstatement of Tuen Mun Safety Town																												
Construction of Viaducts between TRB & Crossover																												
Piling works								55	55	55	55	55	55	55	55	55	55	55	55	55								
Construction of pile caps at Tuen Mun Safety Town																					53	53	53	53	53	53	53	
Construction of Pier																												59
Construction of viaduct structure																												
Degree 1 Completion																												
ABWF works for Degree 1																												
Predicted Noise Level, Leq (30mins), dB(A)			55	55	63	63	63	63	56	56	56	56	56	56	64	65	65	64	66	64	66	66	65	64	64	64	69	69
Concurrent Project																												
Public Housing Developments at Wu Shan Road*	59	59	59	59	61	57	57	57	57	56	56	56	56	56	56	56												
Predicted Cumulative Noise Level, Leq (30mins), dB(A)	59	59	60	60	65	64	64	64	60	59	59	59	59	59	64	65												

Activity Name	2026												2027											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																								
Civil Construction & Architectural Building Works Finishes																								
Viaducts between A16 & Tuen Mun River Bridge																								
Site Clearance and Reinstatement																								
Site clearance (incl tree felling works) for WS 4.14																								
Reinstatement for WS 4.14																								
Temporary Platform																								
Construction of temporary platform																								
Remove temporary platform																								
Foundation & Piers and Crosshead																								
Piling works (Land)																								
Piling works (River)																								
Construction of land pier																								
Construction of river pier	60	60																						
Construction of Viaduct structure (excl. last span connecting to A16)	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61		
Degree 1 Completion																								
ABWF works for Degree 1 (excl. last span connecting to A16)																						58	58	58
Tuen Mun River Bridge																								
Temporary Platform																								
Construction of temporary platform in 2nd dry season																								
Construction of temporary platform in 3rd dry season	56																							
Remove temporary platform																								
Pylon																								
Northern River End Pier																								
Piling works	57	57	57																					
Construction of pile caps											63	63	63											
Construction of Pier Structure														61	61	61								
Northern Pylon																								
Piling works																								
Construction of pile caps	63	63	63	63																				
Construction of Pylon Structure					61	61	61	61	61	61	61	61												
Southern Pylon																								
Piling works																								
Construction of pile caps	63	63	63	63																				
Construction of Pylon Structure					61	61	61	61	61	61	61	61												
Southern Land End Pier																								
Piling works																								
Construction of pile caps																								
Construction of Pier Structure																								
Deck Erection																								
Construction of Bridge Structure												66	66	66	66	66	66	66	66	66	66	66	66	
Degree 1 Completion																								
ABWF works for Degree 1																							51	51
Standard Viaduct between Tuen Mun River Bridge & Crossover																								
Precast Loading and Unloading																								
Tuen Mun Safety Town																								
Site clearance and Tree felling (or transplant)																								
Reinstatement of Tuen Mun Safety Town																								
Construction of Viaducts between TRB & Crossover																								
Piling works																								
Construction of pile caps at Tuen Mun Safety Town																								
Construction of Pier	59	59	59	59	59	59	59	59	59	59	59	59	59											
Construction of viaduct structure											52	52	52	52	52	52	52	52	52					
Degree 1 Completion																								
ABWF works for Degree 1																				46	46			
Predicted Noise Level, Leq (30mins), dB(A)	69	69	68	68	67	67	67	67	67	67	68	70	69	68	68	68	67	67	67	67	67	68	67	59
Concurrent Project																								
Public Housing Developments at Wu Shan Road*																								
Predicted Cumulative Noise Level, Leq (30mins), dB(A)																								

Activity Name	2028												2029												2030											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																																				
Civil Construction & Architectural Building Works Finishes																																				
Viaducts between A16 & Tuen Mun River Bridge																																				
Site Clearance and Reinstatement																																				
Site clearance (incl tree felling works) for WS 4.14																																				
Reinstatement for WS 4.14																						61	61	61	61											
Temporary Platform																																				
Construction of temporary platform																																				
Remove temporary platform								59	59																											
Foundation & Piers and Crosshead																																				
Piling works (Land)																																				
Piling works (River)																																				
Construction of land pier																																				
Construction of river pier																																				
Construction of Viaduct structure (excl. last span connecting to A16)																																				
Degree 1 Completion																																				
ABWF works for Degree 1 (excl. last span connecting to A16)																																				
Tuen Mun River Bridge																																				
Temporary Platform																																				
Construction of temporary platform in 2nd dry season																																				
Construction of temporary platform in 3rd dry season																																				
Remove temporary platform		68	68	68																																
Pylon																																				
Northern River End Pier																																				
Piling works																																				
Construction of pile caps																																				
Construction of Pier Structure																																				
Northern Pylon																																				
Piling works																																				
Construction of pile caps																																				
Construction of Pylon Structure																																				
Southern Pylon																																				
Piling works																																				
Construction of pile caps																																				
Construction of Pylon Structure																																				
Southern Land End Pier																																				
Piling works																																				
Construction of pile caps																																				
Construction of Pier Structure																																				
Deck Erection																																				
Construction of Bridge Structure																																				
Degree 1 Completion																																				
ABWF works for Degree 1	51	51																																		
Standard Viaduct between Tuen Mun River Bridge & Crossover																																				
Precast Loading and Unloading																																				
Tuen Mun Safety Town																																				
Site clearance and Tree felling (or transplant)																																				
Reinstatement of Tuen Mun Safety Town																						61	61	61												
Construction of Viaducts between TRB & Crossover																																				
Piling works																																				
Construction of pile caps at Tuen Mun Safety Town																																				
Construction of Pier																																				
Construction of viaduct structure																																				
Degree 1 Completion																																				
ABWF works for Degree 1																																				
Predicted Noise Level, Leq (30mins), dB(A)	51	68	68	68				59	59													64	64	64	61											
Concurrent Project																																				
Public Housing Developments at Wu Shan Road*																																				
Predicted Cumulative Noise Level, Leq (30mins), dB(A)																																				

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

NAP ID: RB
Assessment Floor: 1/F
Floor Height (mPD): 23.8

Activity Name	Work Zone	Activity Index	SWL, dB(A)	Hori. Distance, m	Vert. Distance, m	Slant Distance, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	2023				2024												2025												2026												2027												2028												2029												2030											
										S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
NEC Contract 1501 (TUM Modification , A16 Station, TRB, Viaducts)																																																																																														
Civil Construction & Architectural Building Works Finishes																																																																																														
Community Green Site																																																																																														
Demolition of Community Green Station	WS4.10	WS4.10	114	275	4	275	-57		3											60	60	60																																																																						
A16 station																																																																																															
Cooling Tower																																																																																															
Socketed H-pile Works	CT	CT-1	104	299	4	299	-57		3																			50	50	50																																																																
Construction of pile cap	CT	CT-2	107	299	4	299	-57		3																							53	53	53																																																										
Construction of Cooling Tower Structure	CT	CT-3	105	299	4	299	-57		3																										51	51	51	51	51	51	51	51	51																																																							
ABWF works for Degree 1	CT	CT-4	97	299	4	299	-57		3																																			43	43																																																						
A16 Northern (GL10-22)																																																																																																	
A16 Southern (GL1-10)																																																																																																	
Temp Platform																																																																																																
Construction of temporary platform	A16S	A16S-3	103	309	4	309	-58		3															48	48	48	48																																																																		
Remove Temporary Platform	A16S	A16S-1	112	309	4	309	-58		3																																																									57	57	57																											
Demolition of existing swimming pool and plant room																																																																																																
Demolition of existing swimming pool and plant room	TMSP	A16S-4	114	238	4	238	-56		3																																				61	61	61	61																																																	
A16 Station Southern																																																																																																	
GI Works	A16S	A16S-2	110	309	4	309	-58		3																																					55	55																																																		
Piling Works	A16S	A16S-5	110	309	4	309	-58		3															55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55																																															
Construction of pile caps	A16S	A16S-6	110	309	4	309	-58		3																																																		55	55	55	55																																						
Construction of Station Structure	A16S	A16S-7	110	309	4	309	-58		3																																																		55	55	55	55	55	55	55	55	55	55	55	55	55	55																								
Other external works	A16S	A16S-9	111	309	4	309	-58		3																																																															56	56	56	56	56																			
Degree 1 Completion																																																																																																	
ABWF works for Degree 1	A16S	A16S-8	114	309	4	309	-58		3																																																								59	59	59	59	59	59	59	59																						
Viaducts between A16 & Tuen Mun River Bridge																																																																																																	
Site Clearance and Reinstatement																																																																																																	
Site clearance (incl tree felling works) for WS 4.14	WS4.14	V2-1	115	229	4	229	-55		3					63	63	63	63																																																																													
Reinstatement for WS 4.14	WS4.14	V2-2	114	229	4	229	-55		3																																																																							62	62	62	62											
Temporary Platform																																																																																																
Construction of temporary platform	V2	V2-3	111	289	4	289	-57		3															57	57	57																																																																						
Remove temporary platform	V2	V2-4	112	289	4	289	-57		3																																																										58	58																											
Foundation & Piers and Crosshead																																																																																																		
Piling works (Land)	V2	V2-5	104	289	4	289	-57		3								50	50	50	50	50	50	50	50	50	50																																																																							
Piling works (River)	V2	V2-5	104	289	4	289	-57		3																		50	50	50	50	50	50																																																														
Construction of land pier	V2	V2-6	113	289	4	289	-57		3																			59	59	59	59	59	59																																																															
Construction of river pier	V2	V2-6	113	289	4	289	-57		3																									59	59	59	59	59	59																																																										
Construction of Viaduct structure (excl. last span connecting to A16)	V2.2	V2-7a	114	288	4	288	-57		3																											60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60																																																	
Construction of Viaduct structure (last span connecting to A16)	V2.1	V2-7b	111	299	4	299	-57		3																																																							57	57	57	57	57																														
Degree 1 Completion																																																																																																		
ABWF works for Degree 1 (excl. last span connecting to A16)	V2.2	V2-8	111	288	4	288	-57		3																																																		57	57	57																																							
ABWF works for Degree 1 (last span connecting to A16)	V2.1	V2-8	111	299	4	299	-57		3																																																									57	57																												
Tuen Mun River Bridge																																																																																																		
Temporary Platform																																																																																																	
Construction of temporary platform in 2nd dry season	TRB	TRB-1a	110	290	4	290	-57		3															56	56	56	56	56																																																																				
Construction of temporary platform in 3rd dry season	TRB	TRB-1b	105	290	4	290	-57		3																											51	51	51																																																														
Remove temporary platform	TRB	TRB-2	117	290	4	290	-57		3																																																					63	63	63																																	
Pylon																																																																																																	
Northern River End Pier																																																																																																	
Piling works	TRB	TRB-3	106	290	4	290	-57		3																													52	52	52																																																												
Construction of pile caps	TRB	TRB-4	112	290	4	290	-57		3																																							58	58	58																																																			
Construction of Pier Structure	TRB	TRB-5	110	290	4	290	-57		3																																										56	56	56																																																	
Northern Pylon																																																																																																	
Piling works	TRB	TRB-3	106	290	4	290	-57		3																			52	52	52	52																																																																				
Construction of pile caps	TRB	TRB-4	112	290	4	290	-57		3																											58	58	58	58	58	58																																																												
Construction of Pylon Structure	TRB	TRB-5	110	290	4	290	-57		3																																	56	56	56	56	56	56	56	56																																																			
Southern Pylon																																																																																																	
Piling works	TRB	TRB-3	106	290	4	290	-57		3																	52	52	52	52	52																																																																				
Construction of pile caps	TRB	TRB-4	112	290	4	290	-57		3																											58	58	58	58	58	58																																																												
Construction of Pylon Structure	TRB	TRB-5	110	290	4	290	-57		3																																	56	56	56	56	56	56	56	56																																																			
Southern Land End Pier																																																																																																	
Piling works	TRB	TRB-3	106	290	4	290	-57		3																52	52	52	52																																																																							
Construction of pile caps	TRB	TRB-4	112	290	4	290	-57		3																					58	58	58																																																																					
Construction of Pier Structure	TRB	TRB-5	110	290	4	290	-57		3																								56	56	56	56																																																																
Deck Erection																																																																																																	
Construction of Bridge Structure	TRB	TRB-6	115	290	4	290	-57		3																																									61	61	61	61	61	61	61	61	61	61	61	61																																								
Degree 1 Completion																																																																																																		
ABWF works for Degree 1	TRB	TRB-7	100	290	4	290	-57		3																																																				46	46	46	46																																						
Architectural Finishing Works																																																																																																		
A16 Station																																																																																																		
ABWF & BS works - A16 Station Southern	A16S	A16S-10	103	309	4	309	-58		3																																																													48	48	48	48	48	48	48	48	48	48	48	48	48	48	48													
Predicted Noise Level, Leq (30mins), dB(A)														63	63	63	63	50	50	60	60	60	50	61	62	62	61	63	62	64	63	63	62	62	62	66	66	66	66	65	64	63	63	63	65	66	66	66	66	65	65	65	65	64	64	64	64	64	65	64	61	58	64	64	64	59	59	64	64	64	61	61	61	61	61	57	57	57	48	48	48	48	62	62	62	62											
Concurrent Project																																																																																																		
Public Housing Developments at Hang Fu Road*										57	57	57	57	55	54	54	54	54	54	54	54																																																																											
Predicted Cumulative Noise Level, Leq (30mins), dB(A)										57	57	57	57	64	64	64	64	55	55	61	61																																																																												

* Reference has been made to the *Final Preliminary Environmental Review Report for Site Formation and Infrastructure Works for Public Housing Developments at Tuen Mun Central – Investigation, Design and Construction*

Appendix 4.12 Cumulative Construction Noise Assessment during Non-Restricted Hours

Plant Inventory for Reprovision of Pet Garden

Location	Work Zone	Activity Index	Reference Code	Activities	No. of plant item	Utilisation rate	Type of Noise Control	Noise Reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)	Max SWL, dB(A)
Pet Garden	WS3.5	RPG-1		**Reprovision of Pet Garden**								104
			CNP 103	Generator, super silenced, 70dB(A) at 7m	1	100%	Movable Noise Barrier	-10	95	85		
			EPD-10792	Mobile Crane	1	70%	Movable Noise Barrier	-5	101	94		
			EPD-10780	Excavator, wheeled/tracked	1	70%	Movable Noise Barrier	-5	97	90		
			OCUPME-046	Dump truck , 5.5 tonne < gross vehicle weight ≦ 38 tonne	1	70%	Movable Noise Barrier	-5	105	98		
			CNP 044	Concrete lorry mixer	1	40%	Movable Noise Barrier	-5	109	100		
			OCUPME-027	Poker, vibratory, hand-held (electric)	1	40%	Movable Noise Barrier	-5	102	93		
			CNP 047	Concrete pump, stationary mounted	1	40%	Movable Noise Barrier	-10	109	95	104	