


MTR Corporation Limited

Tung Chung Line Extension

Construction Noise Management Plan
(for Works Contract No. 1202)
(Condition 2.13 of EP-614/2022)

Certified by: Edan Li 

Position: Environmental Team Leader

Date: 28 September 2023

MTR Corporation Ltd

Tung Chung Line Extension

Construction Noise Management Plan (for Works Contract No. 1202)

Reference: 277416-REP-054-01a

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 277416

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1. Introduction

1.1 Project Background

- 1.1.1.1 The Railway Development Strategy 2014 (RDS-2014) announced by the Government of the Hong Kong Special Administrative Region included the conceptual scheme of Tung Chung West (TCW) Extension and a possible Tung Chung East (TCE) Station.
- 1.1.1.2 This new railway system has been included in the approved Schedule 3 Environmental Impact Assessment (EIA) for Tung Chung New Town Extension (TCNTE), which has included the new stations at TCE area and TCW area and the associated trackwork and tunnel. However, a separate Schedule 2 EIA study for this railway system is conducted to address the associated environmental impacts, taking into account of the latest design.
- 1.1.1.3 The EIA Report for Tung Chung Line Extension (the Project) (AEIAR-235/2022) was approved on 12 July 2022. The Environmental Permit (EP) (No. EP-614/2022) was then issued on 9 August 2022. According to Clause 2.13 of the EP, the Permit Holder shall submit a Construction Noise Management Plan (CNMP) for implementing construction noise mitigation measures at least 2 months before the commencement of construction works of relevant Works Contract of the Project to the Director of Environmental Protection (DEP) for approval.

1.2 Purpose of this Report

- 1.2.1.1 As stipulated in Clause 2.13 of the EP, the CNMP shall identify the noise source inventory and assess the effectiveness of construction noise mitigation measures, including the use of quieter powered mechanical equipment, noise barriers and noise enclosure as recommended in the EIA report (Register No. AEIAR-235/2022). To further mitigate construction noise impacts, the CNMP shall review the practicality of the use of quieter construction equipment/methods, such as hydraulic crusher/ hand-held concrete crusher for demolition; diamond wire saw/ non-explosive chemical expansion agent for rock/concrete breaking; silent piling by Press-in method for sheet piles etc.; when necessary. The CNMP shall include an implementation schedule in table form to clearly list out the mitigation measures to be implemented, and the implementation party, location, timing, and environmental performance required for implementation of the mitigation measures. All mitigation measures recommended and requirements specified in the CNMP shall be fully implemented.
- 1.2.1.2 For the groundborne construction noise, as there is no underground construction for TCE and Tunnel Boring Machine (TBM) construction is only carried out from Tung Chung Station to TCW, hence, groundborne construction noise is not applicable to TCE and noise mitigation measures are not required for groundborne construction.
- 1.2.1.3 This CNMP aims to identify the noise source inventory of TCE station and its rail realignment works, the effectiveness of construction noise mitigation measures, including the use of quieter powered mechanical equipment and noise barriers as recommended in the approved EIA report for Tung Chung Line Extension (AEIAR-235/2022) will be addressed.

1.2.1.4 Noise source inventory and mitigation measures adopted by TCW station, Emergency Access Point (EAP)/ Emergency Egress Point (EEP) and Launching/ Retrieval Shaft, and the barging facility are covered in a separate CNMP.

1.2.1.5 This CNMP will be reviewed and updated subject to the actual construction works and onsite arrangement if necessary. This CNMP focused on the construction works conducted during July 2023 to October 2023 only and the remaining construction period is still under design stage and subject to change. The Contractor will submit other CNMP for the remaining construction period at least one month before the commencement of the relevant construction work. If there is any update on the construction works conducted from July 2023 to October 2023, a revised CNMP will be submitted for EPD approval. To compare with the approved EIA for Tung Chung Line Extension (AEIAR-235/2022), the following items have been updated:

- Updated Quality Powered Mechanical Equipment (QPME) label;
- Additional breaker for site clearance / site formation at TCE;
- Additional generator for TCE Station East Side Stationary Plants & TCE Station West Side Stationary Plants;
- Additional air compressor for TCE Station Structure Foundation; and
- Population intake year update for Tung Chung Area 100.

2. Assessment Criteria

2.1 Construction Noise

Airborne Construction Noise during Normal Hours

2.1.1.1 The Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM) stipulates criteria of 65 – 75dB(A) for daytime construction activities, as shown in **Table 2.1**.

Table 2.1 Noise standards for daytime construction activities

Uses	Noise Standards ^{[1][2]} , Leq (30min) dB(A)
	0700 – 1900 hours on any day not being a Sunday or general holiday
All domestic premises including temporary housing accommodation	75
Hotel and hostels	75
Educational institutions including kindergartens, nurseries and all others where unaided voice communication is required	70 65 (During examination)

Notes:

[1] The above standards apply to uses that rely on opened windows for ventilation.

[2] The above standards should be viewed as the maximum permissible noise levels assessed at 1m from the external facade.

3. Airborne Construction Noise Impact Assessment

3.1 Airborne Construction Noise Impact Assessment Methodology

- 3.1.1.1 The construction noise impact assessment during daytime, on weekdays other than general holidays has been assessed in accordance with the methodology in paragraphs 5.3 and 5.4 of Annex 13 of the EIAO-TM.
- 3.1.1.2 Construction noise assessment will be conducted based on the following procedures:
- Determine 300m from the boundary of the Project and from any works of the Project;
 - Identify and locate representative NSRs that may be affected by the works;
 - Obtain the construction method and work sequence for the construction period;
 - Obtain the construction plant inventory for each corresponding construction work sequence;
 - Determine the Sound Power Levels (SWLs) of the plant items according to the information stated in the GW-TM or other recognised sources of reference, where appropriate;
 - Calculate the correction factors based on the distance between the Noise Sensitive Receivers (NSRs) and the notional noise source positions of the work sites;
 - Apply corrections for façade, distance, barrier attenuation, acoustic reflection where applicable;
 - Predict construction noise levels at the NSRs;
 - Quantify the level of impact at the NSRs, in accordance with GW-TM;
 - Predict the cumulative noise impacts for any concurrent construction works (e.g. Tung Chung New Town Extension (TCNTE)) in the vicinity of the proposed work;
 - For any exceedance of noise criteria, all practical mitigation measures such as alternative construction methodology, quiet plant, silencer, enclosure, etc, shall be examined to alleviate the predicted noise impacts as much as practicable; and
 - Consideration of noise mitigation measures will follow Annex 13 of EIAO-TM and EIAO Guidance Note “Preparation of Construction Noise Impact Assessment under the Environmental Impact Assessment Ordinance” [GN 9/2010].

3.2 Identification of Assessment Area and Noise Sensitive Receivers

- 3.2.1.1 The assessment area for airborne construction noise includes area within 300m from the boundary of the Project and the works of the Project. This CNMP presents the representative NSRs for TCE station and its realignment works.
- 3.2.1.2 The existing NSRs has been reviewed by site visits in November 2022 and indicated that there is no update for the existing NSR.

- 3.2.1.3 The planned NSRs has been reviewed with the latest Recommended Outline Development Plan (RODP), updated population intensity and planning parameter, updated population intake years of TCNTE East collated from CEDD on 21 November 2022. Layout and population intake of Tung Chung Area 99 and Area 100 has been also reviewed and updated with the information provided by Housing Department (HD) on 22 November 2022, 2 December 2022 and 25 May 2023.
- 3.2.1.4 From the above information, there is no change to existing and planned NSR, except the population intensity. Hence, the representative NSRs presented in approved EIA for Tung Chung Line Extension (AEIAR-235/2022) are considered still valid.
- 3.2.1.5 Representative NSRs locations that would be affected by the construction noise have been summarised in **Table 3.1** below and the representative Noise Assessment Point (NAP) are shown in **Appendix 3.1**.

Table 3.1 Representative NSRs for airborne construction noise

No. ^[1]	NSR ^[2]	Uses ^[3]	No. of Storey	NAP ^[6]	Population Intake Year
Existing NSRs					
E1	Ying Tung Estate	R	35 – 40	YTT-02f	N/A ^[5]
E20	Ho Yu College and Primary School	E	7	EHYC-01a	N/A ^[5]
E21	Lantau North (Extension) Country Park	O	N/A ^[5]	LNCP-01	N/A ^[5]
Planned NSRs					
P1 ^[4]	Residential Premises in Tung Chung East – Area 100	R	40 ^[4]	A100-02j	2025 ^[7]
	Residential Premises in Tung Chung East – Area 116	R	32 ^[4]	A116-01c	2029
	Residential Premises in Tung Chung East – Area 133a	R	32 ^[4]	A133a-01b	2030
P4 ^[4]	Tung Chung Area 113	R	31 – 58 ^[4]	A113-01e, A113-12e	2027

Notes:

- [1] The assessment will only include NSRs which rely on opened windows for ventilation.
- [2] Only the first layer of NSRs has been selected for assessment.
- [3] R – Residential Premises, E – Educational Institutions, O – Others.
- [4] The latest Recommended Outline Development Plan (RODP), updated population intensity and planning parameter, updated population intake years of TCNTE East, except Area 99 and Area 100, have been collated from CEDD on 21 November 2022. For Area 99 and Area 100, the layouts provided by HD on 22 November 2022 were adopted.
- [5] N/A – Not applicable.
- [6] NAP – Noise Assessment Point.
- [7] The population intake year for Area 100 has been reviewed and updated according to information provided by HD on 25 May 2023.

3.3 Inventory of Noise Sources

3.3.1.1 According to Section 4.4.2.2 of the approved EIA for Tung Chung Line Extension (AEIAR-235/2022), key airborne construction activities of TCE station have been identified for noise assessment and summarized below:

- Construction of the above-ground TCE Station (e.g. site clearance, structure foundation, link bridge foundation);
- Realignment of ballast tracks to the TCE Station (e.g. site clearance, retaining wall foundation, utilities diversion);
- Works such as landscaping, minor reinstatement, material delivery, etc.

- 3.3.1.2 The construction activities above, plant inventory and construction programme have been reviewed in view of the best available information when preparing this CNMP.
- 3.3.1.3 To compare with the approved EIA for Tung Chung Line Extension (AEIAR-235/2022), changes have been made as follows:
- Updated QPME labels;
 - Additional breaker for site clearance / site formation at TCE;
 - Additional generator for TCE Station East Side Stationary Plants & TCE Station West Side Stationary Plants;
 - Additional air compressor for TCE Station Structure Foundation; and
 - Population intake year update for Tung Chung Area 100.
- 3.3.1.4 The inventories and the percentage on time of PME have been confirmed by construction professionals as workable and practicable. The construction activities would be carried out with the use of Powered Mechanical Equipment (PME) including excavators, lorries, mobile cranes, concrete pumps, concrete mixers, etc. SWLs for each PME would be established according to GW-TM and other relevant information as appropriate. **Table 3.2** presents the SWLs for each PME.
- 3.3.1.5 In addition, for concurrent projects, the latest construction programme, workfronts and PME have been confirmed with relevant project proponents and update is not required. Since the plant inventories under Contract No. 1202 has been updated, the cumulative noise levels will be different from that in the approved EIA for Tung Chung Line Extension (AEIAR-235/2022).

Table 3.2 SWLs of PMEs

PME	Unmitigated SWLs			Quiet Plant			Mitigated Scenario	
	ID	Description	PME SWL, dB(A)	ID ^{[1][2]}	Model / Size	PME SWL, dB(A)	Barrier, dB(A)	PME SWL, dB(A)
Air Compressor	CNP003	Air compressor, air flow > 30m ³ /min	104	EPD-09607 ^[3]	AIRMAN, PDS100S-5C5	93	-10	83
Bar Bender and Cutter	CNP021	Bar bender and cutter (electric)	90	-	-	-	-10	80
Hand Held Breaker	CNP026	Breaker, hand held, mass > 35kg	114	EPD-13019 ^[4]	HILTI, TE800-AVR	101	-5	96
Breaker, excavator mounted	CNP028	Breaker, excavator mounted (hydraulic)	122	-	-	-	-10	112
Concrete Lorry Mixer/ Concrete Truck	CNP044	Concrete lorry mixer	109	-	-	-	-5	104
Concrete Mixer/ Bentonite Mixer/ Grout Mixer	CNP045	Concrete mixer (electric)	96	-	-	-	-10	86
Concrete Pump/ Electric Bentonite Circulation Pump	CNP047	Concrete pump, stationary / lorry mounted	109	-	-	-	-10	99
Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	CNP048	Crane, mobile / barge mounted (diesel)	112	EPD-09130	KOBELCO, Model:CKS900	101	-5	96
Electric drill/ Rock driller	CNP064	Drill, percussive, hand—held (electric)	103	EPD-08781	HILTI, TE1000-AVR	99	-5	94
Grinder	CNP065	Drill / grinder, hand—held (electric)	98	-	-	-	-5	93
Dump Truck	CPME#	Dump truck, 5.5 tonne < gross vehicle weight <=38 tonne	105	-	-	-	-5	100
Drill Rig, DTH Drilling Machine	CPME#	Drill Rig, rotary type (Diesel)	110	-	-	-	-10	100
Excavator	CNP081	Excavator / loader, wheeled / tracked	112	EPD-07150	YANMAR, Model: SV08-1A	90	-5	85
Generator	CNP103	Generator, super silenced, 70 dB(A) at 7 m	95	EPD-10735 ^[5]	DENYO, Model: DCA-45LSK	87	-5	82
Grout Pump	CPME#	Grout Pump	105	-	-	-	-10	95
Lorry	CNP141	Lorry	112	CPME#	5.5 tonnes < gross vehicle weight <= 38 tonne	105	-5	100
Lorry, with crane/grab	CPME#	Lorry, 5.5 tonnes < gross vehicle weight <= 38 tonnes	105	-	-	-	-5	100
Piling, Large Dia Bored, Oscillator	CNP165	Piling, large diameter bored, oscillator	115	-	-	-	-10	105
Vibratory Poker	CNP170	Poker, vibratory, hand held	113	CPME#	Poker, vibratory, hand-held (electric)	102	-10	92

PME	Unmitigated SWLs		Quiet Plant		Mitigated Scenario			
	ID	Description	PME SWL, dB(A)	ID ^{[1][2]}	Model / Size	PME SWL, dB(A)	Barrier, dB(A)	PME SWL, dB(A)
Roller, Vibratory	CNP186	Roller, vibratory	108	EPD-06997	SAKAI, Model: SW502S-1	94	-5	89
Saw, Circular, Wood	CNP201	Saw, circular, wood	108	-	-	-	-10	98

Notes:

- [1] PME with code "EPD-XXXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory. QPME with same or lower SWL will be arranged onsite as far as practicable.
- [2] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLc.pdf
- [3] EPD-09608 has been updated and replaced by EPD-09607. The model / size and SWL of PME remain unchanged.
- [4] EPD-03948 has been expired and replaced by EPD-13019. The model / size and SWL of PME remain unchanged.
- [5] EPD-03845 has been expired and replaced by EPD-10735. The model / size and SWL of PME remain unchanged.

3.3.2 Construction Noise Control Measures Proactively Adopted

- 3.3.2.1 Review of the practicality of use of following quieter construction equipment / methods has been conducted, which includes adoption of QPME.
- 3.3.2.2 Based on the review on the construction works, QPME has been adopted at TCE. For (i) Diamond wire saw/ non-explosive chemical agent for rock/concrete breaking; (ii) silent piling by press-in method for sheet piles and (iii) hydraulic crusher/hand-held concrete crusher, the Contractor will further review during the detailed design over the construction stage.

3.4 Prediction and Evaluation of Construction Noise Impact

- 3.4.1.1 The construction activities involve site clearance, formation, superstructure, site reinstatement, etc. It is anticipated that the Project will be implemented in phases. As discussed in **Section 3.3**, there is no update in construction activities. The construction programme has been given in **Appendix 3.2**.
- 3.4.1.2 As stated in the approved EIA for Tung Chung Line Extension (AEIAR-235/2022), the construction would mainly comprise the activities as described in **Section 3.3**. The corresponding SWLs of these activities have been estimated according to the PME's SWLs and the assessment methodology in the GW-TM. **Table 3.2** presents the SWLs for each PME. **Appendix 3.3** gives the plant inventory adopted for each workfront and **Appendix 3.4** shows the locations of workfronts adopted for this construction noise assessment.
- 3.4.1.3 As mentioned in above sections, there is no update on the calculation methodology, construction programme and representative NAPs. The plant inventory is updated with additional breaker, generator and air compressor supplemented at some workfronts for construction activities, such as site clearance works & site formation works, works at TCE Station East Side Stationary Plants & TCE Station West Side Stationary Plants and TCE Station Structure foundation works, hence, the cumulative results are updated and complied with the relevant criterion. With the implementation of mitigation measures and good site practices, construction noise impacts are expected to achieve full compliance of relevant noise criteria.

3.5 Mitigation of Construction Noise Impact

- 3.5.1.1 To mitigate noise impacts during construction phases, the following mitigation measures have been considered:
- Good site practices to limit noise emissions at the source;
 - Use of QPME;
 - Use of temporary noise barriers to screen noise from relatively static PMEs; and
 - Alternative use of plant items within on worksite, wherever practicable.
- 3.5.1.2 The above mitigation measures would need to be implemented in works sites as good practices where appropriate.

3.5.2 Good Site Management Practices

3.5.2.1 Good site practice and noise management techniques could considerably reduce the noise impact from construction site activities on nearby NSRs. The following measures should be practised during each phase of construction:

- only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme;
- machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;
- plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs;
- silencers or mufflers which available on construction equipment should be properly fitted and maintained during the construction works;
- spoil transportation routes should be directed away from NSRs as far as practicable;
- mobile plant should be sited as far away from NSRs as possible and practicable;
- material stockpiles, site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities; and
- noise monitoring at selected NSRs should be conducted as far as practicable.

3.5.2.2 The benefits of these techniques can vary according to specific site conditions and operations. The environmental noise climate would certainly be improved with these control practices, although the improvement can only be quantified during implementation when specific site parameters are known.

3.5.3 Use of Quality Powered Mechanical Equipment (QPME)

3.5.3.1 The use of quiet plant associated with the construction works is made reference to the PME listed in the TM or the QPME/ other commonly used PME listed in Environmental Protection Department (EPD) web pages as far as possible which includes the SWLs for specific quiet PME. It is generally known (supported by field measurement) that particular models of construction equipment are quieter than standard types given in the GW-TM.

3.5.4 Use of Movable Noise Barrier for Relatively Fixed Plant Source

3.5.4.1 Movable temporary noise barriers that can be located close to noisy plant and be moved concurrently with the plant along a worksite can be very effective for screening noise from NSRs. A typical design which has been used locally is a wooden framed barrier with a small-cantilevered upper portion of superficial density no less than 7kg/m^2 on a skid footing with 25mm thick internal sound absorptive lining. This measure is particularly effective for low level zone of NSRs. A cantilevered top cover would be required to achieve screening benefits at upper floors of NSRs.

3.5.4.2 Movable temporary noise barriers will be used for some PME (e.g. excavator). It is anticipated that suitably designed barriers could achieve at least 5dB(A) reduction for movable plant and 10dB(A) for stationary plant.

- 3.5.4.3 For the use of movable noise barrier for at-grade construction works, for example retaining wall construction, working space would be considered for their manoeuvrability and placement. Generally, sufficient separation between major plants during at-grade construction works is envisaged to cater for the use of temporary movable noise barriers onsite. Temporary movable noise barrier can be placed close to noise source locally as far as practicable.
- 3.5.4.4 A summary of the movable temporary noise barrier adopted for various PMEs is given in **Table 3.3** below and indicative drawings for barrier are shown in **Appendix 3.5**.

Table 3.3 Summary of barrier adopted for PMEs

PME	Attenuation, dB(A)
Air Compressor	-10
Bar Bender and Cutter	-10
Hand Held Breaker	-5
Breaker, excavator mounted	-10 ^[1]
Concrete Lorry Mixer/ Concrete Truck	-5
Concrete Mixer/ Bentonite Mixer/ Grout Mixer	-10
Concrete Pump/ Electric Bentonite Circulation Pump	-10
Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	-5
Electric drill/ Rock driller	-5
Grinder	-5
Dump Truck	-5
Drill Rig, DTH Drilling Machine	-10
Excavator	-5
Generator	-5
Grout Pump	-10
Lorry	-5
Lorry, with crane/grab	-5
Piling, large diameter bored, oscillator	-10
Vibratory Poker	-10
Roller, Vibratory	-5
Saw, Circular, Wood	-10

Notes:

- [1] According to the approved EIA report for Tuen Mun South Extension (AEIAR-236/2022) and the "Best Practice Guide for Environmental Protection on Construction Sites", page 6-10, published by Hong Kong Construction Association, May 2013, excavator-mounted breaker with soundproof hammer bracket can provide a noise reduction of up to 10 dB(A).

3.5.4.5 With the adoption of the above mitigation measures, the construction noise impacts during the construction period have been calculated in accordance with the work programme and are given in **Appendix 3.6**.

3.6 Prediction of Noise Impact with Implementation of Noise Mitigation Measures

3.6.1.1 **Appendix 3.6** presents the calculated construction noise impacts at representative NSRs. Concurrent projects, including TCNTE and Additional Sewerage Rising Main and Rehabilitation of the Existing Sewage Rising Main between Tung Chung and Siu Ho Wan have been considered for the cumulative noise impact. The predicted construction noise impacts at the NSRs are summarised in **Table 3.4**.

Table 3.4 Summary of predicted construction noise impact at NSRs

No. ^[1]	NSR	NAP ^{[2][3]}	Uses ^[4]	Leq (30min), dB(A)				Duration of Exceedance Months
				Criterion ^[5]	Mitigated Noise Level	Cumulative Noise Level	Exceedance	
Existing NSRs								
E1	Ying Tung Estate	YTT-02f	R	75	74	75	-	-
E20	Ho Yu College and Primary School	EHYC-01a	E	70 (65)	50	57	-	-
E21	Lantau North (Extension) Country Park	LNCP-01	O	N/A ^[6]	69	69	N/A ^[6]	N/A ^[6]
Planned NSRs								
P1	Residential Premises in Tung Chung East	A100-02j	R	75	65	71	-	-
		A116-01c	R	75	63	64	-	-
		A133a-01b	R	75	64	68	-	-
P4	Tung Chung Area 113	A113-01e	R	75	68	69	-	-
		A113-12e	R	75	67	67	-	-

Notes:

- [1] The assessment will only include NSRs which rely on opened windows for ventilation.
- [2] NAP- Noise Assessment Point. Only the first layer of NSRs has been selected for assessment.
- [3] The latest Recommended Outline Development Plan (RODP), updated population intensity and planning parameter, updated population intake years of TCNTE West and TCNTE East, except Area 99 and Area 100, have been collated from CEDD on 21 November 2022. For Area 99 and Area 100, the layouts provided by HD on 22 November 2022 were adopted.
- [4] R – Residential Premises, E – Educational Institutions, O – Others.
- [5] Values in parentheses indicate the noise criterion during examination period of educational institution.
- [6] N/A - Not Applicable.

3.6.1.2 Construction noise impacts arising from the proposed and concurrent projects at all planned and existing NSRs including residential premises and schools during normal and examination periods can be properly mitigated by implementing the proposed noise control measures. Given the transient nature of visitor using hiking trails and mitigation measures are recommended to reduce the noise emission, adverse noise impact is not anticipated.

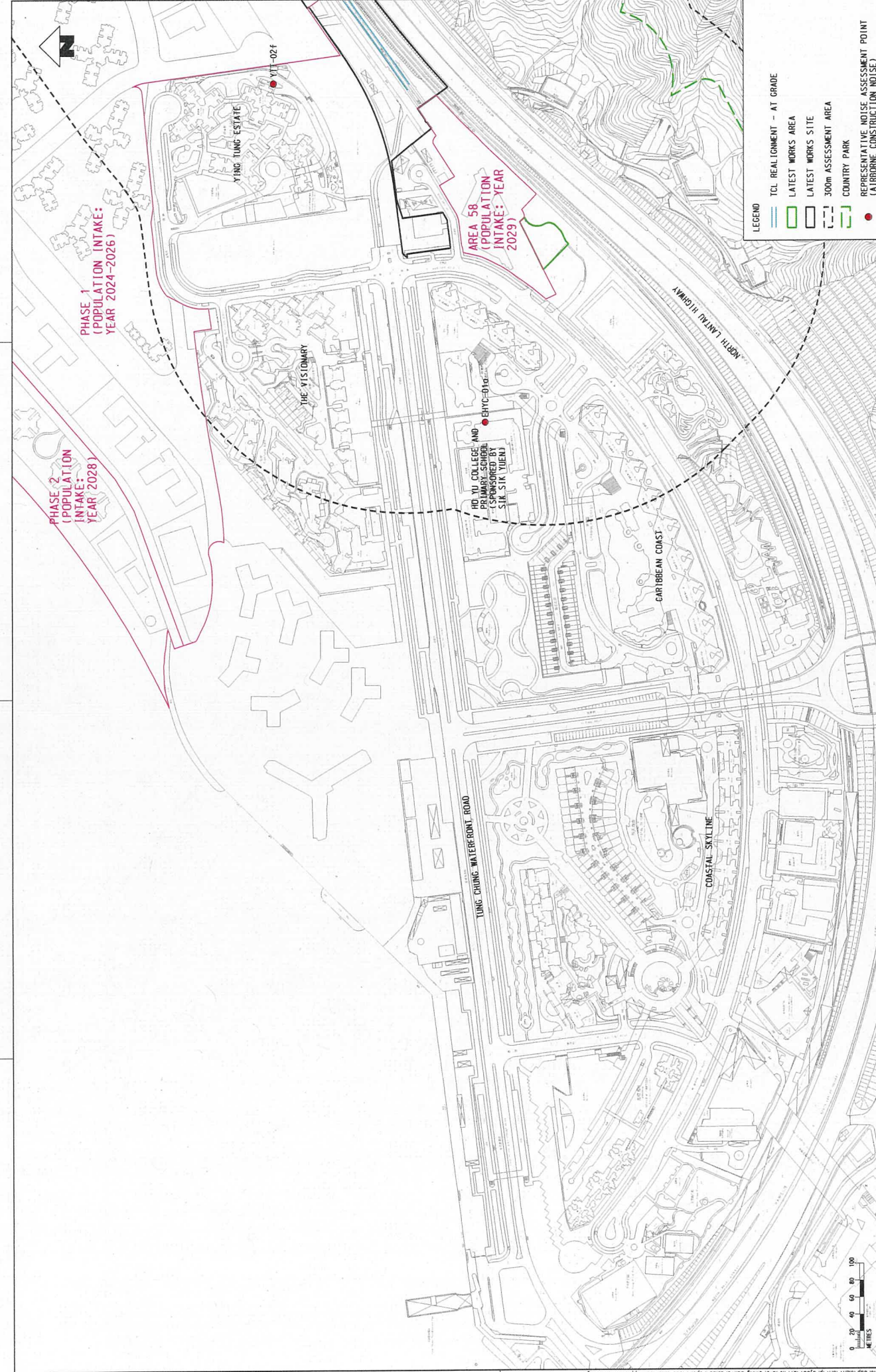
3.6.1.3 The implementation schedule of the noise mitigation measures is summarized in **Appendix 3.7**.

4. Conclusion

- 4.1.1.1 This CNMP (for Works Contract No. 1202) has identified the noise source inventory and assess the effectiveness of construction noise mitigation measures, including the use of quieter powered mechanical equipment, noise barriers for TCE works as recommended in the approved EIA report for Tung Chung Line Extension (AEIAR-235/2022). With the implementation of the recommended mitigation measures, noise impacts during construction phases of TCE are expected to achieve full compliance of relevant noise criteria.
- 4.1.1.2 This CNMP focused on the construction works conducted during July 2023 to October 2023 only and the remaining construction period is still under design stage and subject to change. The Contractor will submit other CNMP for the remaining construction period at least one month before the commencement of the relevant construction work. If there is any update on the construction works conducted from July 2023 to October 2023, a revised CNMP will be submitted for EPD approval.

Appendix 3.1

Locations of Representative NSRs for airborne construction noise



DRAWN DESIGNED: CL CHECKED: EL APPROVED: FC DATE: 07/02/2023 <small>FOR THE SCALE DRAWING, ALL DIMENSIONS SHALL BE IN METRES UNLESS OTHERWISE SPECIFIED. DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE SPECIFIED. DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE SPECIFIED.</small>		ORIGINATOR MTR C1202 - EIA for Tung Chung Line Extension ARUP Ove Arup & Partners Hong Kong Limited Appendix 4.4.6b.dgn	
CL 01/02/23 FC	BT DATE APPROVED REV.	DESCRIPTION A FIRST ISSUE APPROVED REV.	SCALE 1 : 4000 (A3) APPENDIX 3.1b REV. A

TITLE
 PREDICTED NOISE LEVELS OF REPRESENTATIVE NOISE ASSESSMENT POINTS (AIRBORNE CONSTRUCTION NOISE)

LEGEND
 TCL REALIGNMENT - AT GRADE
 LATEST WORKS AREA
 LATEST WORKS SITE
 300M ASSESSMENT AREA
 COUNTRY PARK
 REPRESENTATIVE NOISE ASSESSMENT POINT (AIRBORNE CONSTRUCTION NOISE)

PHASE 1 (POPULATION INTAKE: YEAR 2024-2026)
 PHASE 2 (POPULATION INTAKE: YEAR 2028)
 AREA 58 (POPULATION INTAKE: YEAR 2029)

HO YU COLLEGE AND PRIMARY SCHOOL (SPONSORED BY SH. SH. YUEN)
 THE VISIONARY
 CARIBBEAN COAST
 COASTAL SKYLINE
 TUNG CHUNG WATERFRONT ROAD
 YING TUNG ESTATE
 YING TUNG DRIVE
 YING TUNG DRIVE
 YING TUNG DRIVE

0 20 40 60 80 100 METRES
 NORTH ARROW

X

Appendix 3.2

Tentative Construction Programme

Tentative Construction Programme

Major Construction Activities	2023		2024		2025		2026		2027		2028		2029		2030				
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
TCE																			
Site Clearance / Site Formation																			
Retaining Wall Construction																			
TCE Station structure - Foundation																			
Removal and Reprovision of Existing Noise Barrier																			
Construction of Above Ground Structure																			
Removal of Existing Tracks																			
Site Reinstatement																			
Utilities, road and drainage reinstatement																			
ABWF, BS and E&M Works *																			

Remarks:

- 1) * ABWF - Architectural Builder's Work and Finishes, BS - Building Service, E&M - Electrical and Mechanical
These works are minor construction works conducted inside building structure. Hence, no assessment shall be required in the EIA considering the environmental impact from these works is insignificant.
- 2) The planned construction works in October 2023 will be same as those conducted in September 2023.

Appendix 3.3

Detailed PME Inventory

PME Inventory for TCE

Project: Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension
 Title: Plant Inventory TCE Station Station

TCE Station East Side Retaining Wall Foundation Construction												
Works Area/ Activity	PME	% Operating Time ⁽¹⁾	Time Correction dB(A)	Units	PME Reference	Unmitigated			Mitigated			
						Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference dB(A)	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)
TCE Station East Side Retaining Wall Foundation Construction (Zone E1)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113			Barrier	-10	103
TCE Station East Side Retaining Wall Foundation Construction (Zone E2)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113			Barrier	-10	103
TCE Station East Side Retaining Wall Foundation Construction (Zone E3)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	113			Barrier	-10	103
TCE Station East Side Retaining Wall Foundation Construction (Zone E4)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113			Barrier	-10	103
TCE Station East Side Retaining Wall Foundation Construction (Zone E5)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	113			Barrier	-10	103
TCE Station East Side Retaining Wall Foundation Construction (Zone E6)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	113			Barrier	-10	103
TCE Station East Side Retaining Wall Foundation Construction (Zone E7)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	113			Barrier	-10	103
TCE Station East Side Retaining Wall Foundation Construction (Zone E8)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113			Barrier	-10	103
TCE Station East Side Retaining Wall Foundation Construction (Zone E9)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113			Barrier	-10	103
						Total SWL	113			Total SWL		103

Note:

- [1] Percentage on time within 30 minutes.
- [2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.
- [3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLs.pdf

TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures		Unmitigated										Mitigated									
Works Area/ Activity	PME	% Operating Time ⁽¹⁾	Time Correction ⁽²⁾ dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPM Reference ⁽³⁾	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)									
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E1)	Concrete Pump/ Electric Bentonite Circulation Pump	50	-3	2	CNP047	109	109			Barrier	-10	99									
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77									
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104									
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	100	0	1	CNP048	112	112	EPD-09130	101	Barrier	-5	106									
						Total SWL					Total SWL										
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E2)	Concrete Pump/ Electric Bentonite Circulation Pump	50	-3	2	CNP047	109	109			Barrier	-10	99									
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77									
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104									
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	100	0	1	CNP048	112	112	EPD-09130	101	Barrier	-5	106									
						Total SWL					Total SWL										
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E3)	Concrete Pump/ Electric Bentonite Circulation Pump	50	-3	2	CNP047	109	109			Barrier	-10	99									
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77									
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104									
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	100	0	1	CNP048	112	112	EPD-09130	101	Barrier	-5	106									
						Total SWL					Total SWL										
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E4)	Concrete Pump/ Electric Bentonite Circulation Pump	50	-3	2	CNP047	109	109			Barrier	-10	99									
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77									
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104									
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	100	0	1	CNP048	112	112	EPD-09130	101	Barrier	-5	106									
						Total SWL					Total SWL										
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E5)	Concrete Pump/ Electric Bentonite Circulation Pump	50	-3	2	CNP047	109	109			Barrier	-10	99									
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77									
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104									
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	100	0	1	CNP048	112	112	EPD-09130	101	Barrier	-5	106									
						Total SWL					Total SWL										
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E6)	Concrete Pump/ Electric Bentonite Circulation Pump	50	-3	2	CNP047	109	109			Barrier	-10	99									
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77									
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104									
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	100	0	1	CNP048	112	112	EPD-09130	101	Barrier	-5	106									
						Total SWL					Total SWL										
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E7)	Concrete Pump/ Electric Bentonite Circulation Pump	50	-3	2	CNP047	109	109			Barrier	-10	99									
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77									
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104									
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	100	0	1	CNP048	112	112	EPD-09130	101	Barrier	-5	106									
						Total SWL					Total SWL										
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E8)	Concrete Pump/ Electric Bentonite Circulation Pump	50	-3	2	CNP047	109	109			Barrier	-10	99									
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77									
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104									
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	100	0	1	CNP048	112	112	EPD-09130	101	Barrier	-5	106									
						Total SWL					Total SWL										
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E9)	Concrete Pump/ Electric Bentonite Circulation Pump	50	-3	2	CNP047	109	109			Barrier	-10	99									
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77									
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104									
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	100	0	1	CNP048	112	112	EPD-09130	101	Barrier	-5	106									
						Total SWL					Total SWL										
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E9)	Concrete Pump/ Electric Bentonite Circulation Pump	50	-3	2	CNP047	109	109			Barrier	-10	99									
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77									
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104									
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	100	0	1	CNP048	112	112	EPD-09130	101	Barrier	-5	106									
						Total SWL					Total SWL										
						Total SWL					Total SWL										

Note:
 [1] Percentage on time within 30 minutes.
 [2] PME with code "EPD-XXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.
 [3] The SWL or quiet plant with code "QPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/Other-SWLs.pdf

Project: Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension
 Title: Plant Inventory TCE Station Station

TCE Station East Side Site Clearance / Site Formation										Unmitigated				Mitigated			
Works Area/ Activity	PME	% Operating Time (1)	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference (2)	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)					
TCE Station East Side Site Clearance / Site Formation (Zone E1)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89					
	Breaker, excavator mounted	70	-2	1	CNP028	122	120	EPD-06897	84	Barrier	-5	89					
	Roller, Vibratory	50	-3	2	CNP186	108	108	EPD-09130	101	Barrier	-5	97					
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CNP048	112	113	CPME#	105	Barrier	-5	100					
	Lorry	50	-3	2	CNP141	112	109	CPME#	105	Barrier	-5	104					
	Dump Truck	50	-3	8	CPME#	105	111					106					
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109					104					
						Total SWL	123			Total SWL			114				
							116						111				
							122						112				
TCE Station East Side Site Clearance / Site Formation (Zone E2)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89					
	Breaker, excavator mounted	100	0	1	CNP028	122	122	EPD-06897	84	Barrier	-5	89					
	Roller, Vibratory	50	-3	2	CNP186	108	108	EPD-09130	101	Barrier	-5	97					
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CNP048	112	113	CPME#	105	Barrier	-5	100					
	Lorry	50	-3	2	CNP141	112	112	CPME#	105	Barrier	-5	100					
	Dump Truck	50	-3	8	CPME#	105	111					106					
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109					104					
						Total SWL	124			Total SWL			114				
							112						110				
							120						112				
TCE Station East Side Site Clearance / Site Formation (Zone E3)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89					
	Breaker, excavator mounted	70	-2	1	CNP028	122	120	EPD-06897	84	Barrier	-5	89					
	Roller, Vibratory	50	-3	2	CNP186	108	108	EPD-09130	101	Barrier	-5	97					
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CNP048	112	113	CPME#	105	Barrier	-5	100					
	Lorry	50	-3	2	CNP141	112	112	CPME#	105	Barrier	-5	100					
	Dump Truck	50	-3	8	CPME#	105	111					106					
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109					104					
						Total SWL	124			Total SWL			114				
							112						110				
							120						112				
TCE Station East Side Site Clearance / Site Formation (Zone E4)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89					
	Breaker, excavator mounted	70	-2	1	CNP028	122	120	EPD-06897	84	Barrier	-5	89					
	Roller, Vibratory	50	-3	2	CNP186	108	108	EPD-09130	101	Barrier	-5	97					
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CNP048	112	113	CPME#	105	Barrier	-5	100					
	Lorry	50	-3	2	CNP141	112	112	CPME#	105	Barrier	-5	100					
	Dump Truck	50	-3	8	CPME#	105	111					106					
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109					104					
						Total SWL	124			Total SWL			114				
							112						110				
							120						112				
TCE Station East Side Site Clearance / Site Formation (Zone E5)	Excavator	70	-2	2	CNP081	112	113	EPD-07150	80	Barrier	-5	104					
	Breaker, excavator mounted	70	-2	1	CNP028	122	120	EPD-06897	84	Barrier	-5	86					
	Roller, Vibratory	50	-3	1	CNP186	108	105	EPD-09130	101	Barrier	-5	94					
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	CPME#	105	Barrier	-5	97					
	Lorry	50	-3	1	CNP141	109	109	CPME#	105	Barrier	-5	103					
	Dump Truck	50	-3	4	CPME#	105	108					104					
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109					104					
						Total SWL	122			Total SWL			112				
							113						104				
							120						110				
TCE Station East Side Site Clearance / Site Formation (Zone E6)	Excavator	70	-2	2	CNP081	112	113	EPD-07150	90	Barrier	-5	86					
	Breaker, excavator mounted	100	0	1	CNP028	122	120	EPD-06897	84	Barrier	-5	86					
	Roller, Vibratory	50	-3	1	CNP186	108	105	EPD-09130	101	Barrier	-5	84					
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	CPME#	105	Barrier	-5	97					
	Lorry	50	-3	1	CNP141	109	109	CPME#	105	Barrier	-5	103					
	Dump Truck	50	-3	4	CPME#	105	108					104					
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109					104					
						Total SWL	123			Total SWL			113				
							113						104				
							120						110				
TCE Station East Side Site Clearance / Site Formation (Zone E7)	Excavator	70	-2	2	CNP081	112	113	EPD-07150	90	Barrier	-5	86					
	Breaker, excavator mounted	70	-2	1	CNP028	122	120	EPD-06897	84	Barrier	-5	86					
	Roller, Vibratory	50	-3	1	CNP186	108	105	EPD-09130	101	Barrier	-5	84					
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	CPME#	105	Barrier	-5	97					
	Lorry	50	-3	1	CNP141	109	109	CPME#	105	Barrier	-5	103					
	Dump Truck	50	-3	4	CPME#	105	108					104					
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109					104					
						Total SWL	123			Total SWL			113				
							113						104				
							120						110				
TCE Station East Side Site Clearance / Site Formation (Zone E8)	Excavator	70	-2	2	CNP081	112	113	EPD-07150	90	Barrier	-5	86					
	Breaker, excavator mounted	70	-2	1	CNP028	122	120	EPD-06897	84	Barrier	-5	86					
	Roller, Vibratory	50	-3	1	CNP186	108	105	EPD-09130	101	Barrier	-5	84					
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	CPME#	105	Barrier	-5	97					
	Lorry	50	-3	1	CNP141	109	109	CPME#	105	Barrier	-5	103					
	Dump Truck	50	-3	4	CPME#	105	108					104					
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109					104					
						Total SWL	122			Total SWL			112				
							113						104				
							120						110				
TCE Station East Side Site Clearance / Site Formation (Zone E9)	Excavator	70	-2	2	CNP081	112	113	EPD-07150	90	Barrier	-5	86					
	Breaker, excavator mounted	70	-2	1	CNP028	122	120	EPD-06897	84	Barrier	-5	86					
	Roller, Vibratory	50	-3	1	CNP186	108	105	EPD-09130	101	Barrier	-5	84					
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	CPME#	105	Barrier	-5	97					
	Lorry	50	-3	1	CNP141	109	109	CPME#	105	Barrier	-5	103					
	Dump Truck	50	-3	4	CPME#	105	108					104					
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109					104					
						Total SWL	122			Total SWL			112				
							113						104				
							120						110				

Note:
 (1) Percentage on time within 30 minutes.
 (2) PME with code "EPD-XXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.
 (3) The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/files/res/audfiles/epd/eng/la/application_for_licenses/guidance/files/OtherSWLs.pdf

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TCE Station East Side Site Formation for U/T Diversion												
Works Area/ Activity	PME	% Operating Time ^[1]	Time Correction dB(A)	Units	Unmitigated				Mitigated			
					PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference ^{[2], [3]}	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)
TCE Station East Side Site Formation for U/T Diversion (Zone E2)	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106		Barrier	-5	101	
	Concrete Pump/ Electric Bentonite Circulation Pump	50	-3	1	CNP047	109	106		Barrier	-10	96	
TCE Station East Side Site Formation for U/T Diversion (Zone E3)	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	109		Barrier	-5	101	
	Concrete Pump/ Electric Bentonite Circulation Pump	50	-3	1	CNP047	109	106		Barrier	-10	96	
TCE Station East Side Site Formation for U/T Diversion (Zone E4)	Concrete Lorry Mixer/ Concrete Truck	60	-2	1	CNP044	109	107		Barrier	-5	102	
	Concrete Pump/ Electric Bentonite Circulation Pump	60	-2	1	CNP047	109	107		Barrier	-10	97	
						Total SWL	110		Total SWL		103	

Note:

[1] Percentage on time within 30 minutes.

[2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.

[3] The SWL of quiet plant with code "CPME#*" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWL_e.pdf

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TCE Station East Side Site Reinstatement												
Works Area/ Activity	PME	% Operating Time [1]	Time Correction dB(A)	Units	PME Reference	Unmitigated			Mitigated			
						Single Unit PM10 dB(A)	Total SWL dB(A)	Correction dB(A)	Single Unit QPME dB(A)	Total SWL dB(A)	Correction dB(A)	
TCE Station East Side Site Reinstatement (Zone E1)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	-5	101	104	-5	94
	Lorry, with crane/grab	50	-3	2	CPME#	105	105	-5	100	100	-5	100
	Excavator	90	0	1	CNP081	112	112	-5	90	85	-5	85
	Hand Held Breaker	50	-3	1	CNP026	114	111	-5	101	93	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106	-5	93	80	-5	80
Air Compressor	50	-3	1	CNP003	104	101	-5	93	80	-5	80	
Total SWL						117	117	-5	104	104	-5	94
TCE Station East Side Site Reinstatement (Zone E2)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	-5	101	104	-5	94
	Lorry, with crane/grab	50	-3	2	CPME#	105	105	-5	100	100	-5	100
	Excavator	90	0	1	CNP081	112	112	-5	90	85	-5	85
	Hand Held Breaker	50	-3	1	CNP026	114	111	-5	101	93	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106	-5	93	80	-5	80
Air Compressor	50	-3	1	CNP003	104	101	-5	93	80	-5	80	
Total SWL						117	117	-5	104	104	-5	94
TCE Station East Side Site Reinstatement (Zone E3)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	-5	101	104	-5	94
	Lorry, with crane/grab	50	-3	2	CPME#	105	105	-5	100	100	-5	100
	Excavator	90	0	1	CNP081	112	112	-5	90	85	-5	85
	Hand Held Breaker	50	-3	1	CNP026	114	111	-5	101	93	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106	-5	93	80	-5	80
Air Compressor	50	-3	1	CNP003	104	101	-5	93	80	-5	80	
Total SWL						117	117	-5	104	104	-5	94
TCE Station East Side Site Reinstatement (Zone E4)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	-5	101	104	-5	94
	Lorry, with crane/grab	50	-3	2	CPME#	105	105	-5	100	100	-5	100
	Excavator	90	0	1	CNP081	112	112	-5	90	85	-5	85
	Hand Held Breaker	50	-3	1	CNP026	114	111	-5	101	93	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106	-5	93	80	-5	80
Air Compressor	50	-3	1	CNP003	104	101	-5	93	80	-5	80	
Total SWL						117	117	-5	104	104	-5	94
TCE Station East Side Site Reinstatement (Zone E5)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	-5	101	104	-5	94
	Lorry, with crane/grab	50	-3	2	CPME#	105	105	-5	100	100	-5	100
	Excavator	90	0	1	CNP081	112	112	-5	90	85	-5	85
	Hand Held Breaker	50	-3	1	CNP026	114	111	-5	101	93	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106	-5	93	80	-5	80
Air Compressor	50	-3	1	CNP003	104	101	-5	93	80	-5	80	
Total SWL						117	117	-5	104	104	-5	94

Note:
 [1] Percentage on time within 30 minutes.
 [2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.
 [3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licenses/guidance/files/OtherSWL_e.pdf

Project: Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension
 Title: Plant Inventory TCE Station Station

TCE Station East Side Utilities, Road and Drainage Reinstatement												
Works Area/ Activity	PME	% Operating Time ⁽¹⁾	Time Correction ⁽¹⁾	Units	PME Reference	Unmitigated			Mitigated			
						Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference (a, b, c)	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)
TCE Station East Side Utilities, Road and Drainage Reinstatement (Zone E6)	Excavator	50	-3	4	CNP081	112	115	EPD-07150	90	Barrier	-5	88
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CPME#	112	113	EPD-09130	101	Barrier	-5	97
	Lorry	50	-3	2	CNP141	105	108	CPME#	105	Barrier	-5	100
	Dump Truck	50	-3	4	CPME#	109	109			Barrier	-5	103
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	119			Barrier	-5	104
						Total SWL	119			Total SWL		108
TCE Station East Side Utilities, Road and Drainage Reinstatement (Zone E7)	Excavator	50	-3	4	CNP081	112	115	EPD-07150	90	Barrier	-5	88
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CPME#	112	113	EPD-09130	101	Barrier	-5	97
	Lorry	50	-3	2	CNP141	105	108	CPME#	105	Barrier	-5	100
	Dump Truck	50	-3	4	CPME#	109	109			Barrier	-5	103
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104
						Total SWL	119			Total SWL		108
TCE Station East Side Utilities, Road and Drainage Reinstatement (Zone E8)	Excavator	50	-3	4	CNP081	112	115	EPD-07150	90	Barrier	-5	88
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CPME#	112	113	EPD-09130	101	Barrier	-5	97
	Lorry	50	-3	2	CNP141	105	108	CPME#	105	Barrier	-5	100
	Dump Truck	50	-3	4	CPME#	109	109			Barrier	-5	103
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104
						Total SWL	119			Total SWL		108
TCE Station East Side Utilities, Road and Drainage Reinstatement (Zone E9)	Excavator	50	-3	4	CNP081	112	115	EPD-07150	90	Barrier	-5	88
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CPME#	112	113	EPD-09130	101	Barrier	-5	97
	Lorry	50	-3	2	CNP141	105	108	CPME#	105	Barrier	-5	100
	Dump Truck	50	-3	4	CPME#	109	109			Barrier	-5	103
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104
						Total SWL	119			Total SWL		108

Note:

- [1] Percentage on time within 30 minutes.
- [2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.
- [3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/default/files/epd/english/application_for_licences/guidance/files/OtherSWLs.pdf

Project: Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension
Title: Plant Inventory TCE Station Station

TCE Station East Side Removal of abandoned D/T											
Works Area/ Activity	PME	% Operating Time ⁽¹⁾	Time Correction dB(A)	Units	Unmitigated			Mitigated			
					PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference ^{(2),(3)}	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)
TCE Station East Side Removal of abandoned D/T (Zone E1)	Grinder	50	-3	1	CNP065	98	95		Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station East Side Removal of abandoned D/T (Zone E2)	Grinder	50	-3	1	CNP065	98	95		Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station East Side Removal of abandoned D/T (Zone E3)	Grinder	50	-3	1	CNP065	98	95		Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station East Side Removal of abandoned D/T (Zone E4)	Grinder	50	-3	1	CNP065	98	95		Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station East Side Removal of abandoned D/T (Zone E5)	Grinder	50	-3	1	CNP065	98	95		Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98

Note:

- [1] Percentage on time within 30 minutes.
- [2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.
- [3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from <https://www.epd.gov.hk/epd/sites/default/files/epd/english/guidance/files/OtherSWLLe.pdf>
- [4] Crane Lorry will not be used concurrently with Electric Grinder at any time during removal works.

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Title: Plant Inventory TCE Station Station

TCE Station East Side Removal of abandoned U/T											
Works Area/ Activity	PME	% Operating Time ⁽¹⁾	Time Correction dB(A)	Units	Unmitigated			Mitigated			
					PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference [2], [3]	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)
TCE Station East Side Removal of abandoned U/T (Zone E1)	Grinder	50	-3	1	CNP065	98	95		Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station East Side Removal of abandoned U/T (Zone E2)	Grinder	50	-3	1	CNP065	98	95		Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station East Side Removal of abandoned U/T (Zone E3)	Grinder	50	-3	1	CNP065	98	95		Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station East Side Removal of abandoned U/T (Zone E4)	Grinder	50	-3	1	CNP065	98	95		Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station East Side Removal of abandoned U/T (Zone E5)	Grinder	50	-3	1	CNP065	98	95		Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98

Note:

- [1] Percentage on time within 30 minutes.
- [2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.
- [3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWL_e.pdf
- [4] Crane Lorry will not be used concurrently with Electric Grinder at any time during removal works.

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 Title: Plant Inventory TCE Station Station

TCE Station East Side Stationary Plants												
Works Area/ Activity	PME	% Operating Time ⁽¹⁾	Time Correction ⁽¹⁾ dB(A)	Units	Unmitigated				Mitigated			
					PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference ^{(2), (3)}	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)
TCE Station East Side Stationary Plants (S1)	Air Compressor	90	0	16	CNP003	104	116	EPD-09607	93	Barrier	-10	95
	Concrete Mixer/ Bentonite Mixer/ Grout Mixer	50	-3	5	CNP045	96	100			Barrier	-10	90
	Generator	90	0	3	CNP103	95	99	EPD-10735	87	Barrier	-5	86
	Grout Pump	50	-3	5	CPME#10	105	109			Barrier	-10	99
						Total SWL	117				Total SWL	101
TCE Station East Side Stationary Plants (S2)	Air Compressor	90	0	12	CNP003	104	114	EPD-09607	93	Barrier	-10	93
	Concrete Mixer/ Bentonite Mixer/ Grout Mixer	50	-3	3	CNP045	96	98			Barrier	-10	88
	Generator	90	0	4	CNP103	95	101	EPD-10735	87	Barrier	-5	88
	Grout Pump	50	-3	3	CPME#10	105	107			Barrier	-10	97
						Total SWL	115				Total SWL	99

Note:

[1] Percentage on time within 30 minutes.

[2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.

[3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWL.pdf

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TCE Station West Side Stationary Plants												
Works Area/ Activity	PME	% Operating Time [1]	Time Correction dB(A)	Units	Unmitigated				Mitigated			
					PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference [2], [3]	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)
TCE Station West Side Stationary Plants (S1)	Concrete Mixer/ Bentonite Mixer/ Grout Mixer	50	-3	2	CNP045	96			Barrier	-10	86	
	Grout Pump	50	-3	2	CPME#10	105			Barrier	-10	95	
	Generator	90	0	3	CNP103	99	EPD-10735		Barrier	-5	86	
	Air Compressor	90	0	8	CNP003	104	EPD-09607		Barrier	-10	92	
						Total SWL				Total SWL		
						114				97		
TCE Station West Side Stationary Plants (S2)	Concrete Mixer/ Bentonite Mixer/ Grout Mixer	50	-3	3	CNP045	96			Barrier	-10	88	
	Grout Pump	50	-3	3	CPME#10	107			Barrier	-10	97	
	Generator	90	0	4	CNP103	101	EPD-10735		Barrier	-5	88	
	Air Compressor	90	0	12	CNP003	104	EPD-09607		Barrier	-10	93	
						Total SWL				Total SWL		
						115				99		

Note:

[1] Percentage on time within 30 minutes.

[2] PME with code 'EPD-XXXXX' are quiet equipment with SWLs extracted from EPD's QPME inventory.

[3] The SWL of quiet plant with code 'CPME#' are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWL.e.pdf

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Retaining Wall Construction (Retaining Wall and Mini Piles) W1-W3												
Works Area/ Activity	PME	% Operating Time [1]	Time Correction dB(A)	Units	PME Reference	Unmitigated			Mitigated			
						Single Unit PME dB(A)	Total SWL dB(A)	CPME Reference dB(A)	Single Unit CPME dB(A)	Total SWL dB(A)	Correction dB(A)	Total SWL dB(A)
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W1)	Concrete Pump/Electric Bentonite Circulation Pump	50	-3	1	CNP047	109	106					
	Bar Bender and Cutter	50	-3	1	CNP021	90	87				Barrier	-10
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106				Barrier	-5
						Total SWL	109				Total SWL	102
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W2)	Concrete Pump/Electric Bentonite Circulation Pump	50	-3	1	CNP047	109	106					
	Bar Bender and Cutter	50	-3	1	CNP021	90	87				Barrier	-10
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106				Barrier	-5
						Total SWL	109				Total SWL	102
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W3)	Concrete Pump/Electric Bentonite Circulation Pump	50	-3	1	CNP047	109	106					
	Bar Bender and Cutter	50	-3	1	CNP021	90	87				Barrier	-10
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106				Barrier	-5
						Total SWL	109				Total SWL	102
Retaining Wall Mini piles 80m opposite Ying Tung Estate (Zone W1)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110				Barrier	-10
Retaining Wall Mini piles 80m opposite Ying Tung Estate (Zone W2)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110				Barrier	-10
Retaining Wall Mini piles 80m opposite Ying Tung Estate (Zone W3)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113				Barrier	-10
						Total SWL	113				Total SWL	103

Note

[1] Percentage on time within 30 minutes.

[2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's CPME inventory.

[3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licenses/guidance/files/OtherSWLs.pdf

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Retaining Wall Construction (Retaining wall & mini piles) W4-W8		Unmitigated										Mitigated			
Works Area/ Activity	PME	% Operating Time [1]	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference [2], [3]	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)			
Retaining Wall 240m Section and noise mitigation measures (Zone W4)	Concrete Pump/Electric Bentonite Circulation Pump	50	-3	1	CNP047	109	106			Barrier	-10	96			
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77			
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101			
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	80	-1	1	CNP048	112	111	EPD-09130	101	Barrier	-5	95			
	Total SWL					113				Total SWL		103			
Retaining Wall 240m Section and noise mitigation measures (Zone W5)	Concrete Pump/Electric Bentonite Circulation Pump	50	-3	1	CNP047	109	106			Barrier	-10	96			
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77			
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101			
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	80	-1	1	CNP048	112	111	EPD-09130	101	Barrier	-5	95			
	Total SWL					113				Total SWL		103			
Retaining Wall 240m Section and noise mitigation measures (Zone W6)	Concrete Pump/Electric Bentonite Circulation Pump	50	-3	1	CNP047	109	106			Barrier	-10	96			
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77			
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101			
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	80	-1	1	CNP048	112	111	EPD-09130	101	Barrier	-5	95			
	Total SWL					113				Total SWL		103			
Retaining Wall 240m Section and noise mitigation measures (Zone W7)	Concrete Pump/Electric Bentonite Circulation Pump	50	-3	1	CNP047	109	106			Barrier	-10	96			
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77			
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101			
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	80	-1	1	CNP048	112	111	EPD-09130	101	Barrier	-5	95			
	Total SWL					113				Total SWL		103			
Retaining Wall 240m Section and noise mitigation measures (Zone W8)	Concrete Pump/Electric Bentonite Circulation Pump	50	-3	1	CNP047	109	106			Barrier	-10	96			
	Bar Bender and Cutter	50	-3	1	CNP021	90	87			Barrier	-10	77			
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101			
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	80	-1	1	CNP048	112	111	EPD-09130	101	Barrier	-5	95			
	Total SWL					113				Total SWL		103			
Retaining Wall Foundation 240m Section (Zone W4)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113			Barrier	-10	103			
Retaining Wall Foundation 240m Section (Zone W5)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100			
Retaining Wall Foundation 240m Section (Zone W6)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100			
Retaining Wall Foundation 240m Section (Zone W7)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100			
Retaining Wall Foundation 240m Section (Zone W8)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100			
	Total SWL					110				Total SWL		100			

Note:

[1] Percentage on time within 30 minutes.

[2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.

[3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licenses/guidance/files/OtherSWL_e.pdf

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TCE Station West Side Site Clearance / Site Formation		Unmitigated					Mitigated					
Works Area/ Activity	PME	% Operating Time [1]	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	OPME Reference [2],[3]	Single Unit OPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)
TCE Station West Side Site Clearance / Site Formation (Zone W1)	Excavator	70	-2	2	CNP081	112	113	EPD-07150	90	Barrier	-5	86
	Breaker, vibratory	50	-3	1	CNP186	108	105	EPD-06997	94	Barrier	-5	86
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry	50	-3	1	CNP141	112	109	CPME#	105	Barrier	-5	97
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103
Total SWL 118												
TCE Station West Side Site Clearance / Site Formation (Zone W2)	Excavator	70	-2	2	CNP081	112	113	EPD-07150	90	Barrier	-5	86
	Breaker, vibratory	50	-3	1	CNP186	108	105	EPD-06997	94	Barrier	-5	86
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry	50	-3	1	CNP141	112	109	CPME#	105	Barrier	-5	97
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103
Total SWL 118												
TCE Station West Side Site Clearance / Site Formation (Zone W3)	Excavator	70	-2	2	CNP081	112	113	EPD-07150	90	Barrier	-5	86
	Breaker, excavator mounted	70	-2	5	CNP028	122	127			Barrier	-10	117
	Roller, vibratory	50	-3	1	CNP186	108	105	EPD-06997	94	Barrier	-5	86
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry	50	-3	1	CNP141	112	109	CPME#	105	Barrier	-5	97
Total SWL 118												
TCE Station West Side Site Clearance / Site Formation (Zone W4)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89
	Breaker, excavator mounted	70	-2	5	CNP028	122	127			Barrier	-10	117
	Roller, vibratory	50	-3	2	CNP186	108	108	EPD-06997	94	Barrier	-5	89
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CNP048	112	113	EPD-09130	101	Barrier	-5	97
	Lorry	50	-3	2	CNP141	112	112	CPME#	105	Barrier	-5	100
Total SWL 128												
TCE Station West Side Site Clearance / Site Formation (Zone W5)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89
	Breaker, excavator mounted	70	-2	5	CNP028	122	127			Barrier	-10	117
	Roller, vibratory	50	-3	2	CNP186	108	108	EPD-06997	94	Barrier	-5	89
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CNP048	112	113	EPD-09130	101	Barrier	-5	97
	Lorry	50	-3	2	CNP141	112	112	CPME#	105	Barrier	-5	100
Total SWL 128												
TCE Station West Side Site Clearance / Site Formation (Zone W6)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89
	Breaker, excavator mounted	70	-2	5	CNP028	122	127			Barrier	-10	117
	Roller, vibratory	50	-3	2	CNP186	108	108	EPD-06997	94	Barrier	-5	89
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CNP048	112	113	EPD-09130	101	Barrier	-5	97
	Lorry	50	-3	2	CNP141	112	112	CPME#	105	Barrier	-5	100
Total SWL 123												
TCE Station West Side Site Clearance / Site Formation (Zone W7)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89
	Breaker, excavator mounted	70	-2	5	CNP028	122	127			Barrier	-10	117
	Roller, vibratory	50	-3	2	CNP186	108	108	EPD-06997	94	Barrier	-5	89
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CNP048	112	113	EPD-09130	101	Barrier	-5	97
	Lorry	50	-3	2	CNP141	112	112	CPME#	105	Barrier	-5	100
Total SWL 123												
TCE Station West Side Site Clearance / Site Formation (Zone W8)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89
	Breaker, excavator mounted	70	-2	5	CNP028	122	127			Barrier	-10	117
	Roller, vibratory	50	-3	2	CNP186	108	108	EPD-06997	94	Barrier	-5	89
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CNP048	112	113	EPD-09130	101	Barrier	-5	97
	Lorry	50	-3	2	CNP141	112	112	CPME#	105	Barrier	-5	100
Total SWL 123												
TCE Station West Side Site Clearance / Site Formation (Zone W8)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89
	Breaker, excavator mounted	70	-2	5	CNP028	122	127			Barrier	-10	117
	Roller, vibratory	50	-3	2	CNP186	108	108	EPD-06997	94	Barrier	-5	89
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	2	CNP048	112	113	EPD-09130	101	Barrier	-5	97
	Lorry	50	-3	2	CNP141	112	112	CPME#	105	Barrier	-5	100
Total SWL 123												

Note
 [1] Percentage on time within 30 minutes.
 [2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's OPME inventory.
 [3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_license/guidance/files/OtherSWL_e.pdf

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TCE Station West Side Utilities, Road and Drainage Reinstatement												
Works Area/ Activity	PME	% Operating Time ⁽¹⁾	Time Correction ⁽¹⁾	Units	Unmitigated			Mitigated				
					PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference _(dB)	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)
TCE Station West Side Utilities, Road and Drainage Reinstatement (Zone W1)	Excavator	50	-3	2	CNP081	112	112	EPD-07150	90	Barrier	-5	85
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry	50	-3	1	CNP141	112	109	CPME#	105	Barrier	-5	97
	Dump Truck	50	-3	2	CPME#	105	105	CPME#	105	Barrier	-5	100
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109		109	Barrier	-5	104
						Total SWL	117					106
TCE Station West Side Utilities, Road and Drainage Reinstatement (Zone W2)	Excavator	50	-3	2	CNP081	112	112	EPD-07150	90	Barrier	-5	85
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry	50	-3	1	CNP141	112	109	CPME#	105	Barrier	-5	97
	Dump Truck	50	-3	2	CPME#	105	105	CPME#	105	Barrier	-5	100
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109		109	Barrier	-5	104
						Total SWL	117					106
TCE Station West Side Utilities, Road and Drainage Reinstatement (Zone W3)	Excavator	50	-3	2	CNP081	112	112	EPD-07150	90	Barrier	-5	85
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry	50	-3	1	CNP141	112	109	CPME#	105	Barrier	-5	97
	Dump Truck	50	-3	2	CPME#	105	105	CPME#	105	Barrier	-5	100
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109		109	Barrier	-5	104
						Total SWL	117					106

Note:

[1] Percentage on time within 30 minutes.

[2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME Inventory.

[3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/Other-SWL.e.pdf

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TCE Station West Side Removal and Reprison of Existing Noise Barrier												
Works Area/ Activity	PME	% Operating Time [1]	Time Correction (dB(A))	Units	Unmitigated			Mitigated				
					PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	OPME Reference [2],[3]	Single Unit OPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)
TCE Station West Side Removal and Reprison of Existing Noise Barrier (Zone W1)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	80	-1	2	CNP048	112	114	EPD-09130	101	Barrier	-5	98
	Electric drill/ Rock driller	50	-3	1	CNP064	103	100	EPD-08781	99	Barrier	-5	91
	Gritter	50	-3	1	CNP065	98	95			Barrier	-5	90
	Total SWL					114				Total SWL		99
TCE Station West Side Removal and Reprison of Existing Noise Barrier (Zone W2)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	80	-1	2	CNP048	112	114	EPD-09130	101	Barrier	-5	98
	Electric drill/ Rock driller	50	-3	1	CNP064	103	100	EPD-08781	99	Barrier	-5	91
	Gritter	50	-3	1	CNP065	98	95			Barrier	-5	90
	Total SWL					114				Total SWL		99
TCE Station West Side Removal and Reprison of Existing Noise Barrier (Zone W3)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	80	-1	2	CNP048	112	114	EPD-09130	101	Barrier	-5	98
	Electric drill/ Rock driller	50	-3	1	CNP064	103	100	EPD-08781	99	Barrier	-5	91
	Gritter	50	-3	1	CNP065	98	95			Barrier	-5	90
	Total SWL					114				Total SWL		99

Note:

[1] Percentage on time within 30 minutes.

[2] PME with code "EPD-XXXX" are quiet equipment with SWLs extracted from EPD's OPME inventory.

[3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/english/application_for_licenses/guidance/files/OtherSWL.e.pdf

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TCE Station West Side Removal of abandoned DIT											
Works Area/Activity	PME	% Operating Time ⁽¹⁾	Time Correction dB(A)	Units	Unmitigated			Mitigated			
					PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference dB(A) ^[2]	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)
TCE Station West Side Removal of abandoned DIT (Zone W1)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98	95		Barrier	-5	90
		50	-3	1	CNP145	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned DIT (Zone W2)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98	95		Barrier	-5	90
		50	-3	1	CNP145	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned DIT (Zone W3)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98	95		Barrier	-5	90
		50	-3	1	CNP145	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned DIT (Zone W4)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98	95		Barrier	-5	90
		50	-3	1	CNP145	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned DIT (Zone W5)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98	95		Barrier	-5	90
		50	-3	1	CNP145	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned DIT (Zone W6)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98	95		Barrier	-5	90
		50	-3	1	CNP145	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned DIT (Zone W7)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98	95		Barrier	-5	90
		50	-3	1	CNP145	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned DIT (Zone W8)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98	95		Barrier	-5	90
		50	-3	1	CNP145	105	102		Barrier	-5	97
						Total SWL	103			Total SWL	98

Note:

- [1] Percentage on time within 30 minutes.
- [2] PME with code "EPD-XXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.
- [3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWL.e.pdf

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TCE Station West Side Removal of abandoned UT											
Works Areal Activity	PME	% Operating Time ⁽¹⁾	Time Correction dB(A)	Units	PME Reference	Unmitigated			Mitigated		
						Single Unit dB(A)	Total SWL dB(A)	OPME Reference _{(2), (3)}	Single Unit OPME dB(A)	Mitigation Measures	Correction dB(A)
TCE Station West Side Removal of abandoned UT (Zone W1)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98			Barrier	-5	90
		50	-3	1	CNP145	105			Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned UT (Zone W2)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98			Barrier	-5	90
		50	-3	1	CNP145	105			Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned UT (Zone W3)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98			Barrier	-5	90
		50	-3	1	CNP145	105			Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned UT (Zone W4)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98			Barrier	-5	90
		50	-3	1	CNP145	105			Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned UT (Zone W5)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98			Barrier	-5	90
		50	-3	1	CNP145	105			Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned UT (Zone W6)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98			Barrier	-5	90
		50	-3	1	CNP145	105			Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned UT (Zone W7)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98			Barrier	-5	90
		50	-3	1	CNP145	105			Barrier	-5	97
						Total SWL	103			Total SWL	98
TCE Station West Side Removal of abandoned UT (Zone W8)	Grinder Lorry, with crane/grab	50	-3	1	CNP065	98			Barrier	-5	90
		50	-3	1	CNP145	105			Barrier	-5	97
						Total SWL	103			Total SWL	98

Note:

[1] Percentage on time within 30 minutes.

[2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.

[3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licenses/guidance/files/OtherSWL.e.pdf

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TCE Station Area Stationary Plants		Unmitigated						Mitigated				
Works Area/Activity	PME	% Operating Time ^[1]	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPMEReference ^{[2], [3]}	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)
TCE Station Area Stationary Plants (S1)	Generator	50	-3	2	CNP103	95	95	EPD-10735	87	Barrier	-5	82
	Air Compressor	90	0	5	CNP003	104	111	EPD-09607	93	Barrier	-10	90
						Total SWL	111				Total SWL	90
TCE Station Area Stationary Plants (S2)	Generator	50	-3	1	CNP103	95	92	EPD-10735	87	Barrier	-5	79
	Air Compressor	90	0	3	CNP003	104	108	EPD-09607	93	Barrier	-10	87
						Total SWL	108				Total SWL	88

Note:

- [1] Percentage on time within 30 minutes.
- [2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.
- [3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWL.e.pdf

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TCE Station Site Clearance/Site Formation		Unmitigated										Mitigated			
Works Area/ Activity	PME	% Operating Time (1)	Time Correction dBA	Units	PME Reference	Single Unit PME dBA	Total SWL dBA	QPME Reference (a), (b)	Single Unit QPME dBA	Mitigation Measures	Correction dBA	Total SWL dBA			
TCE Station Site Clearance/Site Formation (Zone A)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89			
	Breaker, excavator mounted	70	-2	1	CNP028	122	120	EPD-06997	94	Barrier	-10	110			
	Roller, Vibratory	50	-3	2	CNP186	108	108	EPD-09130	101	Barrier	-5	89			
	Mobile Crane/Service Crane/ Lifting crane	70	-2	2	CNP048	112	113	CPME#	105	Barrier	-5	100			
	Lorry Truck	50	-3	2	CNP141	105	111			Barrier	-5	106			
Concrete Lorry Mixer/ Concrete Truck	50	-3	4	CNP044	109	112			Barrier	-5	107				
TCE Station Site Clearance/Site Formation (Zone B)	Excavator	70	-2	4	CNP081	112	124	EPD-07150	90	Barrier	-5	113			
	Breaker, excavator mounted	70	-2	1	CNP028	122	120	EPD-06997	94	Barrier	-10	110			
	Roller, Vibratory	50	-3	2	CNP186	108	113	EPD-09130	101	Barrier	-5	89			
	Mobile Crane/Service Crane/ Lifting crane	70	-2	2	CNP048	112	112	CPME#	105	Barrier	-5	97			
	Lorry Truck	50	-3	2	CNP141	105	111			Barrier	-5	100			
Concrete Lorry Mixer/ Concrete Truck	50	-3	4	CNP044	109	112			Barrier	-5	106				
TCE Station Site Clearance/Site Formation (Zone C)	Excavator	70	-2	4	CNP081	112	124	EPD-07150	90	Barrier	-5	113			
	Roller, Vibratory	50	-3	2	CNP186	108	116	EPD-06997	94	Barrier	-10	89			
	Mobile Crane/Service Crane/ Lifting crane	70	-2	2	CNP048	112	113	EPD-09130	101	Barrier	-5	97			
	Lorry Truck	50	-3	2	CNP141	105	112	CPME#	105	Barrier	-5	100			
	Concrete Lorry Mixer/ Concrete Truck	50	-3	4	CNP044	109	111			Barrier	-5	106			
							Total SWL					Total SWL			
							121					110			

Note:

[1] Percentage on time within 30 minutes.

[2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.

[3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licenses/guidance/files/Other-SWLs.pdf

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TCE Station Structure - Foundation		Unmitigated						Mitigated					
Works Area/ Activity	PME	% Operating Time [1]	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference [2], [3]	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)	
TCE Station Structure - Foundation (Zone A)	Piling, Large Dia Bored, Oscillator	90	0	3	CNP165	115	119			Barrier	-10	109	
	Air Compressor	90	0	3	CNP003	104	108	EPD-09607	93	Barrier	-10	87	
	Drill Rig, DTH Drilling Machine	70	-2	3	CPME#	110	113			Barrier	-10	103	
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	80	-1	1	CNP048	112	111	EPD-09130	101	Barrier	-5	95	
	Concrete Lorry Mixer/ Concrete Truck	80	-1	1	CNP044	109	108			Barrier	-5	103	
	Total SWL					121	121				Total SWL	111	
TCE Station Structure - Foundation (Zone B)	Piling, Large Dia Bored, Oscillator	90	0	3	CNP165	115	119			Barrier	-10	109	
	Air Compressor	90	0	4	CNP003	104	110	EPD-09607	93	Barrier	-10	89	
	Drill Rig, DTH Drilling Machine	70	-2	3	CPME#	110	113			Barrier	-10	103	
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	80	-1	1	CNP048	112	111	EPD-09130	101	Barrier	-5	95	
	Concrete Lorry Mixer/ Concrete Truck	80	-1	1	CNP044	109	108			Barrier	-5	103	
	Total SWL					121	121				Total SWL	111	
TCE Station Structure - Foundation (Zone C)	Piling, Large Dia Bored, Oscillator	90	0	3	CNP165	115	119			Barrier	-10	109	
	Air Compressor	90	0	3	CNP003	104	108	EPD-09607	93	Barrier	-10	87	
	Drill Rig, DTH Drilling Machine	70	-2	3	CPME#	110	113			Barrier	-10	103	
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	80	-1	1	CNP048	112	111	EPD-09130	101	Barrier	-5	95	
	Concrete Lorry Mixer/ Concrete Truck	80	-1	1	CNP044	109	108			Barrier	-5	103	
	Total SWL					121	121				Total SWL	111	

Note:

[1] Percentage on time within 30 minutes.

[2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.

[3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLs.pdf

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TCE Station Link Bridge Foundation											
Works Area/ Activity	PME	% Operating Time [1]	Time Correction dB(A)	Units	PME Reference	Unmitigated			Mitigated		
						Single Unit PME dB(A)	Total SWL dB(A)	Total SWL	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)
TCE Station Link Bridge Foundation (Zone C)	Piling, Large Dia Bored, Oscillator	90	0	2	CNP165	115	118		Barrier	-10	108
	Drill Rig, DTH Drilling Machine	70	-2	2	CPME#	110	111		Barrier	-10	101
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	80	-1	1	CNP048	112	111	101	Barrier	-5	95
	Concrete Lorry Mixer/ Concrete Truck	80	-1	1	CNP044	109	108		Barrier	-5	103
	Concrete Pump/ Electric Bentonite Circulation Pump	80	-1	1	CNP047	109	108		Barrier	-10	98
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	101	Barrier	-5	94
	Lorry, with crane/grab	50	-3	1	CPME#	105	102		Barrier	-5	97
	Electric drill/ Rock driller	60	-2	1	CNP064	103	101	99	Barrier	-5	92
	Vibratory Poker	60	-2	3	CNP170	113	116	102	Barrier	-10	95
						Total SWL	122			Total SWL	

Note:

[1] Percentage on time within 30 minutes.

[2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.

[3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWL.e.pdf

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TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances														
Works Area/ Activity	PME	% Operating Time [1]	Time Correction dB(A)	Units	PME Reference	Unmitigated			Mitigated					
						Single Unit PME dB(A)	Total SWL dB(A)	OPME Reference [2], [3]	Single Unit OPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)		
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone A)	Bar Bender and Cutter	100	0	1	CNP021	90	90							
	Concrete Lorry Mixer/ Concrete Truck	80	-1	1	CNP044	109	108			Barrier	-5	103		
	Concrete Pump/ Electric Bentonite Circulation Pump	80	-1	1	CNP047	109	108			Barrier	-5	103		
	Saw, Circular, Wood	50	-3	1	CNP201	108	105			Barrier	-10	98		
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110			Barrier	-5	107		
	Lorry, with crane/grab	50	-3	1	CPME#	105	102			Barrier	-5	97		
	Electric drill/ Rock driller	60	-2	1	CNP064	103	101			Barrier	-5	96		
	Vibratory Poker	60	-2	3	CNP170	113	116			Barrier	-10	106		
						Total SWL	118				Total SWL	-10	106	
							90	90					80	
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone B)	Bar Bender and Cutter	100	0	1	CNP021	90	90							
	Concrete Lorry Mixer/ Concrete Truck	80	-1	1	CNP044	109	108			Barrier	-5	103		
	Concrete Pump/ Electric Bentonite Circulation Pump	80	-1	1	CNP047	109	108			Barrier	-5	103		
	Saw, Circular, Wood	50	-3	1	CNP201	108	105			Barrier	-10	98		
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110			Barrier	-5	107		
	Lorry, with crane/grab	50	-3	1	CPME#	105	102			Barrier	-5	97		
	Electric drill/ Rock driller	60	-2	1	CNP064	103	101			Barrier	-5	96		
						Total SWL	115				Total SWL	-10	106	
							90	90					80	
							109	108					103	
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone C)	Bar Bender and Cutter	100	0	1	CNP021	90	90							
	Concrete Lorry Mixer/ Concrete Truck	80	-1	1	CNP044	109	108			Barrier	-5	103		
	Concrete Pump/ Electric Bentonite Circulation Pump	80	-1	1	CNP047	109	108			Barrier	-5	103		
	Saw, Circular, Wood	50	-3	1	CNP201	108	105			Barrier	-10	98		
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110			Barrier	-5	107		
	Lorry, with crane/grab	50	-3	1	CPME#	105	102			Barrier	-5	97		
	Electric drill/ Rock driller	60	-2	1	CNP064	103	101			Barrier	-5	96		
						Total SWL	115				Total SWL	-10	106	
							90	90					80	
							109	108					103	

Note:

- [1] Percentage on time within 30 minutes.
- [2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.
- [3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLs.pdf

Project: Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension
 Title: Plant Inventory TCE Station Station

TCE Station Site Reinstatement										Unmitigated					Mitigated				
Works Area/ Activity	PME	% Operating Time ⁽¹⁾	Time Correction dBA	Units	PME Reference	Single Unit PME dBA	Total SWL dBA	QPM Reference ^{[2],[3]}	Single Unit QPME dBA	Mitigation Measures	Correction dBA	Total SWL dBA							
TCE Station Site Reinstatement (Zone A)	Excavator	100	0	4	CNP081	112	118	EPD-07150	90	Barrier	-5	91							
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	50	-3	2	CNP048	112	112	EPD-09130	101	Barrier	-5	96							
	Lorry	100	0	2	CNP141	112	115	CPME#	105	Barrier	-5	103							
	Dump Truck	100	0	4	CPME#	105	111			Barrier	-5	106							
	Concrete Lorry Mixer/ Concrete Truck	100	0	2	CNP044	109	112			Barrier	-5	107							
	Roller, Vibratory	70	-2	2	CNP186	108	109	EPD-06997	94	Barrier	-5	90							
	Vibratory Pocker	50	-3	4	CNP170	113	116	CPME#	102	Barrier	-10	95							
	Saw, Circular, Wood	30	-5	2	CNP201	108	106			Barrier	-10	96							
						Total SWL	123						Total SWL	111					
TCE Station Site Reinstatement (Zone B)	Excavator	100	0	4	CNP081	112	118	EPD-07150	90	Barrier	-5	91							
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	50	-3	2	CNP048	112	112	EPD-09130	101	Barrier	-5	96							
	Lorry	100	0	2	CNP141	112	115	CPME#	105	Barrier	-5	103							
	Dump Truck	100	0	4	CPME#	105	111			Barrier	-5	106							
	Concrete Lorry Mixer/ Concrete Truck	100	0	2	CNP044	109	112			Barrier	-5	107							
	Roller, Vibratory	70	-2	2	CNP186	108	109	EPD-06997	94	Barrier	-5	90							
	Vibratory Pocker	50	-3	4	CNP170	113	116	CPME#	102	Barrier	-10	95							
	Saw, Circular, Wood	30	-5	2	CNP201	108	106			Barrier	-10	96							
						Total SWL	123						Total SWL	111					
TCE Station Site Reinstatement (Zone C)	Excavator	100	0	4	CNP081	112	118	EPD-07150	90	Barrier	-5	91							
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	100	0	2	CNP048	112	115	EPD-09130	101	Barrier	-5	99							
	Lorry	100	0	2	CNP141	112	115	CPME#	105	Barrier	-5	103							
	Dump Truck	100	0	4	CPME#	105	111			Barrier	-5	106							
	Concrete Lorry Mixer/ Concrete Truck	100	0	2	CNP044	109	112			Barrier	-5	107							
	Roller, Vibratory	70	-2	2	CNP186	108	109	EPD-06997	94	Barrier	-5	90							
	Vibratory Pocker	50	-3	4	CNP170	113	116	CPME#	102	Barrier	-10	95							
	Saw, Circular, Wood	30	-5	2	CNP201	108	106			Barrier	-10	96							
						Total SWL	123						Total SWL	111					

Note:

[1] Percentage on time within 30 minutes.

[2] PME with code "EPD-XXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.

[3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWL_e.pdf

Project: Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension
Title: Plant Inventory TCE Station Station

TCE - Link Bridge Structure		Unmitigated						Mitigated					
Works Area/ Activity	PME	% Operating Time ^[1]	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	OPME Reference dB(A)	Single Unit OPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)	
TCE - Link Bridge Structure (Zone C)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane Bar Bender and Cutter Concrete Lorry Mixer/ Concrete Truck Concrete Pump/ Electric Bentonite Circulation Pump Saw, Circular, Wood Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane Lorry, with cranes/grabs Electric drill/ Rock drill Vibratory Pocker	50 100 80 80 50 70 50 60 60	-3 0 -1 -1 -3 -2 -3 -2	2 1 1 1 1 1 1 1 3	CNP048 CNP021 CNP044 CNP047 CNP201 CNP048 CPME# CNP064 CNP170	112 90 109 109 108 112 105 103 113	112 90 108 108 105 110 102 101 116	EPD-09130	101	Barrier Barrier Barrier Barrier Barrier Barrier Barrier Barrier Barrier	-5 -10 -5 -10 -5 -5 -5 -5 -10	96 80 103 98 95 94 97 92 95	
							Total SWL	119		Total SWL		107	

Note:

- [1] Percentage on time within 30 minutes.
- [2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's OPME inventory.
- [3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWL_e.pdf

Project: Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension
 Title: Plant Inventory TCE Station Station

TCE Station Removal of abandoned DT												
Works Areal Activity	PME	% Operating Time ⁽¹⁾	Time Correction dB(A)	Units	Unmitigated			Mitigated				
					PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference ^{(2),(3)}	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)
TCE Station Removal of abandoned DT (Zone A)	Grinder	50	-3	1	CNP065	98	95			Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102			Barrier	-5	97
						Total SWL	103				Total SWL	98
TCE Station Removal of abandoned DT (Zone B)	Grinder	50	-3	1	CNP065	98	95			Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102			Barrier	-5	97
						Total SWL	103				Total SWL	98
TCE Station Removal of abandoned DT (Zone C)	Grinder	50	-3	1	CNP065	98	95			Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102			Barrier	-5	97
						Total SWL	103				Total SWL	98

Project: Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension
Title: Plant Inventory TCE Station Station

TCE Station Removal of abandoned UT												
Unmitigated					Mitigated							
Works Area/ Activity	PME	% Operating Time ^[1]	Time Correction dB(A)	Units	PME Reference dB(A)	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference ^{[2],[3]}	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)
TCE Station Removal of abandoned UT (Zone A)	Grinder	50	-3	1	CNP065	98	95			Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102			Barrier	-5	97
						Total SWL	103				Total SWL	98
TCE Station Removal of abandoned UT (Zone B)	Grinder	50	-3	1	CNP065	98	95			Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102			Barrier	-5	97
						Total SWL	103				Total SWL	98
TCE Station Removal of abandoned UT (Zone C)	Grinder	50	-3	1	CNP065	98	95			Barrier	-5	90
	Lorry, with crane/grab	50	-3	1	CPME#	105	102			Barrier	-5	97
						Total SWL	103				Total SWL	98

Note:

[1] Percentage on time within 30 minutes.

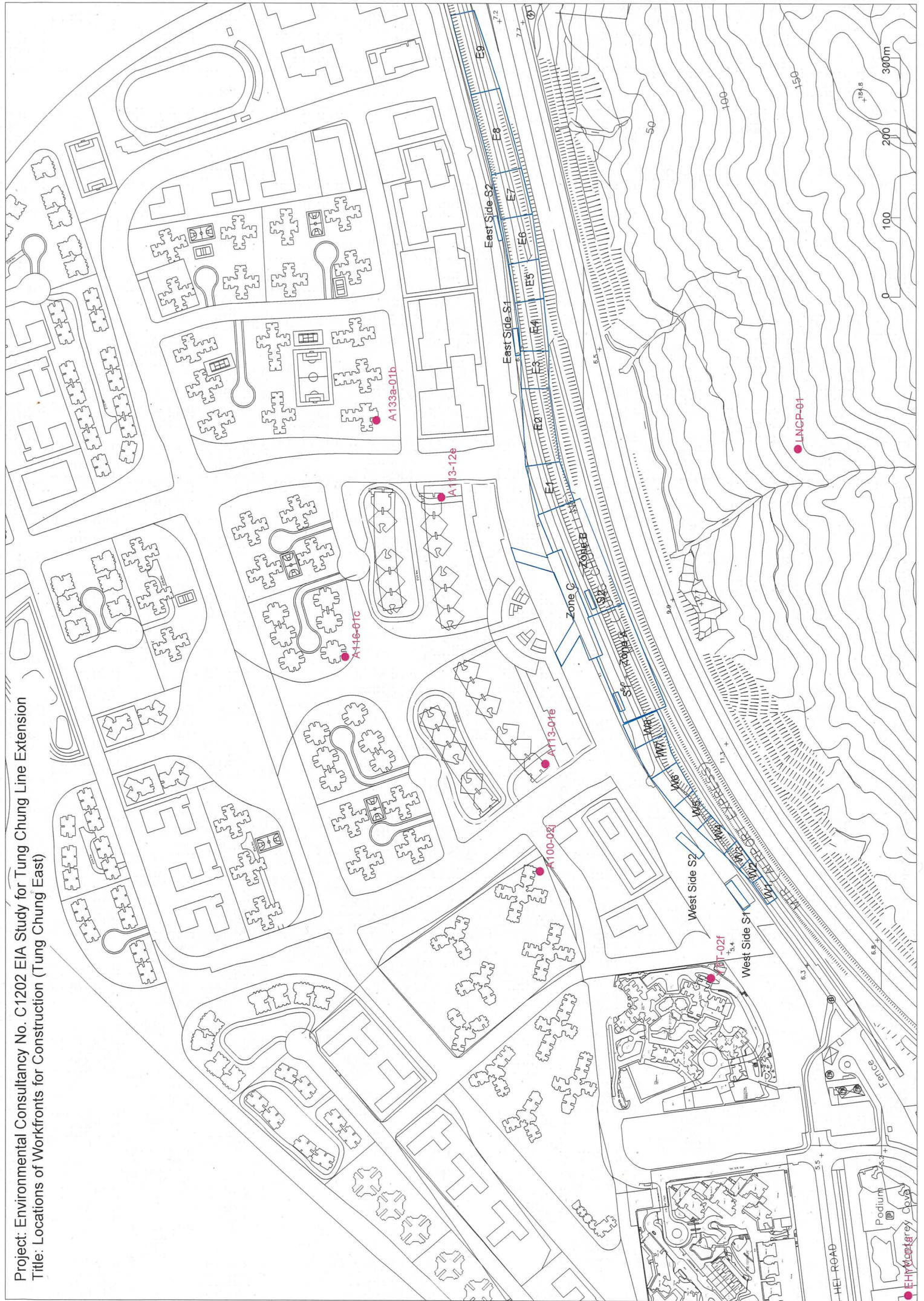
[2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.

[3] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWL.e.pdf

Appendix 3.4

Locations of Workfronts for Construction

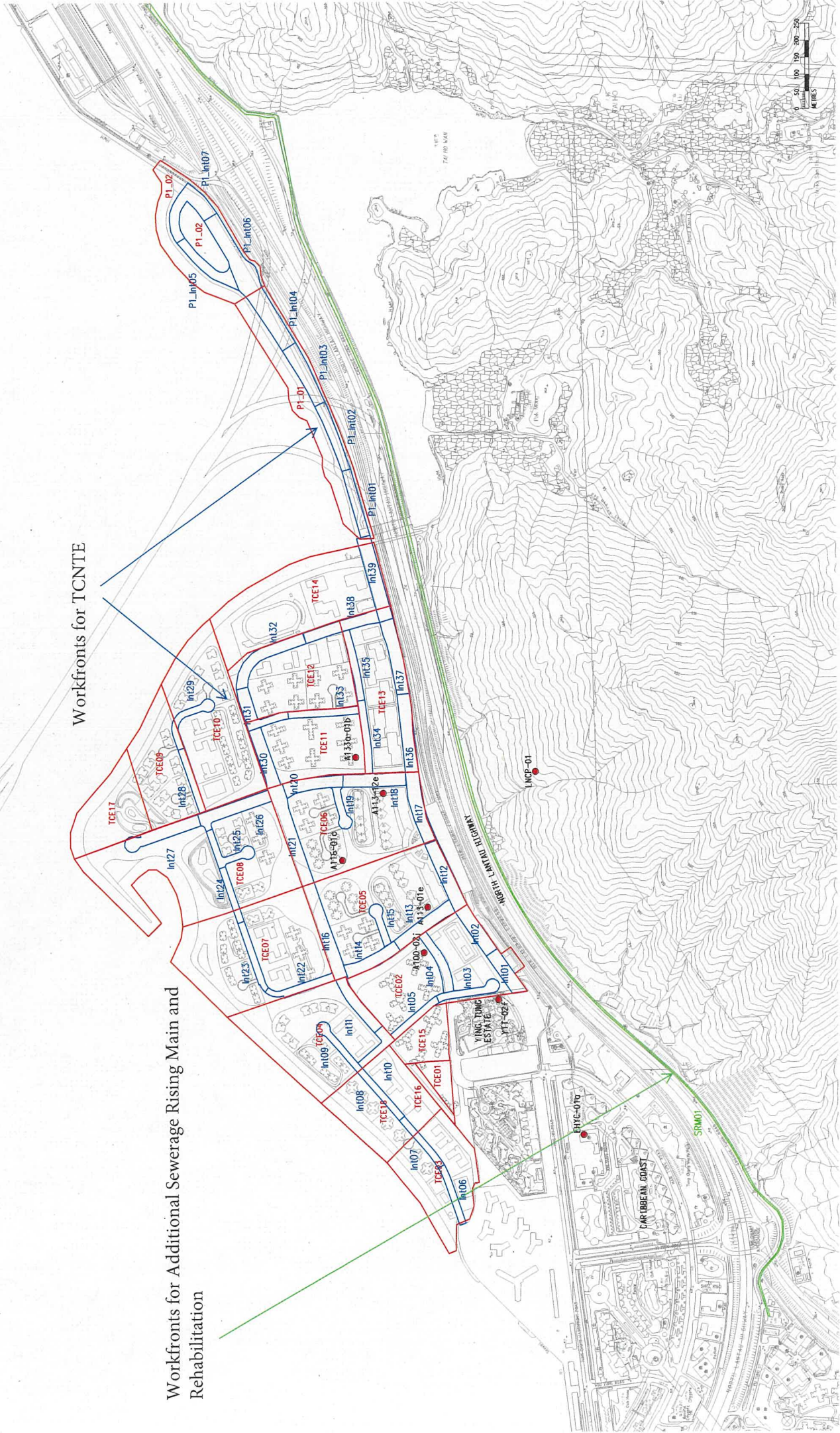
Project: Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension
Title: Locations of Workfronts for Construction (Tung Chung East)



PROJECT : ENVIRONMENTAL CONSULTANCY NO. C1202 EIA STUDY FOR TUNG CHUNG LINE EXTENSION
TITLE : LOCATION OF WORKFRONTS FOR CONCURRENT PROJECTS

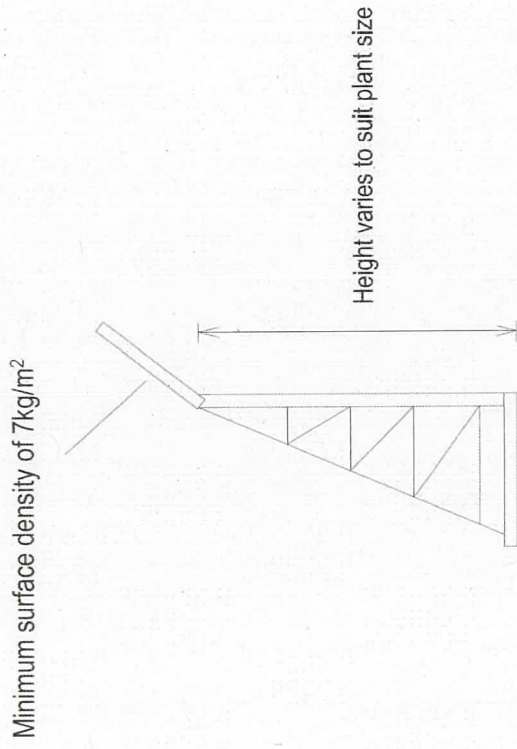
Workfronts for TCNTE

Workfronts for Additional Sewerage Rising Main and Rehabilitation



Appendix 3.5

Sketch of Typical Temporary Noise Barrier



Typical Section of Temporary Movable Noise Barrier
(2-4m tall)

Section of Typical Temporary Noise Barrier

Appendix 3.6

Predicted Construction Noise Impacts with Implementation of Noise Mitigated Measures

Mitigated Construction Noise for TCE

	2026												2027												2028												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
TCE Station East Side Retaining Wall Foundation Construction																																					
TCE Station East Side Retaining Wall Foundation Construction (Zone E1)																																					
TCE Station East Side Retaining Wall Foundation Construction (Zone E2)																																					
TCE Station East Side Retaining Wall Foundation Construction (Zone E3)																																					
TCE Station East Side Retaining Wall Foundation Construction (Zone E4)																																					
TCE Station East Side Retaining Wall Foundation Construction (Zone E5)																																					
TCE Station East Side Retaining Wall Foundation Construction (Zone E6)																																					
TCE Station East Side Retaining Wall Foundation Construction (Zone E7)																																					
TCE Station East Side Retaining Wall Foundation Construction (Zone E8)																																					
TCE Station East Side Retaining Wall Foundation Construction (Zone E9)																																					
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures																																					
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E1)																																					
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E2)																																					
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E3)																																					
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E4)																																					
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E5)																																					
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E6)																																					
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E7)																																					
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E8)																																					
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E9)																																					
TCE Station East Side Clearance / Site Formation																																					
TCE Station East Side Clearance / Site Formation (Zone E1)																																					
TCE Station East Side Clearance / Site Formation (Zone E2)																																					
TCE Station East Side Clearance / Site Formation (Zone E3)																																					
TCE Station East Side Clearance / Site Formation (Zone E4)																																					
TCE Station East Side Clearance / Site Formation (Zone E5)																																					
TCE Station East Side Clearance / Site Formation (Zone E6)																																					
TCE Station East Side Clearance / Site Formation (Zone E7)																																					
TCE Station East Side Clearance / Site Formation (Zone E8)																																					
TCE Station East Side Clearance / Site Formation (Zone E9)																																					
TCE Station East Side Site Formation for U/T Diversion																																					
TCE Station East Side Site Formation for U/T Diversion (Zone E2)																																					
TCE Station East Side Site Formation for U/T Diversion (Zone E3)																																					
TCE Station East Side Site Formation for U/T Diversion (Zone E4)																																					
TCE Station East Side Site Reinstatement																																					
TCE Station East Side Site Reinstatement (Zone E1)																																					
TCE Station East Side Site Reinstatement (Zone E2)																																					
TCE Station East Side Site Reinstatement (Zone E3)																																					
TCE Station East Side Site Reinstatement (Zone E4)																																					
TCE Station East Side Site Reinstatement (Zone E5)																																					
TCE Station East Side Utilities, Road and Drainage Reinstatement																																					
TCE Station East Side Utilities, Road and Drainage Reinstatement (Zone E6)																																					
TCE Station East Side Utilities, Road and Drainage Reinstatement (Zone E7)																																					
TCE Station East Side Utilities, Road and Drainage Reinstatement (Zone E8)																																					
TCE Station East Side Utilities, Road and Drainage Reinstatement (Zone E9)																																					
TCE Station East Side Removal of abandoned DT																																					
TCE Station East Side Removal of abandoned DT (Zone E1)																																					
TCE Station East Side Removal of abandoned DT (Zone E2)																																					
TCE Station East Side Removal of abandoned DT (Zone E3)																																					
TCE Station East Side Removal of abandoned DT (Zone E4)																																					
TCE Station East Side Removal of abandoned DT (Zone E5)																																					
TCE Station East Side Removal of abandoned UT																																					
TCE Station East Side Removal of abandoned UT (Zone E1)																																					
TCE Station East Side Removal of abandoned UT (Zone E2)																																					
TCE Station East Side Removal of abandoned UT (Zone E3)																																					
TCE Station East Side Removal of abandoned UT (Zone E4)																																					
TCE Station East Side Removal of abandoned UT (Zone E5)																																					

	2029												2030											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TCE Station East Side Retaining Wall Foundation Construction																								
TCE Station East Side Retaining Wall Foundation Construction (Zone E1)																								
TCE Station East Side Retaining Wall Foundation Construction (Zone E2)																								
TCE Station East Side Retaining Wall Foundation Construction (Zone E3)																								
TCE Station East Side Retaining Wall Foundation Construction (Zone E4)																								
TCE Station East Side Retaining Wall Foundation Construction (Zone E5)																								
TCE Station East Side Retaining Wall Foundation Construction (Zone E6)																								
TCE Station East Side Retaining Wall Foundation Construction (Zone E7)																								
TCE Station East Side Retaining Wall Foundation Construction (Zone E8)																								
TCE Station East Side Retaining Wall Foundation Construction (Zone E9)																								
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures																								
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E1)																								
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E2)																								
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E3)																								
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E4)																								
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E5)																								
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E6)																								
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E7)																								
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E8)																								
TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures (Zone E9)																								
TCE Station East Side Site Clearance / Site Formation																								
TCE Station East Side Site Clearance / Site Formation (Zone E1)																								
TCE Station East Side Site Clearance / Site Formation (Zone E2)																								
TCE Station East Side Site Clearance / Site Formation (Zone E3)																								
TCE Station East Side Site Clearance / Site Formation (Zone E4)																								
TCE Station East Side Site Clearance / Site Formation (Zone E5)																								
TCE Station East Side Site Clearance / Site Formation (Zone E6)																								
TCE Station East Side Site Clearance / Site Formation (Zone E7)																								
TCE Station East Side Site Clearance / Site Formation (Zone E8)																								
TCE Station East Side Site Clearance / Site Formation (Zone E9)																								
TCE Station East Side Site Formation for U/T Diversion																								
TCE Station East Side Site Formation for U/T Diversion (Zone E2)																								
TCE Station East Side Site Formation for U/T Diversion (Zone E3)																								
TCE Station East Side Site Formation for U/T Diversion (Zone E4)																								
TCE Station East Side Site Reinstatement																								
TCE Station East Side Site Reinstatement (Zone E1)																								
TCE Station East Side Site Reinstatement (Zone E2)																								
TCE Station East Side Site Reinstatement (Zone E3)																								
TCE Station East Side Site Reinstatement (Zone E4)																								
TCE Station East Side Site Reinstatement (Zone E5)																								
TCE Station East Side Utilities, Road and Drainage Reinstatement																								
TCE Station East Side Utilities, Road and Drainage Reinstatement (Zone E6)																								
TCE Station East Side Utilities, Road and Drainage Reinstatement (Zone E7)																								
TCE Station East Side Utilities, Road and Drainage Reinstatement (Zone E8)																								
TCE Station East Side Utilities, Road and Drainage Reinstatement (Zone E9)																								
TCE Station East Side Removal of abandoned D/T																								
TCE Station East Side Removal of abandoned D/T (Zone E1)																								
TCE Station East Side Removal of abandoned D/T (Zone E2)																								
TCE Station East Side Removal of abandoned D/T (Zone E3)																								
TCE Station East Side Removal of abandoned D/T (Zone E4)																								
TCE Station East Side Removal of abandoned D/T (Zone E5)																								
TCE Station East Side Removal of abandoned U/T																								
TCE Station East Side Removal of abandoned U/T (Zone E1)																								
TCE Station East Side Removal of abandoned U/T (Zone E2)																								
TCE Station East Side Removal of abandoned U/T (Zone E3)																								
TCE Station East Side Removal of abandoned U/T (Zone E4)																								
TCE Station East Side Removal of abandoned U/T (Zone E5)																								

	2023			2024												2025		
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TCE Station East Side Stationary Plants																		
TCE Station East Side Stationary Plants (S1)	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101
TCE Station East Side Stationary Plants (S2)	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99
TCE Station West Side Stationary Plants																		
TCE Station West Side Stationary Plants (S1)	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97
TCE Station West Side Stationary Plants (S2)	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99
Construction of Retaining Wall 240m Section and noise mitigation measures																		
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W1)	102																	
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W2)	102																	
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W3)	102																	
Retaining Wall Mini piles 80m opposite Ying Tung Estate																		
Retaining Wall Mini piles 80m opposite Ying Tung Estate (Zone W1)	100																	
Retaining Wall Mini piles 80m opposite Ying Tung Estate (Zone W2)	100																	
Retaining Wall Mini piles 80m opposite Ying Tung Estate (Zone W3)	103																	
Retaining Wall 240m Section and noise mitigation measures																		
Retaining Wall 240m Section and noise mitigation measures (Zone W4)	103																	
Retaining Wall 240m Section and noise mitigation measures (Zone W5)	103																	
Retaining Wall 240m Section and noise mitigation measures (Zone W6)	103																	
Retaining Wall 240m Section and noise mitigation measures (Zone W7)	103																	
Retaining Wall 240m Section and noise mitigation measures (Zone W8)	103																	
Retaining Wall Foundation 240m Section																		
Retaining Wall Foundation 240m Section (Zone W4)	103																	
Retaining Wall Foundation 240m Section (Zone W5)	100																	
Retaining Wall Foundation 240m Section (Zone W6)	100																	
Retaining Wall Foundation 240m Section (Zone W7)	100																	
Retaining Wall Foundation 240m Section (Zone W8)	100																	
TCE Station West Side Site Clearance / Site Formation																		
TCE Station West Side Site Clearance / Site Formation (Zone W1)	107																	
TCE Station West Side Site Clearance / Site Formation (Zone W2)	107																	
TCE Station West Side Site Clearance / Site Formation (Zone W3)	118																	
TCE Station West Side Site Clearance / Site Formation (Zone W4)	118																	
TCE Station West Side Site Clearance / Site Formation (Zone W5)	113																	
TCE Station West Side Site Clearance / Site Formation (Zone W6)	113																	
TCE Station West Side Site Clearance / Site Formation (Zone W7)	113																	
TCE Station West Side Site Clearance / Site Formation (Zone W8)	113																	
TCE Station West Side Site Clearance / Site Formation (Zone W1)																		
TCE Station West Side Site Clearance / Site Formation (Zone W1)	106																	
TCE Station West Side Site Clearance / Site Formation (Zone W2)	106																	
TCE Station West Side Site Clearance / Site Formation (Zone W3)	106																	
TCE Station West Side Removal and Reprovision of Existing Noise Barrier																		
TCE Station West Side Removal and Reprovision of Existing Noise Barrier (Zone W1)	99																	
TCE Station West Side Removal and Reprovision of Existing Noise Barrier (Zone W2)	99																	
TCE Station West Side Removal and Reprovision of Existing Noise Barrier (Zone W3)	99																	
TCE Station West Side Site reinstatement																		
TCE Station West Side Site reinstatement (Zone W1)	106																	
TCE Station West Side Site reinstatement (Zone W2)	106																	
TCE Station West Side Site reinstatement (Zone W3)	106																	
TCE Station West Side Site reinstatement (Zone W4)	104																	
TCE Station West Side Site reinstatement (Zone W5)	104																	
TCE Station West Side Site reinstatement (Zone W6)	104																	
TCE Station West Side Site reinstatement (Zone W7)	104																	
TCE Station West Side Site reinstatement (Zone W8)	104																	
TCE Station West Side Removal of abandoned DTI																		
TCE Station West Side Removal of abandoned DTI (Zone W1)	98																	
TCE Station West Side Removal of abandoned DTI (Zone W2)	98																	
TCE Station West Side Removal of abandoned DTI (Zone W3)	98																	
TCE Station West Side Removal of abandoned DTI (Zone W4)	98																	
TCE Station West Side Removal of abandoned DTI (Zone W5)	98																	
TCE Station West Side Removal of abandoned DTI (Zone W6)	98																	
TCE Station West Side Removal of abandoned DTI (Zone W7)	98																	
TCE Station West Side Removal of abandoned DTI (Zone W8)	98																	

	2026												2027												2028											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TCE Station East Side Stationary Plants																																				
TCE Station East Side Stationary Plants (S1)																																				
TCE Station East Side Stationary Plants (S2)																																				
TCE Station West Side Stationary Plants																																				
TCE Station West Side Stationary Plants (S1)																																				
TCE Station West Side Stationary Plants (S2)																																				
Construction of Retaining Wall 240m Section and noise mitigation measures																																				
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W1)																																				
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W2)																																				
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W3)																																				
Retaining Wall Mini piles 80m opposite Ying Tung Estate																																				
Retaining Wall Mini piles 80m opposite Ying Tung Estate (Zone W1)																																				
Retaining Wall Mini piles 80m opposite Ying Tung Estate (Zone W2)																																				
Retaining Wall Mini piles 80m opposite Ying Tung Estate (Zone W3)																																				
Retaining Wall 240m Section and noise mitigation measures																																				
Retaining Wall 240m Section and noise mitigation measures (Zone W4)																																				
Retaining Wall 240m Section and noise mitigation measures (Zone W5)																																				
Retaining Wall 240m Section and noise mitigation measures (Zone W6)																																				
Retaining Wall 240m Section and noise mitigation measures (Zone W7)																																				
Retaining Wall 240m Section and noise mitigation measures (Zone W8)																																				
Retaining Wall Foundation 240m Section																																				
Retaining Wall Foundation 240m Section (Zone W4)																																				
Retaining Wall Foundation 240m Section (Zone W5)																																				
Retaining Wall Foundation 240m Section (Zone W6)																																				
Retaining Wall Foundation 240m Section (Zone W7)																																				
Retaining Wall Foundation 240m Section (Zone W8)																																				
TCE Station West Side Site Clearance / Site Formation																																				
TCE Station West Side Site Clearance / Site Formation (Zone W1)																																				
TCE Station West Side Site Clearance / Site Formation (Zone W2)																																				
TCE Station West Side Site Clearance / Site Formation (Zone W3)																																				
TCE Station West Side Site Clearance / Site Formation (Zone W4)																																				
TCE Station West Side Site Clearance / Site Formation (Zone W5)																																				
TCE Station West Side Site Clearance / Site Formation (Zone W6)																																				
TCE Station West Side Site Clearance / Site Formation (Zone W7)																																				
TCE Station West Side Site Clearance / Site Formation (Zone W8)																																				
TCE Station West Side Utilities, Road and Drainage Reinstatement																																				
TCE Station West Side Utilities, Road and Drainage Reinstatement (Zone W1)																																				
TCE Station West Side Utilities, Road and Drainage Reinstatement (Zone W2)																																				
TCE Station West Side Utilities, Road and Drainage Reinstatement (Zone W3)																																				
TCE Station West Side Removal and Reprovision of Existing Noise Barrier																																				
TCE Station West Side Removal and Reprovision of Existing Noise Barrier (Zone W1)																																				
TCE Station West Side Removal and Reprovision of Existing Noise Barrier (Zone W2)																																				
TCE Station West Side Removal and Reprovision of Existing Noise Barrier (Zone W3)																																				
TCE Station West Side Site reinstatement																																				
TCE Station West Side Site reinstatement (Zone W1)																																				
TCE Station West Side Site reinstatement (Zone W2)																																				
TCE Station West Side Site reinstatement (Zone W3)																																				
TCE Station West Side Site reinstatement (Zone W4)																																				
TCE Station West Side Site reinstatement (Zone W5)																																				
TCE Station West Side Site reinstatement (Zone W6)																																				
TCE Station West Side Site reinstatement (Zone W7)																																				
TCE Station West Side Site reinstatement (Zone W8)																																				
TCE Station West Side Removal of abandoned DTI																																				
TCE Station West Side Removal of abandoned DTI (Zone W1)																																				
TCE Station West Side Removal of abandoned DTI (Zone W2)																																				
TCE Station West Side Removal of abandoned DTI (Zone W3)																																				
TCE Station West Side Removal of abandoned DTI (Zone W4)																																				
TCE Station West Side Removal of abandoned DTI (Zone W5)																																				
TCE Station West Side Removal of abandoned DTI (Zone W6)																																				
TCE Station West Side Removal of abandoned DTI (Zone W7)																																				
TCE Station West Side Removal of abandoned DTI (Zone W8)																																				

	2029												2030											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TCE Station East Side Stationary Plants																								
TCE Station East Side Stationary Plants (S1)																								
TCE Station East Side Stationary Plants (S2)																								
TCE Station West Side Stationary Plants																								
TCE Station West Side Stationary Plants (S1)																								
TCE Station West Side Stationary Plants (S2)																								
Construction of Retaining Wall 240m Section and noise mitigation measures																								
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W1)																								
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W2)																								
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W3)																								
Retaining Wall Mini piles 60m opposite Ying Tung Estate																								
Retaining Wall Mini piles 60m opposite Ying Tung Estate (Zone W1)																								
Retaining Wall Mini piles 60m opposite Ying Tung Estate (Zone W2)																								
Retaining Wall Mini piles 60m opposite Ying Tung Estate (Zone W3)																								
Retaining Wall 240m Section and noise mitigation measures																								
Retaining Wall 240m Section and noise mitigation measures (Zone W4)																								
Retaining Wall 240m Section and noise mitigation measures (Zone W5)																								
Retaining Wall 240m Section and noise mitigation measures (Zone W6)																								
Retaining Wall 240m Section and noise mitigation measures (Zone W7)																								
Retaining Wall 240m Section and noise mitigation measures (Zone W8)																								
Retaining Wall Foundation 240m Section																								
Retaining Wall Foundation 240m Section (Zone W4)																								
Retaining Wall Foundation 240m Section (Zone W5)																								
Retaining Wall Foundation 240m Section (Zone W6)																								
Retaining Wall Foundation 240m Section (Zone W7)																								
Retaining Wall Foundation 240m Section (Zone W8)																								
TCE Station West Side Site Clearance / Site Formation																								
TCE Station West Side Site Clearance / Site Formation (Zone W1)																								
TCE Station West Side Site Clearance / Site Formation (Zone W2)																								
TCE Station West Side Site Clearance / Site Formation (Zone W3)																								
TCE Station West Side Site Clearance / Site Formation (Zone W4)																								
TCE Station West Side Site Clearance / Site Formation (Zone W5)																								
TCE Station West Side Site Clearance / Site Formation (Zone W6)																								
TCE Station West Side Site Clearance / Site Formation (Zone W7)																								
TCE Station West Side Site Clearance / Site Formation (Zone W8)																								
TCE Station West Side Utilities, Road and Drainage Reinstatement																								
TCE Station West Side Utilities, Road and Drainage Reinstatement (Zone W1)																								
TCE Station West Side Utilities, Road and Drainage Reinstatement (Zone W2)																								
TCE Station West Side Utilities, Road and Drainage Reinstatement (Zone W3)																								
TCE Station West Side Removal and Repron of Existing Noise Barrier																								
TCE Station West Side Removal and Repron of Existing Noise Barrier (Zone W1)																								
TCE Station West Side Removal and Repron of Existing Noise Barrier (Zone W2)																								
TCE Station West Side Removal and Repron of Existing Noise Barrier (Zone W3)																								
TCE Station West Side Site reinstatement																								
TCE Station West Side Site reinstatement (Zone W1)																								
TCE Station West Side Site reinstatement (Zone W2)																								
TCE Station West Side Site reinstatement (Zone W3)																								
TCE Station West Side Site reinstatement (Zone W4)																								
TCE Station West Side Site reinstatement (Zone W5)																								
TCE Station West Side Site reinstatement (Zone W6)																								
TCE Station West Side Site reinstatement (Zone W7)																								
TCE Station West Side Site reinstatement (Zone W8)																								
TCE Station West Side Removal of abandoned DTI																								
TCE Station West Side Removal of abandoned DTI (Zone W1)																								
TCE Station West Side Removal of abandoned DTI (Zone W2)																								
TCE Station West Side Removal of abandoned DTI (Zone W3)																								
TCE Station West Side Removal of abandoned DTI (Zone W4)																								
TCE Station West Side Removal of abandoned DTI (Zone W5)																								
TCE Station West Side Removal of abandoned DTI (Zone W6)																								
TCE Station West Side Removal of abandoned DTI (Zone W7)																								
TCE Station West Side Removal of abandoned DTI (Zone W8)																								

	2023												2024												2025											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec						
TCE Station West Side Removal of abandoned U/I																																				
TCE Station West Side Removal of abandoned U/I (Zone W1)	98																																			
TCE Station West Side Removal of abandoned U/I (Zone W2)	98																																			
TCE Station West Side Removal of abandoned U/I (Zone W3)	98																																			
TCE Station West Side Removal of abandoned U/I (Zone W4)	98																																			
TCE Station West Side Removal of abandoned U/I (Zone W5)	98																																			
TCE Station West Side Removal of abandoned U/I (Zone W6)	98																																			
TCE Station West Side Removal of abandoned U/I (Zone W7)	98																																			
TCE Station West Side Removal of abandoned U/I (Zone W8)	98																																			
TCE Station Area Stationary Plants																																				
TCE Station Area Stationary Plants (S1)	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90							
TCE Station Area Stationary Plants (S2)	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88							
TCE Station Structure - Foundation																																				
TCE Station Structure - Foundation (Zone A)	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111							
TCE Station Structure - Foundation (Zone B)	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111							
TCE Station Structure - Foundation (Zone C)	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111							
TCE Station Site Clearance/Site Formation																																				
TCE Station Site Clearance/Site Formation (Zone A)	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113							
TCE Station Site Clearance/Site Formation (Zone B)	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113							
TCE Station Site Clearance/Site Formation (Zone C)	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110							
TCE Station Link Bridge Foundation																																				
TCE Station Link Bridge Foundation (Zone C)	111																																			
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances																																				
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone A)	106																																			
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone B)	106																																			
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone C)	106																																			
TCE Station Site Reinstatement																																				
TCE Station Site Reinstatement (Zone A)	111																																			
TCE Station Site Reinstatement (Zone B)	111																																			
TCE Station Site Reinstatement (Zone C)	111																																			
TCE - Link Bridge Structure																																				
TCE - Link Bridge Structure (Zone C)	107																																			
TCE Station Removal of abandoned D/I																																				
TCE Station Removal of abandoned D/I (Zone A)	98																																			
TCE Station Removal of abandoned D/I (Zone B)	98																																			
TCE Station Removal of abandoned D/I (Zone C)	98																																			
TCE Station Removal of abandoned U/I																																				
TCE Station Removal of abandoned U/I (Zone A)	98																																			
TCE Station Removal of abandoned U/I (Zone B)	98																																			
TCE Station Removal of abandoned U/I (Zone C)	98																																			

	2026												2027												2028												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
TCE Station West Side Removal of abandoned U/I																																					
TCE Station West Side Removal of abandoned U/I (Zone W1)	98																																				
TCE Station West Side Removal of abandoned U/I (Zone W2)	98																																				
TCE Station West Side Removal of abandoned U/I (Zone W3)	98																																				
TCE Station West Side Removal of abandoned U/I (Zone W4)	98																																				
TCE Station West Side Removal of abandoned U/I (Zone W5)	98																																				
TCE Station West Side Removal of abandoned U/I (Zone W6)	98																																				
TCE Station West Side Removal of abandoned U/I (Zone W7)	98																																				
TCE Station West Side Removal of abandoned U/I (Zone W8)	98																																				
TCE Station Area Stationary Plants																																					
TCE Station Area Stationary Plants (S1)	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
TCE Station Area Stationary Plants (S2)	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88
TCE Station Structure - Foundation																																					
TCE Station Structure - Foundation (Zone A)	111																																				
TCE Station Structure - Foundation (Zone B)	111																																				
TCE Station Structure - Foundation (Zone C)	111																																				
TCE Station Site Clearance/Site Formation																																					
TCE Station Site Clearance/Site Formation (Zone A)	113																																				
TCE Station Site Clearance/Site Formation (Zone B)	113																																				
TCE Station Site Clearance/Site Formation (Zone C)	110																																				
TCE Station Link Bridge Foundation																																					
TCE Station Link Bridge Foundation (Zone C)	111																																				
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances																																					
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone A)	106																																				
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone B)	106	106	106																																		
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone C)	106	106	106																																		
TCE Station Site Reinstatement																																					
TCE Station Site Reinstatement (Zone A)	111																																				
TCE Station Site Reinstatement (Zone B)	111																																				
TCE Station Site Reinstatement (Zone C)	111																																				
TCE - Link Bridge Structure																																					
TCE - Link Bridge Structure (Zone C)	107																																				
TCE Station Removal of abandoned D/I																																					
TCE Station Removal of abandoned D/I (Zone A)	98																																				
TCE Station Removal of abandoned D/I (Zone B)	98																																				
TCE Station Removal of abandoned D/I (Zone C)	98																																				
TCE Station Removal of abandoned U/I																																					
TCE Station Removal of abandoned U/I (Zone A)	98																																				
TCE Station Removal of abandoned U/I (Zone B)	98																																				
TCE Station Removal of abandoned U/I (Zone C)	98																																				

	2029												2030											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TCE Station West Side Removal of abandoned U/I																								
TCE Station West Side Removal of abandoned U/I (Zone W1)	98																							
TCE Station West Side Removal of abandoned U/I (Zone W2)	98																							
TCE Station West Side Removal of abandoned U/I (Zone W3)	98																							
TCE Station West Side Removal of abandoned U/I (Zone W4)	98																							
TCE Station West Side Removal of abandoned U/I (Zone W5)	98																							
TCE Station West Side Removal of abandoned U/I (Zone W6)	98																							
TCE Station West Side Removal of abandoned U/I (Zone W7)	98																							
TCE Station West Side Removal of abandoned U/I (Zone W8)	98																							
TCE Station Area Stationary Plants																								
TCE Station Area Stationary Plants (S1)	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
TCE Station Area Stationary Plants (S2)	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88
TCE Station Structure - Foundation																								
TCE Station Structure - Foundation (Zone A)	111																							
TCE Station Structure - Foundation (Zone B)	111																							
TCE Station Structure - Foundation (Zone C)	111																							
TCE Station Site Clearance/Site Formation																								
TCE Station Site Clearance/Site Formation (Zone A)	113																							
TCE Station Site Clearance/Site Formation (Zone B)	113																							
TCE Station Site Clearance/Site Formation (Zone C)	110																							
TCE Station Link Bridge Foundation																								
TCE Station Link Bridge Foundation (Zone C)	111																							
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances																								
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone A)	106																							
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone B)	106																							
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone C)	106																							
TCE Station Site Reinstatement																								
TCE Station Site Reinstatement (Zone A)	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
TCE Station Site Reinstatement (Zone B)	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
TCE Station Site Reinstatement (Zone C)	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
TCE - Link Bridge Structure																								
TCE - Link Bridge Structure (Zone C)	107																							
TCE Station Removal of abandoned D/I																								
TCE Station Removal of abandoned D/I (Zone A)	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
TCE Station Removal of abandoned D/I (Zone B)	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
TCE Station Removal of abandoned D/I (Zone C)	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
TCE Station Removal of abandoned U/I																								
TCE Station Removal of abandoned U/I (Zone A)	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
TCE Station Removal of abandoned U/I (Zone B)	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
TCE Station Removal of abandoned U/I (Zone C)	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98

Title : Construction Noise Calculation for TNCIE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2023			2024			2025												
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
TCE01																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
B1 - High PR Residential Foundations																			
B2 - High PR Residential Foundations and High PR Residential Superstructure																			
B3 - High PR Residential Superstructure	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
TCE02																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
B1 - High PR Residential Foundations																			
B2 - High PR Residential Foundations and High PR Residential Superstructure																			
B3 - High PR Residential Superstructure	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
TCE03																			
A1 - Silt Curtain																			
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
B1 - High PR Residential Foundations	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106
B2 - High PR Residential Foundations and High PR Residential Superstructure																			
B3 - High PR Residential Superstructure	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106
TCE04																			
A1 - Silt Curtain																			
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
B1 - High PR Residential Foundations																			
B2 - High PR Residential Foundations and High PR Residential Superstructure																			
B3 - High PR Residential Superstructure	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2026												2027												2028											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
TCE01																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
B1 - High PR Residential Foundations																																				
B2 - High PR Residential Foundations and High PR Residential Superstructure																																				
B3 - High PR Residential Superstructure																																				
TCE02																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
B1 - High PR Residential Foundations																																				
B2 - High PR Residential Foundations and High PR Residential Superstructure																																				
B3 - High PR Residential Superstructure																																				
TCE03																																				
A1 - Silt Curtain																																				
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
B1 - High PR Residential Foundations	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	
B2 - High PR Residential Foundations and High PR Residential Superstructure																																				
B3 - High PR Residential Superstructure	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	
TCE04																																				
A1 - Silt Curtain																																				
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
B1 - High PR Residential Foundations	112	112.3	112.3	112.3	112	112	112	112	112	112	112	112	112.3	112.3	112.3	112	112	112	112	112	112	112	112	112	112.3	112.3	112.3	112	112	112	112	112	112	112	112	
B2 - High PR Residential Foundations and High PR Residential Superstructure																																				

Title : Construction Noise Calculation for TNCIE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2023												2030											
	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
TCE01																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure																								
TCE02																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure																								
TCE03																								
A1 - Silt Curtain																								
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure																								
TCE04																								
A1 - Silt Curtain																								
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure																								

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2023												2024												2025											
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec						
B3 - High PR Residential Superstructure						112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112						
TCE06																																				
A4 - Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
B1 - High PR Residential Foundations																																				
B2 - High PR Residential Foundations and High PR Residential Superstructure												112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112							
B3 - High PR Residential Superstructure																																				
TCE06																																				
A4 - Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
B1 - High PR Residential Foundations																																				
B2 - High PR Residential Foundations and High PR Residential Superstructure																																				
B3 - High PR Residential Superstructure																																				
TCE07																																				
A1 - Silt Curtain																																				
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
B1 - High PR Residential Foundations																																				
B2 - High PR Residential Foundations and High PR Residential Superstructure																																				
B3 - High PR Residential Superstructure																																				
TCE06																																				
A1 - Silt Curtain																																				
A4 - Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				

Title : Construction Noise Calculation for TNCITE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2026			2027			2028					
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
B3 - High PR Residential Superstructure												
TCE05												
A4 - Geotextile / Sand Blanket, Marine Band Drains												
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling												
A6 - Reclamation Filling (Underwater)												
A7 - Reclamation Filling and Surcharging (Above water)												
A8 - Surcharge												
B1 - High PR Residential Foundations												
B2 - High PR Residential Foundations and High PR Residential Superstructure												
B3 - High PR Residential Superstructure												
TCE06												
A4 - Geotextile / Sand Blanket, Marine Band Drains												
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling												
A6 - Reclamation Filling (Underwater)												
A7 - Reclamation Filling and Surcharging (Above water)												
A8 - Surcharge												
B1 - High PR Residential Foundations												
B2 - High PR Residential Foundations and High PR Residential Superstructure												
B3 - High PR Residential Superstructure												
TCE07												
A1 - Silt Curtain												
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains												
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling												
A6 - Reclamation Filling (Underwater)												
A7 - Reclamation Filling and Surcharging (Above water)												
A8 - Surcharge												
B1 - High PR Residential Foundations												
B2 - High PR Residential Foundations and High PR Residential Superstructure												
B3 - High PR Residential Superstructure												
TCE08												
A1 - Silt Curtain												
A4 - Geotextile / Sand Blanket, Marine Band Drains												
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling												

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2029												2030											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
B3 - High PR Residential Superstructure																								
TCE05																								
A4 - Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
TCE06																								
A4 - Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
TCE07																								
A1 - Silt Curtain																								
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
TCE08																								
A1 - Silt Curtain																								
A4 - Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2023			2024			2025												
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
A6 - Reclamation Filling (Underwater)																			
A2 - Stone Column and Seawall Construction																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
B1 - High PR Residential Foundations																			
B2 - High PR Residential Foundations and High PR Residential Superstructure																			
B3 - High PR Residential Superstructure																			
TCE09																			
A1 - Silt Curtain																			
A2 - Stone Column and Seawall Construction																			
A4 - Geotextile / Sand Blanket, Marine Band Drains																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
C1 - Medium PR Residential / GIC Foundations																			
C2 - Medium PR Residential / GIC Foundations and Medium PR Residential / GIC Superstructure																			
C3 - Medium PR Residential/ GIC Superstructure																			
TCE10																			
A1 - Silt Curtain																			
A2 - Stone Column and Seawall Construction																			
A4 - Geotextile / Sand Blanket, Marine Band Drains																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
C1 - Medium PR Residential / GIC Foundations																			
C2 - Medium PR Residential / GIC Foundations and Medium PR Residential / GIC Superstructure																			
C3 - Medium PR Residential/ GIC Superstructure																			
TCE11																			
A1 - Geotextile / Sand Blanket, Marine Band Drains																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2026												2027												2028											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
A6 - Reclamation Filling (Underwater)																																				
A2 - Stone Column and Seawall Construction																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
B1 - High PR Residential Foundations																																				
B2 - High PR Residential Foundations and High PR Residential Superstructure																																				
B3 - High PR Residential Superstructure																																				
TCE09																																				
A1 - Silt Curtain																																				
A2 - Stone Column and Seawall Construction																																				
A4 - Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
C1 - Medium PR Residential / GIC Foundations																																				
C2 - Medium PR Residential / GIC Foundations and Medium PR Residential / GIC Superstructure																																				
C3 - Medium PR Residential/ GIC Superstructure																																				
TCE10																																				
A1 - Silt Curtain																																				
A2 - Stone Column and Seawall Construction																																				
A4 - Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
C1 - Medium PR Residential / GIC Foundations																																				
C2 - Medium PR Residential / GIC Foundations and Medium PR Residential / GIC Superstructure																																				
C3 - Medium PR Residential/ GIC Superstructure																																				
TCE11																																				
A4 - Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				

Title : Construction Noise Calculation for TNC/TE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2028												2030											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
A6 - Reclamation Filling (Underwater)																								
A2 - Stone Column and Seawall Construction																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
TCE09																								
A1 - Silt Curtain																								
A2 - Stone Column and Seawall Construction																								
A4 - Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
C1 - Medium PR Residential / GIC Foundations																								
C2 - Medium PR Residential / GIC Foundations and Medium PR Residential / GIC Superstructure																								
C3 - Medium PR Residential/ GIC Superstructure	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103
TCE10																								
A1 - Silt Curtain																								
A2 - Stone Column and Seawall Construction																								
A4 - Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
C1 - Medium PR Residential / GIC Foundations																								
C2 - Medium PR Residential / GIC Foundations and Medium PR Residential / GIC Superstructure																								
C3 - Medium PR Residential/ GIC Superstructure	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106
TCE11																								
A1 - Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Raising Main
 Scenario : Mitigated Scenario

Activities	2023			2024			2025			Nov	Dec								
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March			Apr	May	June	July	Aug	Sept	Oct	Nov
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
B1 - High PR Residential Foundations																			
B2 - High PR Residential Foundations and High PR Residential Superstructure																			
B3 - High PR Residential Superstructure																			
TCE12																			
A4 - Geotextile / Sand Blanket, Marine Band Drains																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
B1 - High PR Residential Foundations																			
B2 - High PR Residential Foundations and High PR Residential Superstructure																			
B3 - High PR Residential Superstructure																			
TCE13																			
A4 - Geotextile / Sand Blanket, Marine Band Drains																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
B1 - High PR Residential Foundations																			
B2 - High PR Residential Foundations and High PR Residential Superstructure																			
B3 - High PR Residential Superstructure																			
TCE14																			
A1 - Silt Curtain																			
A2 - Stone Column and Seawall Construction																			
A4 - Geotextile / Sand Blanket, Marine Band Drains																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			

Title - Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2026												2027												2028											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
B1 - High PR Residential Foundations																																				
B2 - High PR Residential Foundations and High PR Residential Superstructure																																				
B3 - High PR Residential Superstructure																																				
TCE12																																				
A4 - Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
B1 - High PR Residential Foundations																																				
B2 - High PR Residential Foundations and High PR Residential Superstructure																																				
B3 - High PR Residential Superstructure																																				
TCE13																																				
A4 - Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
B1 - High PR Residential Foundations																																				
B2 - High PR Residential Foundations and High PR Residential Superstructure																																				
B3 - High PR Residential Superstructure																																				
TCE14																																				
A1 - Silt Curtain																																				
A2 - Stone Column and Seawall Construction																																				
A4 - Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2029												2030											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure																								
TCE12	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
A4 - Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure																								
TCE13	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
A4 - Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure																								
TCE14	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
A1 - Sill Curtain																								
A2 - Stone Column and Seawall Construction																								
A4 - Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2023			2024			2025												
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
C1 - Medium PR Residential / GIC Foundations																			
C2 - Medium PR Residential / GIC Foundations and Medium PR Residential / GIC Superstructure																			
C3 - Medium PR Residential/ GIC Superstructure																			
TCE15																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
B1 - High PR Residential Foundations																			
B2 - High PR Residential Foundations and High PR Residential Superstructure																			
B3 - High PR Residential Superstructure																			
TCE16																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			
TCE17																			
A1 - Silt Curtain																			
A2 - Stone Column and Seawall Construction																			
A4 - Geotextile / Sand Blanket, Marine Band Drains																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
C1 - Medium PR Residential / GIC Foundations																			
C2 - Medium PR Residential / GIC Foundations and Medium PR Residential / GIC Superstructure																			
C3 - Medium PR Residential/ GIC Superstructure																			
TCE18																			
A1 - Silt Curtain																			
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2026												2027												2028											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
C1 - Medium PR Residential / GIC Foundations																																				
C2 - Medium PR Residential / GIC Foundations and Medium PR Residential / GIC Superstructure																																				
C3 - Medium PR Residential/ GIC Superstructure																																				
TCE15																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
B1 - High PR Residential Foundations																																				
B2 - High PR Residential Foundations and High PR Residential Superstructure																																				
B3 - High PR Residential Superstructure																																				
TCE16																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
TCE17																																				
A1 - Silt Curtain																																				
A2 - Stone Column and Seawall Construction																																				
A4 - Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
C1 - Medium PR Residential / GIC Foundations																																				
C2 - Medium PR Residential / GIC Foundations and Medium PR Residential / GIC Superstructure																																				
C3 - Medium PR Residential/ GIC Superstructure																																				
TCE18																																				
A1 - Silt Curtain																																				
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																																				
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2029												2030											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
C1 - Medium PR Residential / GIC Foundations																								
C2 - Medium PR Residential / GIC Foundations and Medium PR Residential / GIC Superstructure																								
C3 - Medium PR Residential/ GIC Superstructure	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106
TCE15																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure																								
TCE16																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
TCE17																								
A1 - Silt Curtain																								
A2 - Stone Column and Seawall Construction																								
A4 - Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
C1 - Medium PR Residential / GIC Foundations																								
C2 - Medium PR Residential / GIC Foundations and Medium PR Residential / GIC Superstructure																								
C3 - Medium PR Residential/ GIC Superstructure	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103
TCE18																								
A1 - Silt Curtain																								
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Raising Main
 Scenario : Mitigated Scenario

Activities	2023			2024			2025												
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
B1 - High PR Residential Foundations	106	106	106	106	106	106													
B2 - High PR Residential Foundations and High PR Residential Superstructure							106	106	106	106	106	106	106	106	106	106	106	106	106
B3 - High PR Residential Superstructure																			
P1_01																			
A1 - Silt Curtain																			
A2 - Stone Column and Seawall Construction																			
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
C1 - Medium PR Residential / GIC Foundations																			
P1_02																			
A1 - Silt Curtain																			
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																			
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																			
A6 - Reclamation Filling (Underwater)																			
A7 - Reclamation Filling and Surcharging (Above water)																			
A8 - Surcharge																			
C1 - Medium PR Residential / GIC Foundations																			
Int01																			
Int02																			
Int03	100	100	100	100	100	100													
Int04	100	100	100	100	100	100													
Int05	100	100	100	100	100	100													
Int06	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int07	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int08	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int09	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int10	100	100	100	100	100	100													
Int11							100	100	100	100	100	100	100	100	100	100	100	100	100

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2029												2030											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
B1 - High PR Residential Foundations																								
B2 - High PR Residential Foundations and High PR Residential Superstructure																								
B3 - High PR Residential Superstructure																								
P1_01																								
A1 - Silt Curtain																								
A2 - Stone Column and Seawall Construction																								
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
C1 - Medium PR Residential / GIC Foundations																								
P1_02																								
A1 - Silt Curtain																								
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																								
A5 - Geotextile / Sand Blanket, Marine Band Drains, Under Water Reclamation Filling																								
A6 - Reclamation Filling (Underwater)																								
A7 - Reclamation Filling and Surcharging (Above water)																								
A8 - Surcharge																								
C1 - Medium PR Residential / GIC Foundations																								
Int01																								
Int02																								
Int03																								
Int04																								
Int05																								
Int06																								
Int07																								
Int08																								
Int09																								
Int10																								
Int11																								

Title - Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2023			2024			2025											
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Int12													100	100	100	100	100	100
Int13													100	100	100	100	100	100
Int14													100	100	100	100	100	100
Int15													100	100	100	100	100	100
Int16													100	100	100	100	100	100
Int17													100	100	100	100	100	100
Int18													100	100	100	100	100	100
Int19													100	100	100	100	100	100
Int20													100	100	100	100	100	100
Int21													100	100	100	100	100	100
Int22													100	100	100	100	100	100
Int23													100	100	100	100	100	100
Int24													100	100	100	100	100	100
Int25													100	100	100	100	100	100
Int26													100	100	100	100	100	100
Int27													100	100	100	100	100	100
Int28													100	100	100	100	100	100
Int29													100	100	100	100	100	100
Int30													100	100	100	100	100	100
Int31													100	100	100	100	100	100
Int32													100	100	100	100	100	100
Int33													100	100	100	100	100	100
Int34													100	100	100	100	100	100
Int35													100	100	100	100	100	100
Int36													100	100	100	100	100	100
Int37													100	100	100	100	100	100
Int38													100	100	100	100	100	100
Int39													100	100	100	100	100	100
SFMM01	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Title : Construction Noise Calculation for TNCTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2029												2030												
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
Int2																									
Int3																									
Int4																									
Int5																									
Int6																									
Int7																									
Int8																									
Int9																									
Int20																									
Int21																									
Int22																									
Int23																									
Int24																									
Int25																									
Int26																									
Int27																									
Int28																									
Int29																									
Int30																									
Int31																									
Int32																									
Int33																									
Int34																									
Int35																									
Int36																									
Int37																									
Int38																									
Int39																									
SRM01																									

Title : Construction Noise Calculation for TCNTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2023			2024			2025												
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
Predicted Construction Noise for TCNTE / Additional Sewerage Rising Main, dB(A)																			
Max	71	71	71	71	71	71	70	70	70	70	70	70	71	71	71	71	71	71	60
YTF-02f	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	60
EHYC-01a	53	53	53	53	53	53	53	53	53	53	53	53	57	58	58	58	58	58	53
LCHP-01	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	53
AT00-02j	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	53
AT15-01c	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	60
AT133a-01b	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	60
AT13-01e	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	57
AT13-12k	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69

Note:
 1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workforce to the closest NSR.
 2. Text in red in shaded cell denotes exceedance of relevant criterion.
 3. Cell with shaded area denotes the unoccupancy of the NSR (i.e. before the population intake).
 4. The plant inventory for constructions of TCNTE and additional sewerage rising main is retrieved from approved EIA report for TCNTE (AEIAR-196/2016).

Title : Construction Noise Calculation for TCNTE and Additional Sewerage Rising Main
 Scenario : Mitigated Scenario

Activities	2029												2030											
	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Predicted Construction Noise for TCNTE / Additional Sewerage Rising Main, dB(A)																								
Max																								
YTL-02f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EHYC-01a	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LCNP-01	62	60	60	60	60	60	60	60	60	60	60	60	54	54	54	54	54	54	54	54	54	54	54	54
AI00-02j	71	68	68	68	68	68	68	68	68	68	68	68	0	0	0	0	0	0	0	0	0	0	0	0
AI16-01c	57	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
AI33a-01b	66	61	61	61	61	61	61	61	61	61	61	61	58	58	58	58	58	58	58	58	58	58	58	58
AI13-01e	62	61	61	61	61	61	61	61	61	61	61	61	58	58	58	58	58	58	58	58	58	58	58	58
AI13-12a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

- Note:
1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workforce to the closest NSR.
 2. Text in red in shaded cell denotes exceedance of relevant criterion.
 3. Cell with shaded area denotes the unoccupancy of the NSR (i.e. before the population intake).
 4. The plant inventory for constructions of TCNTE and additional sewerage rising main is retrieved from approved EIA report for TCNTE (AEIAR-196/2016).

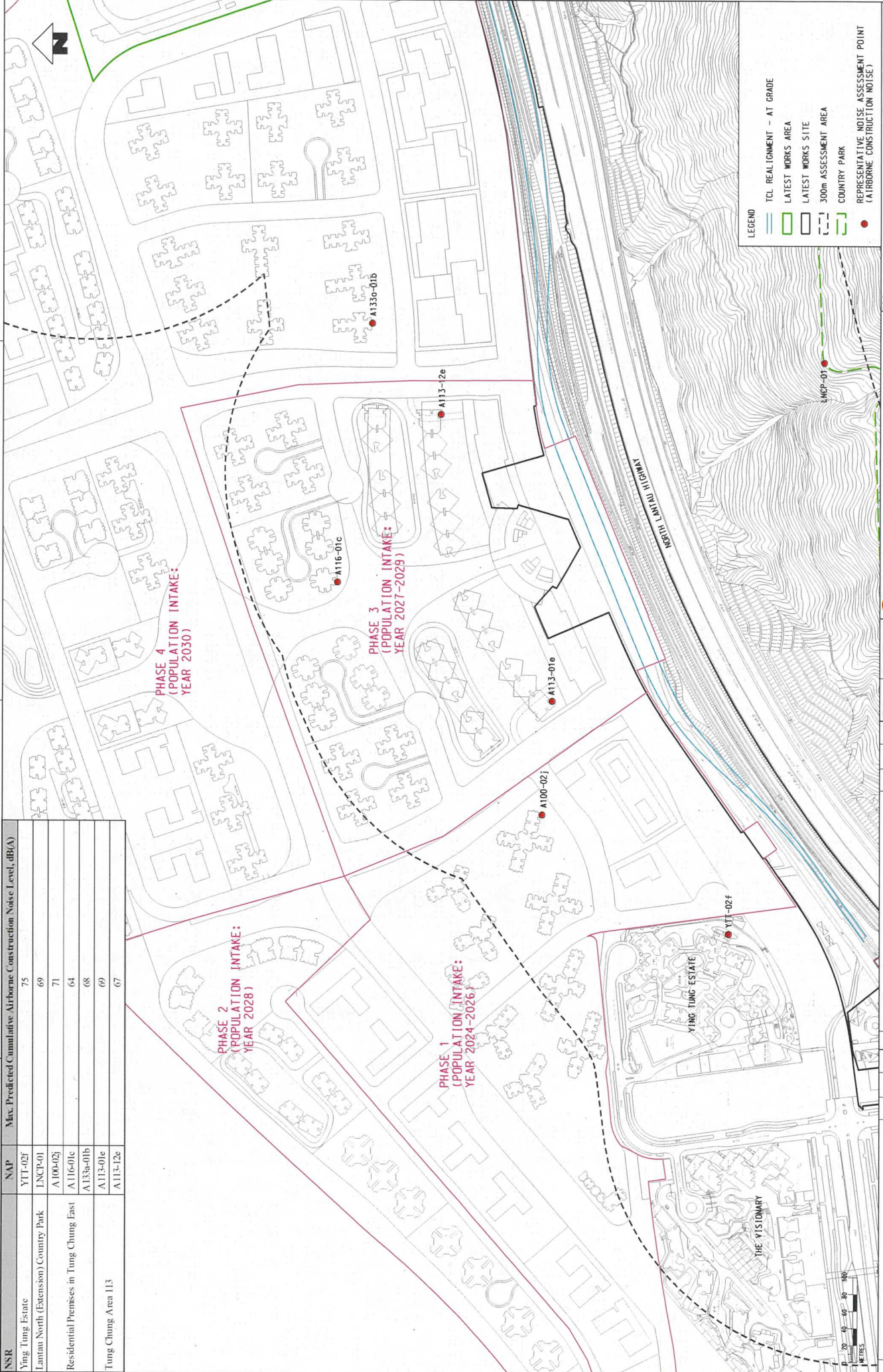
NSR	2029												2030											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MAX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
YTT-02f	74	0	0	0	0	0	0	0	0	0	0	0	66	66	66	66	66	66	66	66	66	66	66	66
EHC-01a	50	0	0	0	0	0	0	0	0	0	0	0	47	47	47	47	47	47	47	47	47	47	47	47
LCNP-01	69	0	0	0	0	0	0	0	0	0	0	0	63	63	63	63	63	63	63	63	63	63	63	63
A100-02j	65	0	0	0	0	0	0	0	0	0	0	0	65	65	65	65	65	65	65	65	65	65	65	65
A116-01c	63	0	0	0	0	0	0	0	0	0	0	0	63	63	63	63	63	63	63	63	63	63	63	63
A133a-01b	64	0	0	0	0	0	0	0	0	0	0	0	64	64	64	64	64	64	64	64	64	64	64	64
A113-01e	68	0	0	0	0	0	0	0	0	0	0	0	67	67	67	67	67	67	67	67	67	67	67	67
A113-12e	67	0	0	0	0	0	0	0	0	0	0	0	67	67	67	67	67	67	67	67	67	67	67	67

NSR	2029												2030											
NSR	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MAX	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EHC-01a	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LCNP-01	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
A100-02j	72	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
A116-01c	57	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
A133a-01b	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
A113-01e	62	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61
A113-12e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NSR	2029												2030											
NSR	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MAX	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EHC-01a	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LCNP-01	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
A100-02j	64	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
A116-01c	64	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
A133a-01b	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
A113-01e	69	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61
A113-12e	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

- Note:
- As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workforce to the closest NSR.
 - Text in red in shaded cell denotes exceedance of relevant criterion.
 - Cell with shaded area denotes the unoccupancy of the NSR (i.e. before the population intake).
 - The limit/inventory for constructions of TCNTE and additional sewerage rising main is retrieved from approved EIA report for TCNTE (WEIAR-1992/016).

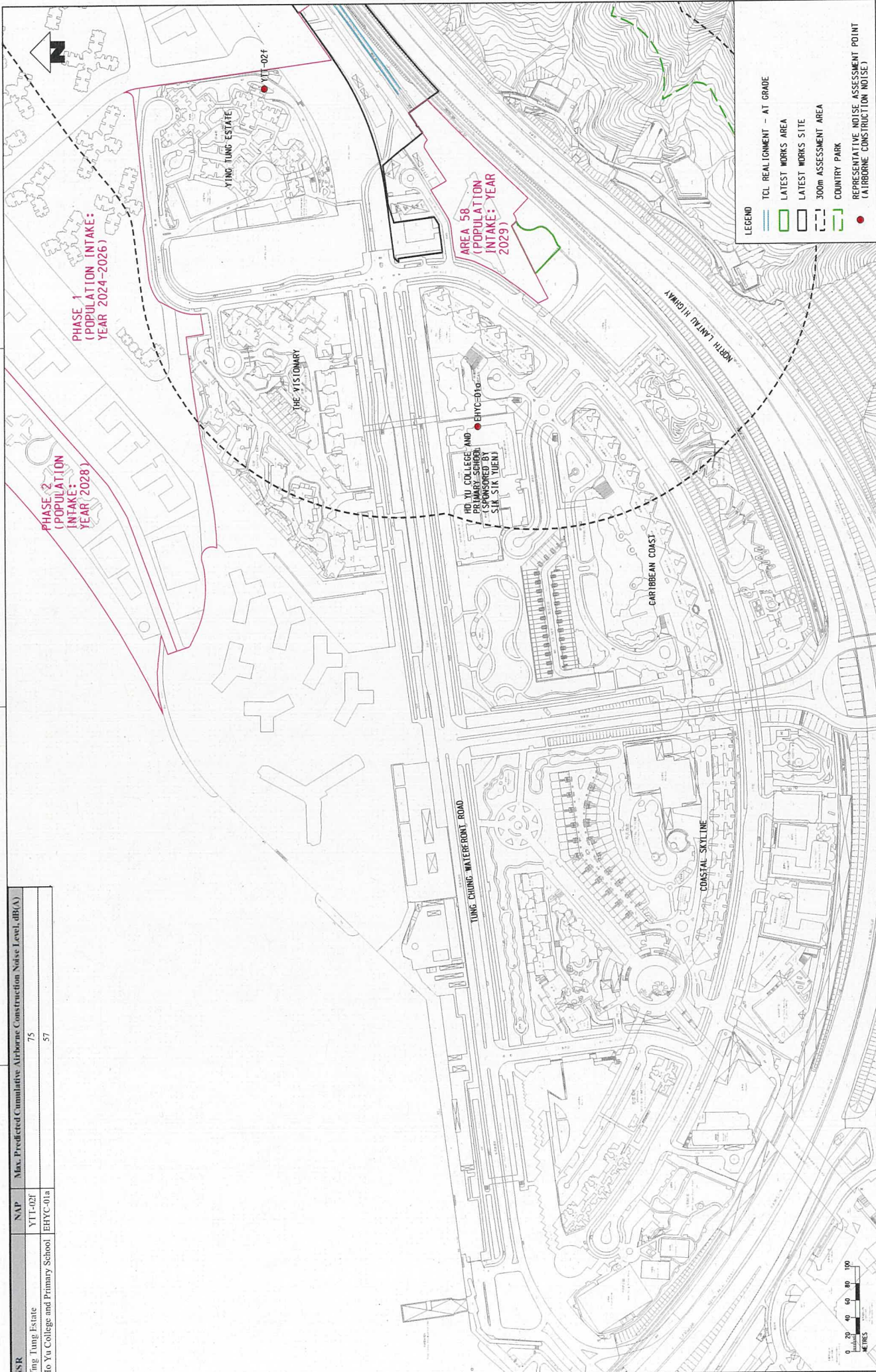
NSR	NAP	Max. Predicted Cumulative Airborne Construction Noise Level, dB(A)
Ying Tung Estate	YTT-02f	75
Lantau North (Extension) Country Park	LNCP-01	69
	A100-02j	71
Residential Premises in Tung Chung East	A116-01c	64
	A133a-01b	68
	A113-01e	69
Tung Chung Area 113	A113-12e	67



<p>PROJECT NAME: Tung Chung Line Extension</p> <p>DATE: 07/02/2023</p> <p>SCALE: 1 : 4000 (A3)</p> <p>APPENDIX: 3.6a</p>	<p>OPERATOR: ARUP</p> <p>DATE: 07/02/2023</p> <p>BY: [Signature]</p> <p>DATE: 07/02/23</p> <p>DESCRIPTION: FIRST ISSUE</p>	<p>DATE: 07/02/2023</p> <p>BY: [Signature]</p> <p>DESCRIPTION: FIRST ISSUE</p>	<p>DATE: 07/02/2023</p> <p>BY: [Signature]</p> <p>DESCRIPTION: FIRST ISSUE</p>
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MTR
 C1202 - EIA for Tung Chung Line Extension
 OPERATOR: ARUP
 One Arup & Partners
 Hong Kong Limited
 Appendix 4.4.6a.dgn
 SCALE: 1 : 4000 (A3) APPENDIX 3.6a

NSR	NAP	Max. Predicted Cumulative Airborne Construction Noise Level, dB(A)
Yung Tung Estate	YTT-02F	75
Ho Yu College and Primary School	EHYC-01a	57



FILE NAME: \\gob01\informatics\standards\airborne-noise\work\271\2023\1026\30 AM	DATE: 27/10/2023	PRINTED BY: MCG/BK/M	DRIVING DIRECTORY\9088\9908\11055\DM\1\CE\Appendix 4-4b.dgn		
PLT: 807	REV	DESCRIPTION	DATE	APPROVED	REV
	A	FIRST ISSUE	07/02/2023	FC	
	BY		DATE	APPROVED	
	GL		07/02/2023	FC	
	EL		DATE	APPROVED	
	EL		DATE	APPROVED	
	GL		DATE	APPROVED	
<p>DO NOT SCALE DRAWING. ALL DIMENSIONS SHALL BE CHECKED AGAINST THE ORIGINAL DRAWING. THE OPERATOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE DATA PROVIDED AND THE OPERATOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE DATA PROVIDED.</p>					
<p>OPERATOR: MTR</p>					
<p>PROJECT: C1202 - EIA for Tung Chung Line Extension</p>					
<p>CLIENT: MTR</p>					
<p>SCALE: 1 : 4000 (A3)</p>					
<p>APPENDIX 3.6 b</p>					
<p>REV. A</p>					

ARUP
One Arup & Partners
Hong Kong Limited

Appendix 4.4.4b.dgn

Appendix 3.7

Implementation Schedule of Noise Mitigation Measures

**Noise Mitigation Implementation Schedule
Tung Chung Line Extension**

CNMP Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Phase
<i>Construction Noise</i>						
S3.5.2	N1	<p>Good site practice and noise management techniques could considerably reduce the noise impact from construction site activities on nearby NSRs. The following measures practised during each phase of construction:</p> <ul style="list-style-type: none"> only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme; machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs; silencers or mufflers which available on construction equipment should be properly fitted and maintained during the construction works; spoil transportation routes should be directed away from NSRs as far as practicable; mobile plant should be sited as far away from NSRs as possible and practicable; material stockpiles, site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities; and noise monitoring at selected NSRs should be conducted as far as possible. 	Control construction airborne noise	Contractor	All construction sites (Tung Chung East Station and realignment works)	Construction phase
S3.5.3	N2	<p>Use of quiet plant which should be made reference to the Powered Mechanical Equipment (PME) listed in the Technical Memorandum or the Quality Powered Mechanical Equipment (QPME) / other commonly used PME listed in Environmental Protection Department (EPD) web pages as far as possible which</p>	Reduce the noise levels from plant items	Contractor	All construction sites (Tung Chung East Station and realignment works) where practicable	Construction phase

**Noise Mitigation Implementation Schedule
Tung Chung Line Extension**

CNMP Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Phase
		includes the Sound Power Level (SWLs) for specific quiet PME (e.g. EPD-09607, EPD-13019)				
S3.5.4	N3	Install movable temporary noise barriers (typical design is wooden framed barrier with a small-cantilevered upper portion of superficial density no less than 7kg/m ² on a skid footing with 25mm thick internal sound absorptive lining) screen the noisy plants including concrete pump etc.	Minimise the construction noise levels through screening	Contractor	All construction sites (Tung Chung East Station and realignment works)	Construction phase
S3.5.2.1	N6	Implement an airborne construction noise monitoring under EM&A programme.	Monitor the airborne construction noise levels at the selected representative locations	Contractor	Selected noise monitoring stations [1]	Construction phase

Note:

[1] Refer to Figure 5.1 of EM&A Manual of the approved EIA for Tung Chung Line Extension (AEIAR-235/2022).

