

MTR Corporation Limited

## Tung Chung Line Extension

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

(Condition 2.13 of EP-614/2022)

Verified by: James Choi James

Position: Independent Environmental Checker

Date: 23 June 2023

MTR Corporation Limited

## **Tung Chung Line Extension**

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(for Works Contract No. 1202)  
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Certified by: \_\_\_\_\_ Edan Li 

Position: Environmental Team Leader

Date: 23 June 2023

**ARUP**

**MTR Corporation Ltd**

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Reference: 277416-REP-054-01a

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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 September 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 September 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 <sup>[1][2]</sup> , L <sub>eq</sub> (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. <sup>[1]</sup>	NSR <sup>[2]</sup>	Uses <sup>[3]</sup>	No. of Storey	NAP <sup>[6]</sup>	Population Intake Year
Existing NSRs					
E1	Ying Tung Estate	R	35 – 40	YTT-02f	N/A <sup>[5]</sup>
E20	Ho Yu College and Primary School	E	7	EHYC-01a	N/A <sup>[5]</sup>
E21	Lantau North (Extension) Country Park	O	N/A <sup>[5]</sup>	LNCP-01	N/A <sup>[5]</sup>
Planned NSRs					
P1 <sup>[4]</sup>	Residential Premises in Tung Chung East – Area 100	R	40 <sup>[4]</sup>	A100-02j	2025 <sup>[7]</sup>
	Residential Premises in Tung Chung East – Area 116	R	32 <sup>[4]</sup>	A116-01c	2029
	Residential Premises in Tung Chung East – Area 133a	R	32 <sup>[4]</sup>	A133a-01b	2030
P4 <sup>[4]</sup>	Tung Chung Area 113	R	31 – 58 <sup>[4]</sup>	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 <sup>[1][2]</sup>	Model / Size	PME SWL, dB(A)	Barrier, dB(A)	PME SWL, dB(A)
Air Compressor	CNP003	Air compressor, air flow > 30m <sup>3</sup> /min	104	EPD-09607 <sup>[3]</sup>	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 <sup>[4]</sup>	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 <sup>[5]</sup>	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 <sup>[1][2]</sup>	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-XXXXX” 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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.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  $7\text{kg}/\text{m}^2$  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 <sup>[1]</sup>
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. <sup>[1]</sup>	NSR	NAP <sup>[2][3]</sup>	Uses <sup>[4]</sup>	L <sub>eq</sub> (30min), dB(A)				Duration of Exceedance Months
				Criterion <sup>[5]</sup>	Mitigated Noise Level	Cumulative Noise Level	Exceedance	
<b>Existing NSRs</b>								
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 <sup>[6]</sup>	69	69	N/A <sup>[6]</sup>	N/A <sup>[6]</sup>
<b>Planned NSRs</b>								
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.

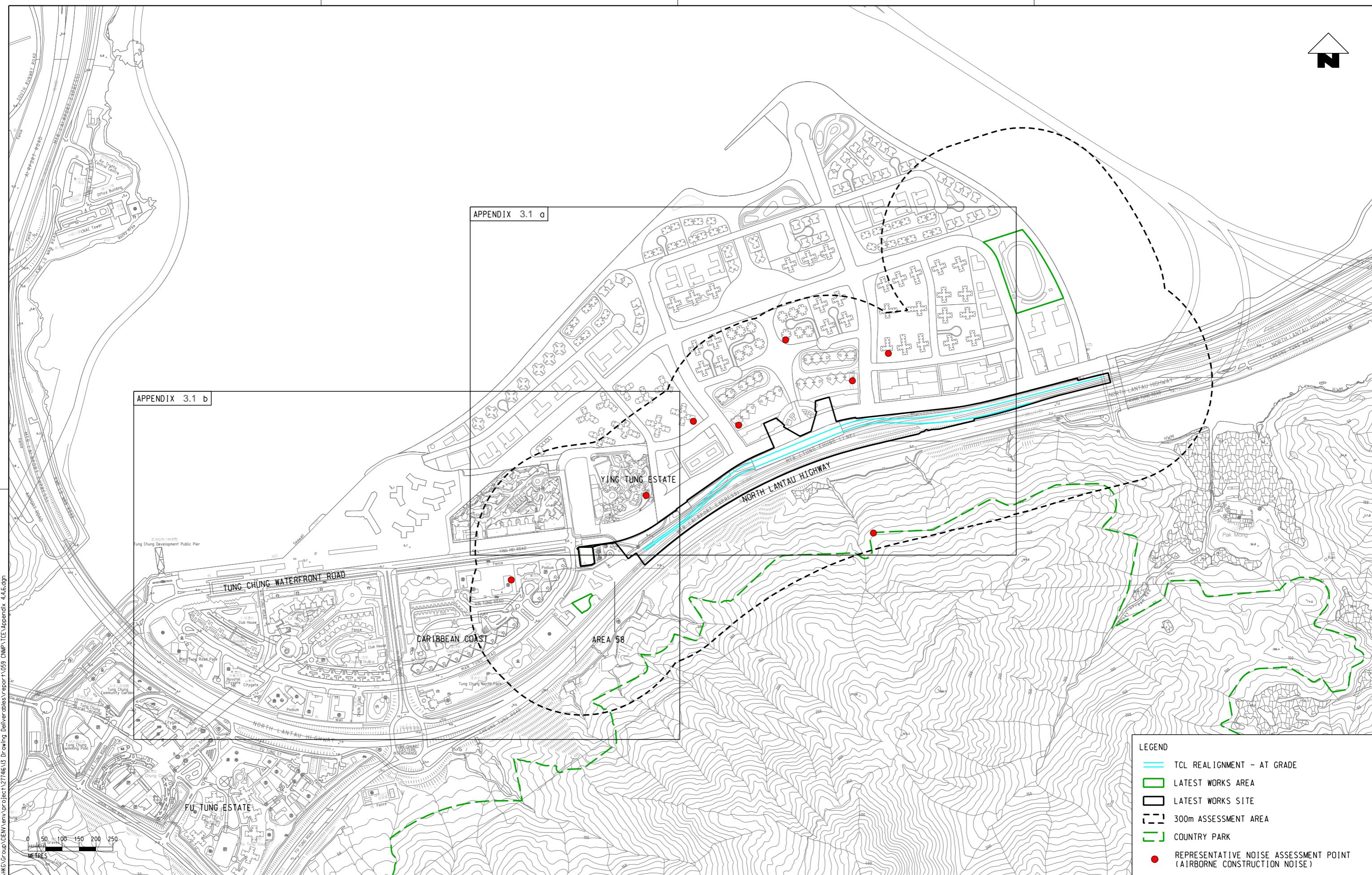
- 3.6.1.2 Construction noise impacts arising from the proposed and concurrent projects at all planned and existing NSRs including residential premises and schools during normal and examination periods can be properly mitigated by implementing the proposed noise control measures. Given the transient nature 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 September 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 September 2023, a revised CNMP will be submitted for EPD approval.

# Appendix 3.1

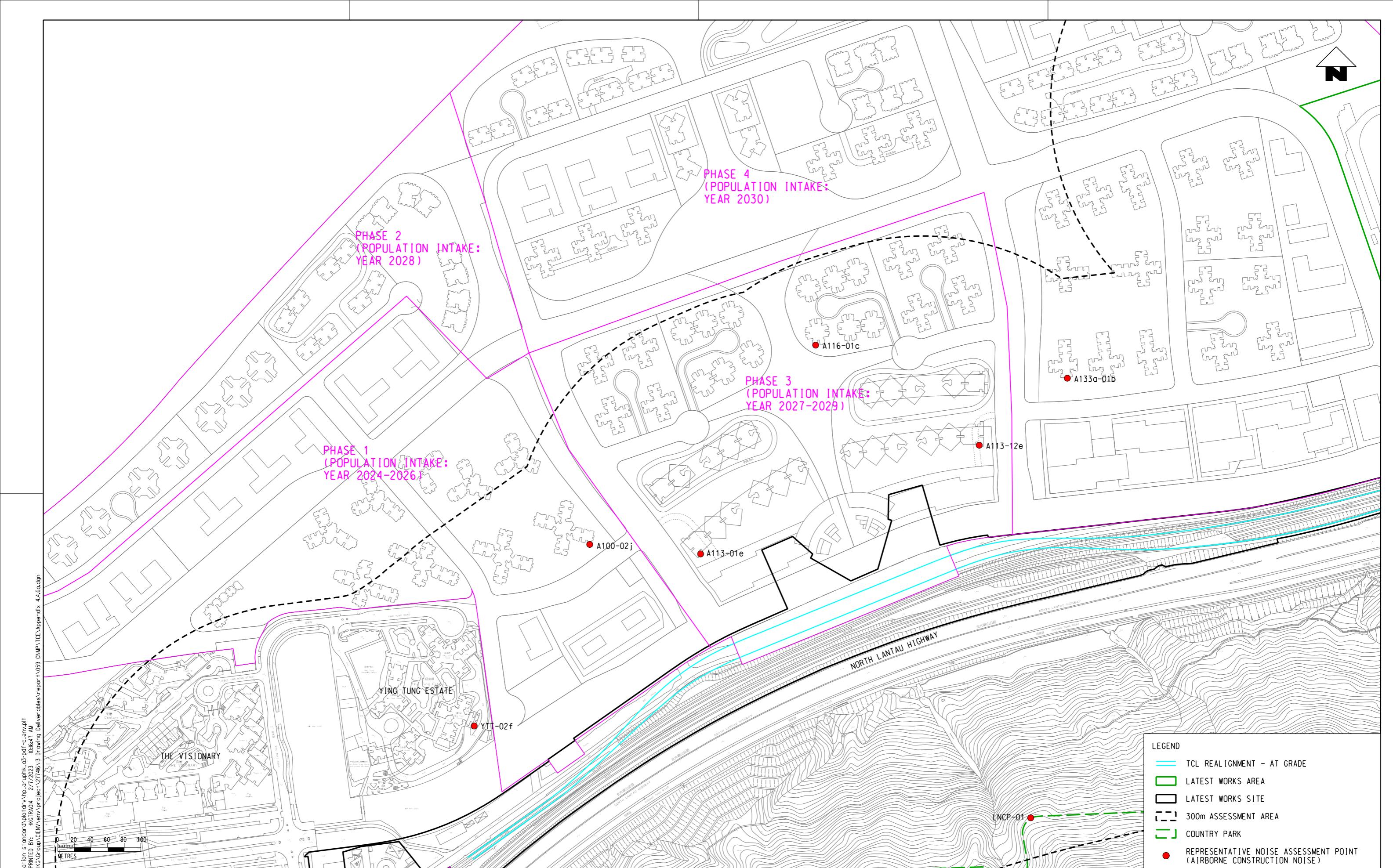
## Locations of Representative NSRs for airborne construction noise



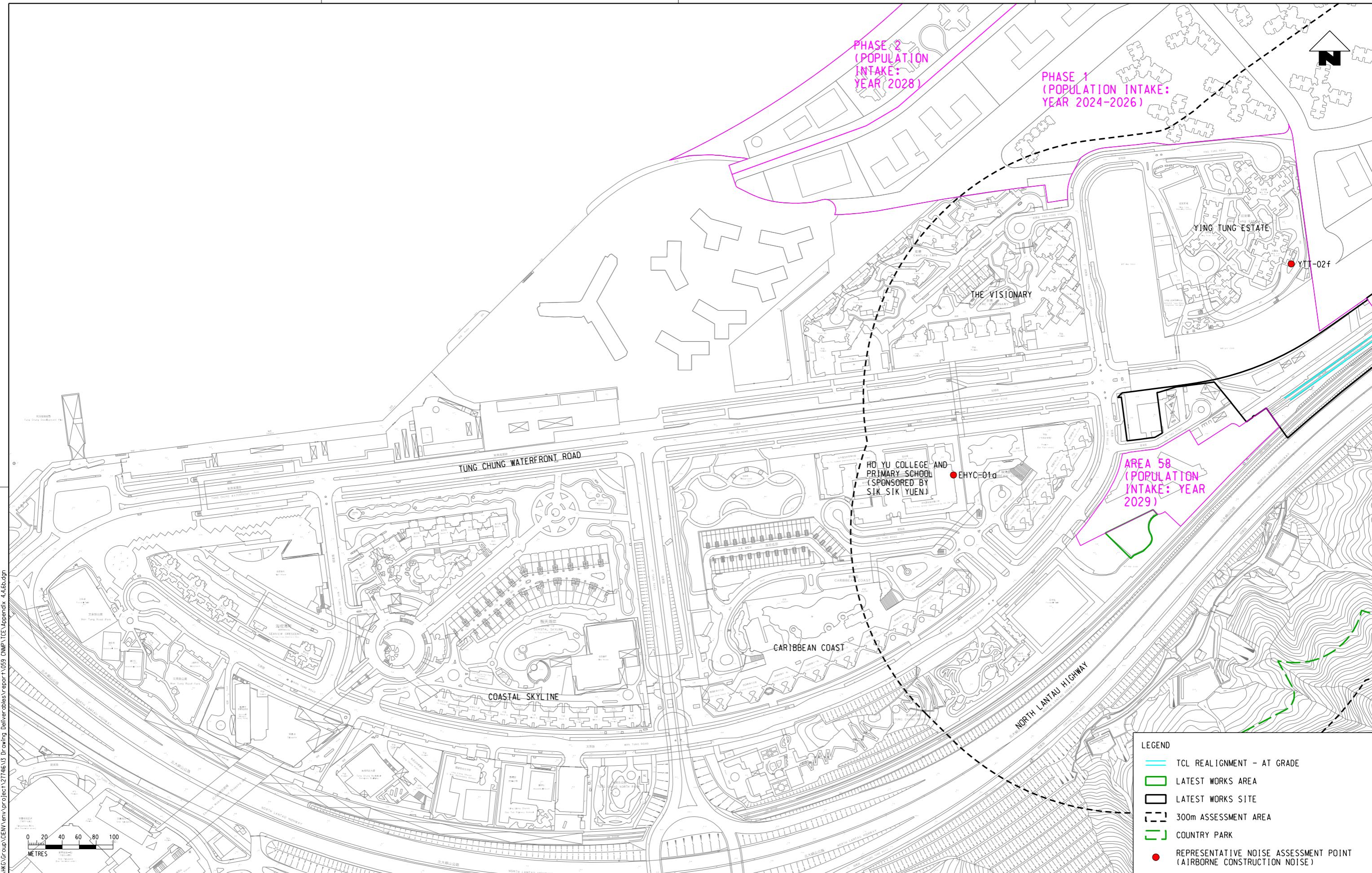
LEGEND

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

\\global\\EastAsia\\							<b>MTR</b>  C1202 - EIA for Tung Chung Line Extension  ORIGINATOR <b>ARUP</b> Ove Arup & Partners Hong Kong Limited	DRAWN GL			TITLE  PREDICTED NOISE LEVELS OF REPRESENTATIVE NOISE ASSESSMENT POINTS (AIRBORNE CONSTRUCTION NOISE)				
								DESIGNED	GL						
								CHECKED	EL						
								APPROVED	FC						
								DATE	07/02/2023						
								DO NOT SCALE DRAWINGS. ALL DIMENSIONS SHALL BE VERIFIED ON SITE. © MTR CORPORATION LIMITED 2008 COPYRIGHT IN RESPECT OF THIS DRAWING / DOCUMENT IS OWNED BY THE MTR CORPORATION LIMITED OF HONG KONG. NO PART OF THIS DRAWING / DOCUMENT MAY BE COPIED OR REPRODUCED IN WHOLE OR IN PART BY WHATEVER MEANS IS PERMITTED WITHOUT THE PRIOR WRITTEN CONSENT OF THE MTR CORPORATION LIMITED.							
								A FIRST ISSUE				GL	070223	FC	
												BY	DATE	APPROVED	
								DESCRIPTION				BY	DATE	APPROVED	
								REV	REV	REV		REV	REV	REV	REV
DESCRIPTION				DESCRIPTION			APPENDIX 3.1								
				Appendix 4.4.6.dgn			A								
				1:10000 (A3)			SCALE								
							DRAWING NO.								



PREDICTED NOISE LEVELS OF REPRESENTATIVE NOISE ASSESSMENT POINTS (AIRBORNE CONSTRUCTION NOISE)											
REV.	DESCRIPTION	BY	DATE	APPROVED	REV.	DESCRIPTION	BY	DATE	APPROVED	REV.	NOTE
	A FIRST ISSUE					GL 070223 FC					MTR C1202 - EIA for Tung Chung Line Extension
											ORIGINATOR ARUP Ove Arup & Partners Hong Kong Limited
											CADD REF. Appendix 4.4.6a.dgn
											SCALE 1 : 4000 (A3) APPENDIX 3.1 D REV. A



LEGEND

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

The MTR logo consists of a red circle containing a white stylized 'X' or 'H' shape, followed by the letters 'MTR' in a blue sans-serif font.

C1202 – EIA for Tung Chung Line Extension

**ARUP** Ove Arup & Partners  
Hong Kong Limited

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

4000 (A3) DRAWING NO. APPENDIX 3.1 b

REV. A

## **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												
<b>TCE</b>																						
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:

\* 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.

# **Appendix 3.3**

## **Detailed PME Inventory**

## PME Inventory for TCE

TCE Station East Side Retaining Wall Foundation Construction						Unmitigated			Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	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	
						<b>Total SWL</b>	<b>113</b>					<b>Total SWL</b>	<b>103</b>
TCE Station East Side Retaining Wall Foundation Construction (Zone E2)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113			Barrier	-10	103	
						<b>Total SWL</b>	<b>113</b>					<b>Total SWL</b>	<b>103</b>
TCE Station East Side Retaining Wall Foundation Construction (Zone E3)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100	
						<b>Total SWL</b>	<b>110</b>					<b>Total SWL</b>	<b>100</b>
TCE Station East Side Retaining Wall Foundation Construction (Zone E4)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113			Barrier	-10	103	
						<b>Total SWL</b>	<b>113</b>					<b>Total SWL</b>	<b>103</b>
TCE Station East Side Retaining Wall Foundation Construction (Zone E5)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100	
						<b>Total SWL</b>	<b>110</b>					<b>Total SWL</b>	<b>100</b>
TCE Station East Side Retaining Wall Foundation Construction (Zone E6)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100	
						<b>Total SWL</b>	<b>110</b>					<b>Total SWL</b>	<b>100</b>
TCE Station East Side Retaining Wall Foundation Construction (Zone E7)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100	
						<b>Total SWL</b>	<b>110</b>					<b>Total SWL</b>	<b>100</b>
TCE Station East Side Retaining Wall Foundation Construction (Zone E8)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113			Barrier	-10	103	
						<b>Total SWL</b>	<b>113</b>					<b>Total SWL</b>	<b>103</b>
TCE Station East Side Retaining Wall Foundation Construction (Zone E9)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113			Barrier	-10	103	
						<b>Total SWL</b>	<b>113</b>					<b>Total SWL</b>	<b>103</b>

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

TCE Station East Side Retaining Wall Construction and Noise Mitigation Measures						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 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	96	
						Total SWL	115						Total SWL 106
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	96	
						Total SWL	115						Total SWL 106
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	96	
						Total SWL	115						Total SWL 106
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	96	
						Total SWL	115						Total SWL 106
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	96	
						Total SWL	115						Total SWL 106
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	96	
						Total SWL	115						Total SWL 106
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	96	
						Total SWL	115						Total SWL 106
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	96	
						Total SWL	115						Total SWL 106
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	96	
						Total SWL	115						Total SWL 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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

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], [3]	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			Barrier	-10	110		
	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		
	Dump Truck	50	-3	8	CPME#	105	111			Barrier	-5	106		
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104		
Total SWL							123						Total SWL	113
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			Barrier	-10	112		
	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		
	Dump Truck	50	-3	8	CPME#	105	111			Barrier	-5	106		
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104		
Total SWL							124						Total SWL	114
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			Barrier	-10	110		
	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		
	Dump Truck	50	-3	8	CPME#	105	111			Barrier	-5	106		
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104		
Total SWL							123						Total SWL	113
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			Barrier	-10	110		
	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		
	Dump Truck	50	-3	8	CPME#	105	111			Barrier	-5	106		
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104		
Total SWL							123						Total SWL	113
TCE Station East Side Site Clearance / Site Formation (Zone E5)	Excavator	70	-2	2	CNP081	112	113	EPD-07150	90	Barrier	-5	86		
	Breaker, excavator mounted	70	-2	1	CNP028	122	120			Barrier	-10	110		
	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		
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103		
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104		
Total SWL							122						Total SWL	112
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	122			Barrier	-10	112		
	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		
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103		
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104		
Total SWL							123						Total SWL	113
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			Barrier	-10	110		
	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		
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103		
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104		
Total SWL							122						Total SWL	112
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			Barrier	-10	110		
	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		
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103		
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104		
Total SWL							122						Total SWL	112
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			Barrier	-10	110		
	Roller, Vibr													

TCE Station East Side Site Formation for U/T Diversion							Unmitigated		Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	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	
						<b>Total SWL</b>	<b>109</b>					<b>Total SWL</b>	<b>102</b>
TCE Station East Side Site Formation for U/T Diversion (Zone E3)	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	
						<b>Total SWL</b>	<b>109</b>					<b>Total SWL</b>	<b>102</b>
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	
						<b>Total SWL</b>	<b>110</b>					<b>Total SWL</b>	<b>103</b>

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

TCE Station East Side Site Reinstatement							Unmitigated		Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)	
TCE Station East Side Site Reinstatement (Zone E1)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94	
	Lorry, with crane/grab	50	-3	2	CPME#	105	105			Barrier	-5	100	
	Excavator	90	0	1	CNP081	112	112	EPD-07150	90	Barrier	-5	85	
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93	
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101	
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80	
							<b>Total SWL</b>	<b>117</b>					
TCE Station East Side Site Reinstatement (Zone E2)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94	
	Lorry, with crane/grab	50	-3	2	CPME#	105	105			Barrier	-5	100	
	Excavator	90	0	1	CNP081	112	112	EPD-07150	90	Barrier	-5	85	
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93	
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101	
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80	
							<b>Total SWL</b>	<b>117</b>					
TCE Station East Side Site Reinstatement (Zone E3)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94	
	Lorry, with crane/grab	50	-3	2	CPME#	105	105			Barrier	-5	100	
	Excavator	90	0	1	CNP081	112	112	EPD-07150	90	Barrier	-5	85	
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93	
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101	
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80	
							<b>Total SWL</b>	<b>117</b>					
TCE Station East Side Site Reinstatement (Zone E4)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94	
	Lorry, with crane/grab	50	-3	2	CPME#	105	105			Barrier	-5	100	
	Excavator	90	0	1	CNP081	112	112	EPD-07150	90	Barrier	-5	85	
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93	
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101	
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80	
							<b>Total SWL</b>	<b>117</b>					
TCE Station East Side Site Reinstatement (Zone E5)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94	
	Lorry, with crane/grab	50	-3	2	CPME#	105	105			Barrier	-5	100	
	Excavator	90	0	1	CNP081	112	112	EPD-07150	90	Barrier	-5	85	
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93	
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101	
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80	
							<b>Total SWL</b>	<b>117</b>					

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.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							Unmitigated		Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	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	112	112	CPME#	105	Barrier	-5	100	
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103	
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104	
							<b>Total SWL</b>	<b>119</b>					
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	112	112	CPME#	105	Barrier	-5	100	
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103	
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104	
							<b>Total SWL</b>	<b>119</b>					
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	112	112	CPME#	105	Barrier	-5	100	
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103	
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104	
							<b>Total SWL</b>	<b>119</b>					
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	112	112	CPME#	105	Barrier	-5	100	
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103	
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104	
							<b>Total SWL</b>	<b>119</b>					

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.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					Unmitigated			Mitigated					
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL 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	
				<b>Total SWL</b>		<b>103</b>						<b>Total SWL</b>	<b>98</b>
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	
				<b>Total SWL</b>		<b>103</b>						<b>Total SWL</b>	<b>98</b>
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	
				<b>Total SWL</b>		<b>103</b>						<b>Total SWL</b>	<b>98</b>
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	
				<b>Total SWL</b>		<b>103</b>						<b>Total SWL</b>	<b>98</b>
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	
				<b>Total SWL</b>		<b>103</b>						<b>Total SWL</b>	<b>98</b>

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](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLs.pdf)

[4] Crane Lorry will not be used concurrently with Electric Grinder at any time during removal works.

**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 U/T					Unmitigated			Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL 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
					<b>Total SWL</b>		<b>103</b>				<b>Total SWL</b>	
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
					<b>Total SWL</b>		<b>103</b>				<b>Total SWL</b>	
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
					<b>Total SWL</b>		<b>103</b>				<b>Total SWL</b>	
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
					<b>Total SWL</b>		<b>103</b>				<b>Total SWL</b>	
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
					<b>Total SWL</b>		<b>103</b>				<b>Total SWL</b>	

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](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLs.pdf)

[4] Crane Lorry will not be used concurrently with Electric Grinder at any time during removal works.

**Project:** Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension

**Title:** Plant Inventory TCE Station Station

TCE Station East Side Stationary Plants					Unmitigated			Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

**Project:** Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension

**Title:** Plant Inventory TCE Station Station

TCE Station West Side Stationary Plants					Unmitigated			Mitigated					
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	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	96			Barrier	-10	86	
	Grout Pump	50	-3	2	CPME#10	105	105			Barrier	-10	95	
	Generator	90	0	3	CNP103	95	99	EPD-10735	87	Barrier	-5	86	
	Air Compressor	90	0	8	CNP003	104	113	EPD-09607	93	Barrier	-10	92	
					Total SWL	114						Total SWL	97
TCE Station West Side Stationary Plants (S2)	Concrete Mixer/ Bentonite Mixer/ Grout Mixer	50	-3	3	CNP045	96	98			Barrier	-10	88	
	Grout Pump	50	-3	3	CPME#10	105	107			Barrier	-10	97	
	Generator	90	0	4	CNP103	95	101	EPD-10735	87	Barrier	-5	88	
	Air Compressor	90	0	12	CNP003	104	114	EPD-09607	93	Barrier	-10	93	
					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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

Retaining Wall Construction (Retaining Wall and Mini Piles) W1-W3							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)	
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W1)	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	
							<b>Total SWL</b>	<b>109</b>					
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W2)	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	
							<b>Total SWL</b>	<b>109</b>					
Construction of Retaining Wall 240m Section and noise mitigation measures (Zone W3)	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	
							<b>Total SWL</b>	<b>109</b>					
Retaining Wall Mini piles 80m opposite Ying Tung Estate (Zone W1)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100	
							<b>Total SWL</b>	<b>110</b>					
Retaining Wall Mini piles 80m opposite Ying Tung Estate (Zone W2)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100	
							<b>Total SWL</b>	<b>110</b>					
Retaining Wall Mini piles 80m opposite Ying Tung Estate (Zone W3)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113			Barrier	-10	103	
							<b>Total SWL</b>	<b>113</b>					

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

Retaining Wall Construction (Retaining wall& mini piles) W4-W8							Unmitigated		Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	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	
<b>Total SWL</b>							<b>113</b>						<b>Total SWL 103</b>
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	
<b>Total SWL</b>							<b>113</b>						<b>Total SWL 103</b>
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	
<b>Total SWL</b>							<b>113</b>						<b>Total SWL 103</b>
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	
<b>Total SWL</b>							<b>113</b>						<b>Total SWL 103</b>
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	
<b>Total SWL</b>							<b>113</b>						<b>Total SWL 103</b>
Retaining Wall Foundation 240m Section (Zone W4)	Drill Rig, DTH Drilling Machine	90	0	2	CPME#	110	113			Barrier	-10	103	
<b>Total SWL</b>							<b>113</b>						<b>Total SWL 103</b>
Retaining Wall Foundation 240m Section (Zone W5)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100	
<b>Total SWL</b>							<b>110</b>						<b>Total SWL 100</b>
Retaining Wall Foundation 240m Section (Zone W6)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100	
<b>Total SWL</b>							<b>110</b>						<b>Total SWL 100</b>
Retaining Wall Foundation 240m Section (Zone W7)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100	
<b>Total SWL</b>							<b>110</b>						<b>Total SWL 100</b>
Retaining Wall Foundation 240m Section (Zone W8)	Drill Rig, DTH Drilling Machine	90	0	1	CPME#	110	110			Barrier	-10	100	
<b>Total SWL</b>							<b>110</b>						<b>Total SWL 100</b>

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/files/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/files/OtherSWLe.pdf)

TCE Station West Side Site Clearance / Site Formation					Unmitigated			Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	Single Unit QPME 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
	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
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104
					<b>Total SWL</b>		<b>118</b>					
TCE Station West Side Site Clearance / Site Formation (Zone W2)	Excavator	70	-2	2	CNP081	112	113	EPD-07150	90	Barrier	-5	86
	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
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104
					<b>Total SWL</b>		<b>118</b>					
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
	Dump Truck	50	-3	4	CPME#	105	108			Barrier	-5	103
					<b>Total SWL</b>		<b>118</b>					
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
	Dump Truck	50	-3	8	CPME#	105	111			Barrier	-5	106
					<b>Total SWL</b>		<b>128</b>					
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	1	CNP028	122	120			Barrier	-10	110
	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
	Dump Truck	50	-3	8	CPME#	105	111			Barrier	-5	106
					<b>Total SWL</b>		<b>109</b>					
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	1	CNP028	122	120			Barrier	-10	110
	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
	Dump Truck	50	-3	8	CPME#	105	111			Barrier	-5	106
					<b>Total SWL</b>		<b>109</b>					
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	1	CNP028	122	120			Barrier	-10	110
	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
	Dump Truck	50	-3	8	CPME#	105	111			Barrier	-5	106
					<b>Total SWL</b>		<b>109</b>					
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	1	CNP028	122	120			Barrier	-10	110
	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
	Dump Truck	50	-3	8	CPME#	105	111			Barrier	-5	106
					<b>Total SWL</b>		<b>109</b>					
					<b>Total SWL</b>		<b>123</b>					

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/files/OtherSWLs.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/files/OtherSWLs.pdf)

TCE Station West Side Utilities, Road and Drainage Reinstatement							Unmitigated		Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	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			Barrier	-5	100	
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104	
							<b>Total SWL</b>	<b>117</b>					
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			Barrier	-5	100	
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104	
							<b>Total SWL</b>	<b>117</b>					
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			Barrier	-5	100	
	Concrete Lorry Mixer/ Concrete Truck	50	-3	2	CNP044	109	109			Barrier	-5	104	
							<b>Total SWL</b>	<b>117</b>					

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

TCE Station West Side Removal and Reprovision of Existing Noise Barrier						Unmitigated			Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)	
TCE Station West Side Removal and Reprovision 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	
	Grinder	50	-3	1	CNP065	98	95			Barrier	-5	90	
						<b>Total SWL</b>	<b>114</b>						<b>Total SWL</b>
TCE Station West Side Removal and Reprovision 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	
	Grinder	50	-3	1	CNP065	98	95			Barrier	-5	90	
						<b>Total SWL</b>	<b>114</b>						<b>Total SWL</b>
TCE Station West Side Removal and Reprovision 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	
	Grinder	50	-3	1	CNP065	98	95			Barrier	-5	90	
						<b>Total SWL</b>	<b>114</b>						<b>Total SWL</b>

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

**Project:** Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension

**Title:** Plant Inventory TCE Station Station

TCE Station West Side Site reinstatement					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 West Side Site reinstatement (Zone W1)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry, with crane/grab	100	0	2	CPME#	105	108			Barrier	-5	103
	Excavator	50	-3	1	CNP081	112	109	EPD-07150	90	Barrier	-5	82
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80
					Total SWL		116					Total SWL 106
TCE Station West Side Site reinstatement (Zone W2)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry, with crane/grab	100	0	2	CPME#	105	108			Barrier	-5	103
	Excavator	90	0	1	CNP081	112	112	EPD-07150	90	Barrier	-5	85
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80
					Total SWL		117					Total SWL 106
TCE Station West Side Site reinstatement (Zone W3)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry, with crane/grab	100	0	2	CPME#	105	108			Barrier	-5	103
	Excavator	90	0	1	CNP081	112	112	EPD-07150	90	Barrier	-5	85
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80
					Total SWL		117					Total SWL 106
TCE Station West Side Site reinstatement (Zone W4)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry, with crane/grab	50	-3	2	CPME#	105	105			Barrier	-5	100
	Excavator	90	0	1	CNP081	112	112	EPD-07150	90	Barrier	-5	85
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80
					Total SWL		117					Total SWL 104
TCE Station West Side Site reinstatement (Zone W5)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry, with crane/grab	50	-3	2	CPME#	105	105			Barrier	-5	100
	Excavator	90	0	1	CNP081	112	112	EPD-07150	90	Barrier	-5	85
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80
					Total SWL		117					Total SWL 104
TCE Station West Side Site reinstatement (Zone W6)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry, with crane/grab	50	-3	2	CPME#	105	105			Barrier	-5	100
	Excavator	90	0	1	CNP081	112	112	EPD-07150	90	Barrier	-5	85
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80
					Total SWL		117					Total SWL 104
TCE Station West Side Site reinstatement (Zone W7)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry, with crane/grab	50	-3	2	CPME#	105	105			Barrier	-5	100
	Excavator	90	0	1	CNP081	112	112	EPD-07150	90	Barrier	-5	85
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80
					Total SWL		117					Total SWL 104
TCE Station West Side Site reinstatement (Zone W8)	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	60	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94
	Lorry, with crane/grab	50	-3	2	CPME#	105	105			Barrier	-5	100
	Excavator	90	0	1	CNP081	112	112	EPD-07150	90	Barrier	-5	85
	Hand Held Breaker	50	-3	1	CNP026	114	111	EPD-13019	101	Barrier	-5	93
	Concrete Lorry Mixer/ Concrete Truck	50	-3	1	CNP044	109	106			Barrier	-5	101
	Air Compressor	50	-3	1	CNP003	104	101	EPD-09607	93	Barrier	-10	80
					Total SWL		117					Total SWL 104

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

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

**Project:** Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension

**Title:** Plant Inventory TCE Station Station

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

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

**Project:** Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension

**Title:** Plant Inventory TCE Station Station

TCE Station Area Stationary Plants					Unmitigated			Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	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
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	111						Total SWL 90
					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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

**Project:** Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension

**Title:** Plant Inventory TCE Station Station

TCE Station Site Clearance/Site Formation						Unmitigated		Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)
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			Barrier	-10	110
	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
	Dump Truck	50	-3	8	CPME#	105	111			Barrier	-5	106
	Concrete Lorry Mixer/ Concrete Truck	50	-3	4	CNP044	109	112			Barrier	-5	107
						<b>Total SWL</b>	<b>124</b>					
TCE Station Site Clearance/Site Formation (Zone B)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89
	Breaker, excavator mounted	70	-2	1	CNP028	122	120			Barrier	-10	110
	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
	Dump Truck	50	-3	8	CPME#	105	111			Barrier	-5	106
	Concrete Lorry Mixer/ Concrete Truck	50	-3	4	CNP044	109	112			Barrier	-5	107
						<b>Total SWL</b>	<b>124</b>					
TCE Station Site Clearance/Site Formation (Zone C)	Excavator	70	-2	4	CNP081	112	116	EPD-07150	90	Barrier	-5	89
	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
	Dump Truck	50	-3	8	CPME#	105	111			Barrier	-5	106
	Concrete Lorry Mixer/ Concrete Truck	50	-3	4	CNP044	109	112			Barrier	-5	107
							<b>Total SWL</b>	<b>121</b>				

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

TCE Station Structure - Foundation						Unmitigated			Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	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	
						<b>Total SWL</b>	<b>121</b>						<b>Total SWL</b> <b>111</b>
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	
						<b>Total SWL</b>	<b>121</b>						<b>Total SWL</b> <b>111</b>
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	
						<b>Total SWL</b>	<b>121</b>						<b>Total SWL</b> <b>111</b>

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

**Project:** Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension

**Title:** Plant Inventory TCE Station Station

TCE Station Link Bridge 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)	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL 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	
						<b>Total SWL</b>	<b>122</b>				<b>Total SWL</b>	<b>111</b>

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances						Unmitigated			Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	Single Unit QPME 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			Barrier	-10	80	
	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	
	Saw, Circular, Wood	50	-3	1	CNP201	108	105			Barrier	-10	95	
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	EPD-09130	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	EPD-08781	99	Barrier	-5	92	
	Vibratory Poker	60	-2	3	CNP170	113	116	CPME#	102	Barrier	-10	95	
						<b>Total SWL</b>	<b>118</b>						<b>Total SWL</b> <b>106</b>
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone B)	Bar Bender and Cutter	100	0	1	CNP021	90	90			Barrier	-10	80	
	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	
	Saw, Circular, Wood	50	-3	1	CNP201	108	105			Barrier	-10	95	
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	EPD-09130	101	Barrier	-5	94	
	Lorry, with crane/grab	50	-3	1	CPME#	105	102			Barrier	-5	97	
						<b>Total SWL</b>	<b>115</b>						<b>Total SWL</b> <b>106</b>
TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances (Zone C)	Bar Bender and Cutter	100	0	1	CNP021	90	90			Barrier	-10	80	
	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	
	Saw, Circular, Wood	50	-3	1	CNP201	108	105			Barrier	-10	95	
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	EPD-09130	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	EPD-08781	99	Barrier	-5	92	
						<b>Total SWL</b>	<b>118</b>						<b>Total SWL</b> <b>106</b>

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

TCE Station Site Reinstatement						Unmitigated			Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)	
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 Poker	50	-3	4	CNP170	113	116	CPME#	102	Barrier	-10	95	
	Saw, Circular, Wood	30	-5	2	CNP201	108	106			Barrier	-10	96	
						<b>Total SWL</b>	<b>123</b>						<b>Total SWL</b> <b>111</b>
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 Poker	50	-3	4	CNP170	113	116	CPME#	102	Barrier	-10	95	
	Saw, Circular, Wood	30	-5	2	CNP201	108	106			Barrier	-10	96	
						<b>Total SWL</b>	<b>123</b>						<b>Total SWL</b> <b>111</b>
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 Poker	50	-3	4	CNP170	113	116	CPME#	102	Barrier	-10	95	
	Saw, Circular, Wood	30	-5	2	CNP201	108	106			Barrier	-10	96	
						<b>Total SWL</b>	<b>123</b>						<b>Total SWL</b> <b>111</b>

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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

TCE - Link Bridge Structure						Unmitigated			Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	Single Unit QPME 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	50	-3	2	CNP048	112	112	EPD-09130	101	Barrier	-5	96	
	Bar Bender and Cutter	100	0	1	CNP021	90	90			Barrier	-10	80	
	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	
	Saw, Circular, Wood	50	-3	1	CNP201	108	105			Barrier	-10	95	
	Mobile Crane/ Service Crane/ Crawler Crane/ Lifting crane	70	-2	1	CNP048	112	110	EPD-09130	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	EPD-08781	99	Barrier	-5	92	
	Vibratory Poker	60	-2	3	CNP170	113	116	CPME#	102	Barrier	-10	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 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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

**Project:** Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension

**Title:** Plant Inventory TCE Station Station

TCE Station Removal of abandoned D/T						Unmitigated			Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)	
TCE Station Removal of abandoned D/T (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	
						<b>Total SWL</b>		<b>103</b>				<b>Total SWL</b>	
TCE Station Removal of abandoned D/T (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	
						<b>Total SWL</b>		<b>103</b>				<b>Total SWL</b>	
TCE Station Removal of abandoned D/T (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	
						<b>Total SWL</b>		<b>103</b>				<b>Total SWL</b>	

**Project:** Environmental Consultancy No. C1202 EIA Study for Tung Chung Line Extension

**Title:** Plant Inventory TCE Station Station

TCE Station Removal of abandoned U/T						Unmitigated			Mitigated				
Works Area/ Activity	PME	% Operating Time <sup>[1]</sup>	Time Correction dB(A)	Units	PME Reference	Single Unit PME dB(A)	Total SWL dB(A)	QPME Reference <sup>[2], [3]</sup>	Single Unit QPME dB(A)	Mitigation Measures	Correction dB(A)	Total SWL dB(A)	
TCE Station Removal of abandoned U/T (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		
TCE Station Removal of abandoned U/T (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		
TCE Station Removal of abandoned U/T (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		

Note:

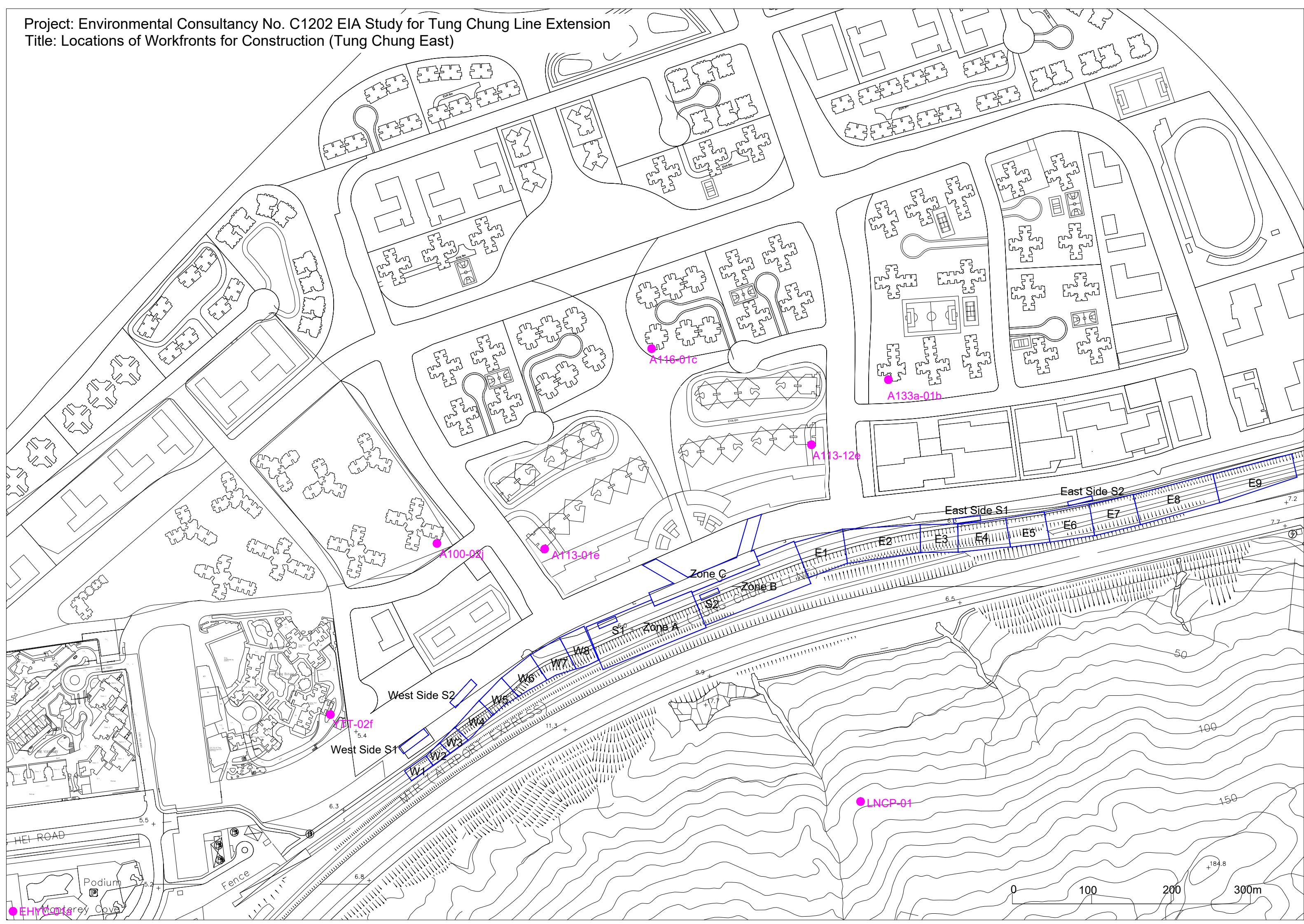
[1] Percentage on time within 30 minutes.

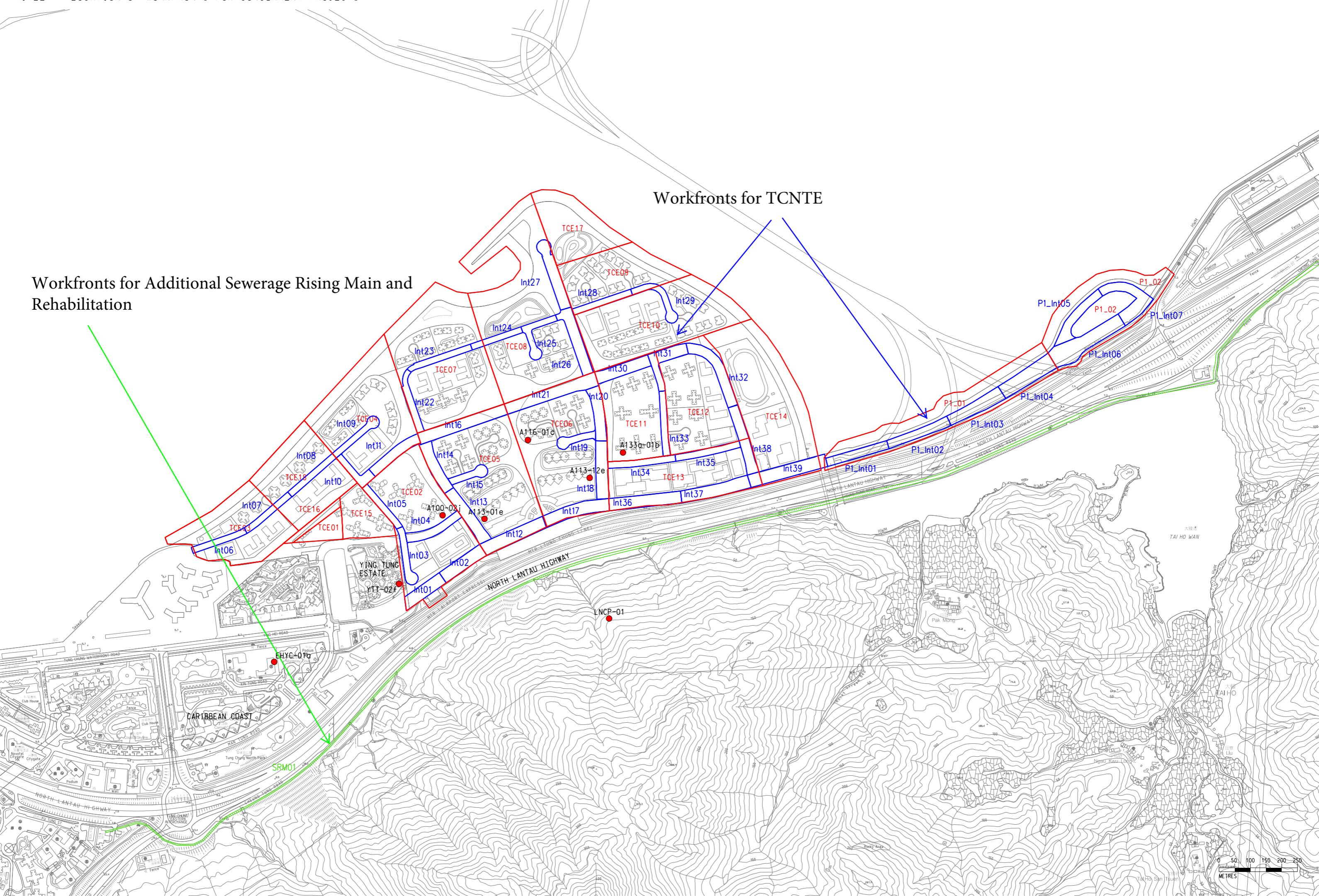
[2] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.

[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/OtherSWLe.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

# Appendix 3.4

## Locations of Workfronts for Construction

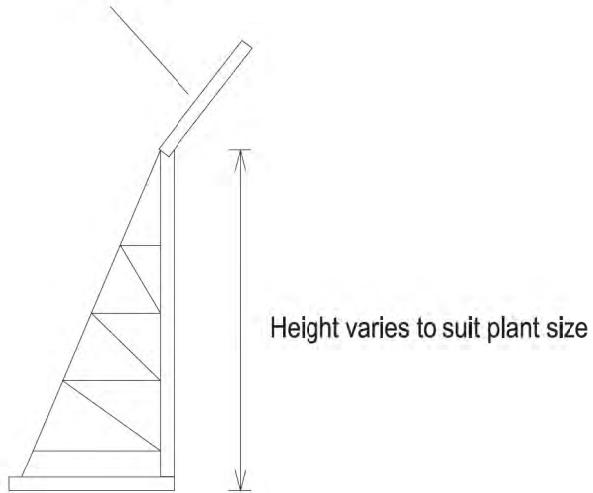




## Appendix 3.5

### Sketch of Typical Temporary Noise Barrier

Minimum surface density of 7kg/m<sup>2</sup>



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







	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	
<b>TCE Station East Side Stationary Plants</b>																															
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	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	99	99	99	99	99	99	99	99	99	99	99	99	99
<b>TCE Station West Side Stationary Plants</b>																															
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	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	99	99	99	99	99	99	99	99	99	99	99	99	99
<b>Construction of Retaining Wall 240m Section and noise mitigation measures</b>																															
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																														
<b>Retaining Wall Mini piles 80m opposite Ying Tung Estate</b>																															
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																														
<b>Retaining Wall 240m Section and noise mitigation measures</b>																															
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																														
<b>Retaining Wall Foundation 240m Section</b>																															
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																														
<b>TCE Station West Side Site Clearance / Site Formation</b>																															
TCE Station West Side Site Clearance / Site Formation (Zone W1)	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	
TCE Station West Side Site Clearance / Site Formation (Zone W2)	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	
TCE Station West Side Site Clearance / Site Formation (Zone W3)	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	
TCE Station West Side Site Clearance / Site Formation (Zone W4)	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	
TCE Station West Side Site Clearance / Site Formation (Zone W5)	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	113	
TCE Station West Side Site Clearance / Site Formation (Zone W6)	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	113	
TCE Station West Side Site Clearance / Site Formation (Zone W7)	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	113	
TCE Station West Side Site Clearance / Site Formation (Zone W8)	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	113	
<b>TCE Station West Side Utilities, Road and Drainage Reinstatement</b>																															
TCE Station West Side Utilities, Road and Drainage Reinstatement																															

	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							
<b>TCE Station East Side Stationary Plants</b>																																											
TCE Station East Side Stationary Plants (S1)	101																																										
TCE Station East Side Stationary Plants (S2)	99																																										
<b>TCE Station West Side Stationary Plants</b>																																											
TCE Station West Side Stationary Plants (S1)	97	97	97	97	97																																						
TCE Station West Side Stationary Plants (S2)	99	99	99	99	99																																						
<b>Construction of Retaining Wall 240m Section and noise mitigation measures</b>																																											
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																																										
<b>Retaining Wall Mini piles 80m opposite Ying Tung Estate</b>																																											
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																																										
<b>Retaining Wall 240m Section and noise mitigation measures</b>																																											
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																																										
<b>Retaining Wall Foundation 240m Section</b>																																											
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																																										
<b>TCE Station West Side Site Clearance / Site Formation</b>																																											
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																																										



	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	
<b>TCE Station West Side Removal of abandoned U/T</b>																															
TCE Station West Side Removal of abandoned U/T (Zone W1)	98																														
TCE Station West Side Removal of abandoned U/T (Zone W2)	98																														
TCE Station West Side Removal of abandoned U/T (Zone W3)	98																														
TCE Station West Side Removal of abandoned U/T (Zone W4)	98																														
TCE Station West Side Removal of abandoned U/T (Zone W5)	98																														
TCE Station West Side Removal of abandoned U/T (Zone W6)	98																														
TCE Station West Side Removal of abandoned U/T (Zone W7)	98																														
TCE Station West Side Removal of abandoned U/T (Zone W8)	98																														
<b>TCE Station Area Stationary Plants</b>																															
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	
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	
<b>TCE Station Structure - Foundation</b>																															
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	
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	
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	
<b>TCE Station Site Clearance/Site Formation</b>																															
TCE Station Site Clearance/Site Formation (Zone A)	113	113	113																												
TCE Station Site Clearance/Site Formation (Zone B)	113	113	113																												
TCE Station Site Clearance/Site Formation (Zone C)	110	110	110																												
<b>TCE Station Link Bridge Foundation</b>																															
TCE Station Link Bridge Foundation (Zone C)	111																														
<b>TCE Station Structure - Main Station Structure, Ancillary Buildings, Bridges, Entrances</b>																															
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																														
<b>TCE Station Site Reinstatement</b>																															
TCE Station Site Reinstatement (Zone A)	111																														
TCE Station Site Reinstatement (Zone B)	111																														
TCE Station Site Reinstatement (Zone C)	111																														
<b>TCE - Link Bridge Structure</b>																															
TCE - Link Bridge Structure (Zone C)	107																														
<b>TCE Station Removal of abandoned D/T</b>																															
TCE Station Removal of abandoned D/T (Zone A)	98																														
TCE Station Removal of abandoned D/T (Zone B)	98																														
TCE Station Removal of abandoned D/T (Zone C)	98																														
<b>TCE Station Removal of abandoned U/T</b>																															
TCE Station Removal of abandoned U/T (Zone A)	98																														
TCE Station Removal of abandoned U/T (Zone B)	98																														
TCE Station Removal of abandoned U/T (Zone C)	98																														





Predicted Construction Noise, dB(A)	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	
NSR	MAX																														
YTT-02f	74	73	73	74	74	74	74	74	74	74	74	74	64	64	62	61	61	60	60	60	65	65	65	65	60	60	60	60	59		
EHYC-01a	50	48	48	49	49	49	49	49	49	49	49	49	44	44	38	38	42	42	42	42	48	48	48	48	42	42	42	42	42		
LCNP-01	69	69	69	69	69	69	69	69	69	69	69	69	64	64	63	61	62	61	61	61	59	59	59	59	58	58	58	58	56		
A100-02j	65																			60	60	62	62	62	62	60	60	60	58		
A116-01c	63																														
A133a-01b	64																														
A113-01e	68																														
A113-12e	67																														

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).

## Note:

1. As a worst case scenario, the predicted construction noise is calculated using the distance between
  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).

Predicted Construction Noise, dB(A)	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
YTT-02f	MAX	74	0	0	0	0	0	0	0	0	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
EHYC-01a		50	0	0	0	0	0	0	0	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
LCNP-01		69	0	0	0	0	0	0	0	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
A100-02j		65	0	0	0	0	0	0	0	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
A116-01c		63									63	63	62	62	62	62	63	63	63	63	63	63	63	63	63
A133a-01b		64															64	64	64	64	64	64	64	64	64
A113-01e		68	0	0	0	0	0	0	0	68	68	68	68	67	67	67	67	68	68	68	68	68	68	68	68
A113-12e		67	0	0	0	0	0	0	0	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67

Note:

1. As a worst case scenario, the predicted construction noise is calculated using the distance between

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).

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						
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	105	105	105	105	105	105	105	105	105	105	105	105					
TCE02																																				
A5 - Geotextile / Sand Blanket, Marine Band Draings, 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	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 Draings, 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					
B2 - High PR Residential Foundations and High PR Residential Superstructure																			106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106
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 Draings, 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	113	113	113	113	113	113																														

## **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
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 Draings, 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 Draings, 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 Draings, 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																								

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	
TCE05																																
A4 - Geotextile / Sand Blanket, Marine Band Drains																																
A5 - Geotextile / Sand Blanket, Marine Band Draings, Under Water Reclamation Filling																																
A6 - Reclamation Filling (Underwater)																																
A7 - Reclamation Filling and Surcharging (Above water)																																
A8 - Surcharge																																
B1 - High PR Residential Foundations													112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
B2 - High PR Residential Foundations and High PR Residential Superstructure																																
B3 - High PR Residential Superstructure																																112
TCE06																																
A4 - Geotextile / Sand Blanket, Marine Band Drains																																
A5 - Geotextile / Sand Blanket, Marine Band Draings, 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 Draings, 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 Draings, Under Water Reclamation Filling																																

**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	
B3 - High PR Residential Superstructure																									
TCE05																									
A4 - Geotextile / Sand Blanket, Marine Band Drains																									
A5 - Geotextile / Sand Blanket, Marine Band Draings, 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													
TCE06																									
A4 - Geotextile / Sand Blanket, Marine Band Drains																									
A5 - Geotextile / Sand Blanket, Marine Band Draings, 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													
TCE07																									
A1 - Silt Curtain																									
A3 - Stone Column, Seawall Construction, Geotextile / Sand Blanket, Marine Band Drains																									
A5 - Geotextile / Sand Blanket, Marine Band Draings, 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													
TCE08																									
A1 - Silt Curtain																									
A4 - Geotextile / Sand Blanket, Marine Band Drains																									
A5 - Geotextile / Sand Blanket, Marine Band Draings, Under Water Reclamation Filling																									

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			
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 Draings, 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 Draings, 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 Draings, Under Water Reclamation Filling																																	
A6 - Reclamation Filling (Underwater)																																	

Activities	2026												2027												2028																						
	Jan	Feb	March	Apr	May	June	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											
A6 - Reclamation Filling (Underwater)																																															
A2 - Stone Column and Seawall Construction																																															
A7 - Reclamation Filling and Surcharging (Above water)																																															
A8 - Surcharge																																															
B1 - High PR Residential Foundations													112	112	112	112	112	112	112	112	112	112	112	112																							
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 Draings, Under Water Reclamation Filling																																															
A6 - Reclamation Filling (Underwater)																																															
A7 - Reclamation Filling and Surcharging (Above water)																																															
A8 - Surcharge																																															
C1 - Medium PR Residential / GIC Foundations													115	115	115	115	115	115	115	115	115	115	115	115																							
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 Draings, Under Water Reclamation Filling																																															
A6 - Reclamation Filling (Underwater)																																															
A7 - Reclamation Filling and Surcharging (Above water)																																															
A8 - Surcharge																																															
C1 - Medium PR Residential / GIC Foundations													115	115	115	115	115	115	115	115	115	115	115	115																							
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 Draings, Under Water Reclamation Filling																																															
A6 - Reclamation Filling (Underwater)																																															

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	
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 Draings, 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 Draings, 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																									
A4 - Geotextile / Sand Blanket, Marine Band Drains																									
A5 - Geotextile / Sand Blanket, Marine Band Draings, Under Water Reclamation Filling																									
A6 - Reclamation Filling (Underwater)																									

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			
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 Draings, 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 Draings, 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 Draings, Under Water Reclamation Filling																																	
A6 - Reclamation Filling (Underwater)																																	



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	
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	
TCE12																									
A4 - Geotextile / Sand Blanket, Marine Band Drains																									
A5 - Geotextile / Sand Blanket, Marine Band Draings, 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	
TCE13																									
A4 - Geotextile / Sand Blanket, Marine Band Drains																									
A5 - Geotextile / Sand Blanket, Marine Band Draings, 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	
TCE14																									
A1 - Silt Curtain																									
A2 - Stone Column and Seawall Construction																									
A4 - Geotextile / Sand Blanket, Marine Band Drains																									
A5 - Geotextile / Sand Blanket, Marine Band Draings, Under Water Reclamation Filling																									
A6 - Reclamation Filling (Underwater)																									

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				
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 Draings, 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	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105			
TCE16																																		
A5 - Geotextile / Sand Blanket, Marine Band Draings, 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 Draings, 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 Draings, Under Water Reclamation Filling																																		
A6 - Reclamation Filling (Underwater)																																		

### **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	
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 Draings, 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 Draings, 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 Draings, 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 Draings, Under Water Reclamation Filling																									
A6 - Reclamation Filling (Underwater)																									

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						
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																								
B2 - High PR Residential Foundations and High PR Residential Superstructure													106	106	106	106	106	106	106																	
B3 - High PR Residential Superstructure																				105	105	105	105	105	105	105	105	105	105	105						
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 Draings, 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 Draings, Under Water Reclamation Filling																																				
A6 - Reclamation Filling (Underwater)																																				
A7 - Reclamation Filling and Surcharging (Above water)																																				
A8 - Surcharge																																				
C1 - Medium PR Residential / GIC Foundations																																				
Int01																			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int02																			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
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																		
Int07													100	100	100	100	100	100																		
Int08													100	100	100	100	100	100																		
Int09													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	100	100	100	100	100

## **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	
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 Draings, 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 Draings, 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																									

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		
Int12													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Int13													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int14													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int15																																
Int16													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int17													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int18													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int19																																
Int20													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int21													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int22													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int23													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int24																																
Int25																																
Int26													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int27													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int28																																
Int29																																
Int30													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int31													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int32													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int33													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int34																																
Int35																																
Int36													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int37													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int38													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Int39													100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
SRM01	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	



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
Int12																								
Int13																								
Int14																								
Int15																								
Int16																								
Int17																								
Int18																								
Int19																								
Int20																								
Int21																								
Int22																								
Int23	100	100	100	100	100	100	100	100	100	100	100	100												
Int24	100	100	100	100	100	100	100	100	100	100	100	100												
Int25	100	100	100	100	100	100	100	100	100	100	100	100												
Int26																								
Int27																								
Int28	100	100	100	100	100	100	100	100	100	100	100	100												
Int29	100	100	100	100	100	100	100	100	100	100	100	100												
Int30																								
Int31																								
Int32																								
Int33																								
Int34																								
Int35																								
Int36																								
Int37																								
Int38																								
Int39																								
SRM01																								

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
<b>Predicted Construction Noise for TCNTE / Additional Sewerage Rising Main, dB(A)</b>																														
	Max																													
YTT-02f	71	71	71	71	71	71	70	70	70	70	70	71	71	71	71	71	60	60	60	60	60	60	60	60	60	60	60	60	60	
EHYC-01a	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	52	51	51	51	51	53	53	53	53	53	53	53	53	
LCNP-01	62	53	53	53	53	53	53	53	53	53	57	58	58	58	58	58	56	56	56	56	57	57	57	57	57	57	57	56		
A100-02j	71																	68	68	68	68	69	69	69	69	69	69	68		
A116-01c	57																													
A133a-01b	66																													
A113-01e	62																													
A113-12e	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).

Activities	2026												2027												2028																						
	Jan	Feb	March	Apr	May	June	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											
<b>Predicted Construction Noise for TCNTE / Additional Sewerage Rising Main, dB(A)</b>																																															
Max																																															
YTT-02f	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	53	53	53	53	53	53	53	53	53	53	53	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	0					
LCNP-01	62	55	55	55	55	55	60	60	60	60	60	60	60	60	60	60	60	60	60	60	62	62	62	62	62	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60						
A100-02j	71	68	68	68	68	68	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	68	68	68	68	68	68	68	68	68	68	68	68							
A116-01c	57																																														
A133a-01b	66																																														
A113-01e	62																																														
A113-12e	0																																														

## Note:

1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront 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).

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	
<b>Predicted Construction Noise for TCNTE / Additional Sewerage Rising Main, dB(A)</b>																									
Max																									
YTT-02f	71	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	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	0
A100-02j	71	68	68	68	68	68	68	68	68	68	68	68	0	0	0	0	0	0	0	0	0	0	0	0	0
A116-01c	57												57	56	56	56	56	56	56	56	56	56	56	56	0
A133a-01b	66																		66	66	66	66	66	66	0
A113-01e	62	61	61	61	61	61	61	61	61	61	61	61	56	56	56	56	56	54	54	54	54	54	54	0	
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	

Note:

1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront 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).

Predicted Construction Noise from Project, dB(A)	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
NSR	MAX																													
YTT-02f	74	73	73	74	74	74	74	74	74	74	74	74	64	64	62	61	61	60	60	60	65	65	65	65	60	60	60	60	59	
EHYC-01a	50	48	48	49	49	49	49	49	49	49	49	49	44	44	38	38	42	42	42	42	48	48	48	48	42	42	42	42	42	
LCNP-01	69	69	69	69	69	69	69	69	69	69	69	69	64	64	63	61	62	61	61	61	59	59	59	59	58	58	58	58	56	
A100-02j	65																			60	60	62	62	62	62	60	60	60	58	
A116-01c	63																													
A133a-01b	64																													
A113-01e	68																													
A113-12e	67																													
Predicted Construction Noise from TCNTE / Additional Sewerage Rising Main <sup>[4]</sup> , dB(A)	MAX																													
NSR	71	71	71	71	71	71	71	70	70	70	70	70	71	71	71	71	71	71	60	60	60	60	60	60	60	60	60	60		
YTT-02f	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	51	51	51	51	51	53	53	53	53	53	
EHYC-01a	62	53	53	53	53	53	53	53	53	53	53	53	57	58	58	58	58	58	56	56	56	56	56	57	57	57	57	57		
LCNP-01	71																			68	68	68	68	68	69	69	69	69	68	
A100-02j	57																													
A116-01c	66																													
A133a-01b	62																													
A113-12e	0																													
Predicted Cumulative Construction Noise, dB(A)	MAX																													
NSR	75	75	75	75	75	75	75	75	75	75	75	75	71	72	71	71	71	71	63	63	66	66	66	66	63	63	63	63	63	
YTT-02f	57	57	57	57	57	57	57	57	57	57	57	57	57	57	56	56	56	56	56	52	51	51	52	52	54	54	53	53	53	
EHYC-01a	69	69	69	69	69	69	69	69	69	69	69	69	65	65	65	63	64	63	63	63	61	61	61	61	61	61	61	61	59	
LCNP-01	71																			69	69	69	69	70	70	70	70	70	69	
A100-02j	64																													
A116-01c	68																													
A133a-01b	69																													
A113-01e	67																													

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).

### Note:

1. As a worst case scenario, the predicted construction noise is calculated using the distance between the notional centre of the workfront 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	MAX	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	
<b>Predicted Construction Noise from Project, dB(A)</b>																										
YTT-02f	74	0	0	0	0	0	0	0	0	0	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	
EHYC-01a	50	0	0	0	0	0	0	0	0	0	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	
LCNP-01	69	0	0	0	0	0	0	0	0	0	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	
A100-02]	65	0	0	0	0	0	0	0	0	0	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	
A116-01c	63										63	63	62	62	62	62	63	63	63	63	63	63	63	63		
A133a-01b	64																			64	64	64	64	64	64	
A113-01e	68	0	0	0	0	0	0	0	0	0	68	68	68	68	68	67	67	67	67	68	68	68	68	68		
A113-12e	67	0	0	0	0	0	0	0	0	0	67	67	67	67	67	67	67	67	67	67	67	67	67	67		
<b>Predicted Construction Noise from TCNTE / Additional Sewerage Rising Main [4], dB(A)</b>																										
NSR	MAX																									
YTT-02f	71	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	0	
LCNP-01	62	60	60	60	60	60	60	60	60	60	60	60	60	60	54	54	54	54	54	54	54	54	54	54	54	
A100-02]	71	68	68	68	68	68	68	68	68	68	68	68	68	68	0	0	0	0	0	0	0	0	0	0	0	
A116-01c	57														57	56	56	56	56	56	56	56	56	56	56	56
A133a-01b	66																			66	66	66	66	66	66	
A113-01e	62	61	61	61	61	61	61	61	61	61	61	61	61	56	56	56	56	56	56	54	54	54	54	54	54	
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		
<b>Predicted Cumulative Construction Noise, dB(A)</b>																										
NSR	MAX																									
YTT-02f	75	0	0	0	0	0	0	0	0	0	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	
EHYC-01a	57	0	0	0	0	0	0	0	0	0	47	47	47	47	47	47	47	47	47	47	47	47	47	47		
LCNP-01	69	60	60	60	60	60	60	60	60	60	65	65	64	64	63	63	63	63	64	64	64	64	64	64		
A100-02]	71	68	68	68	68	68	68	68	68	68	70	70	65	65	65	65	65	65	65	65	65	65	65	65		
A116-01c	64												64	64	63	63	63	63	64	64	64	64	64	64		
A133a-01b	68																		68	68	68	68	68	68		
A113-01e	69	61	61	61	61	61	61	61	61	61	69	69	68	68	68	68	68	68	68	68	68	68	68	68		
A113-12e	67	0	0	0	0	0	0	0	0	0	67	67	67	67	67	67	67	67	67	67	67	67	67	67		

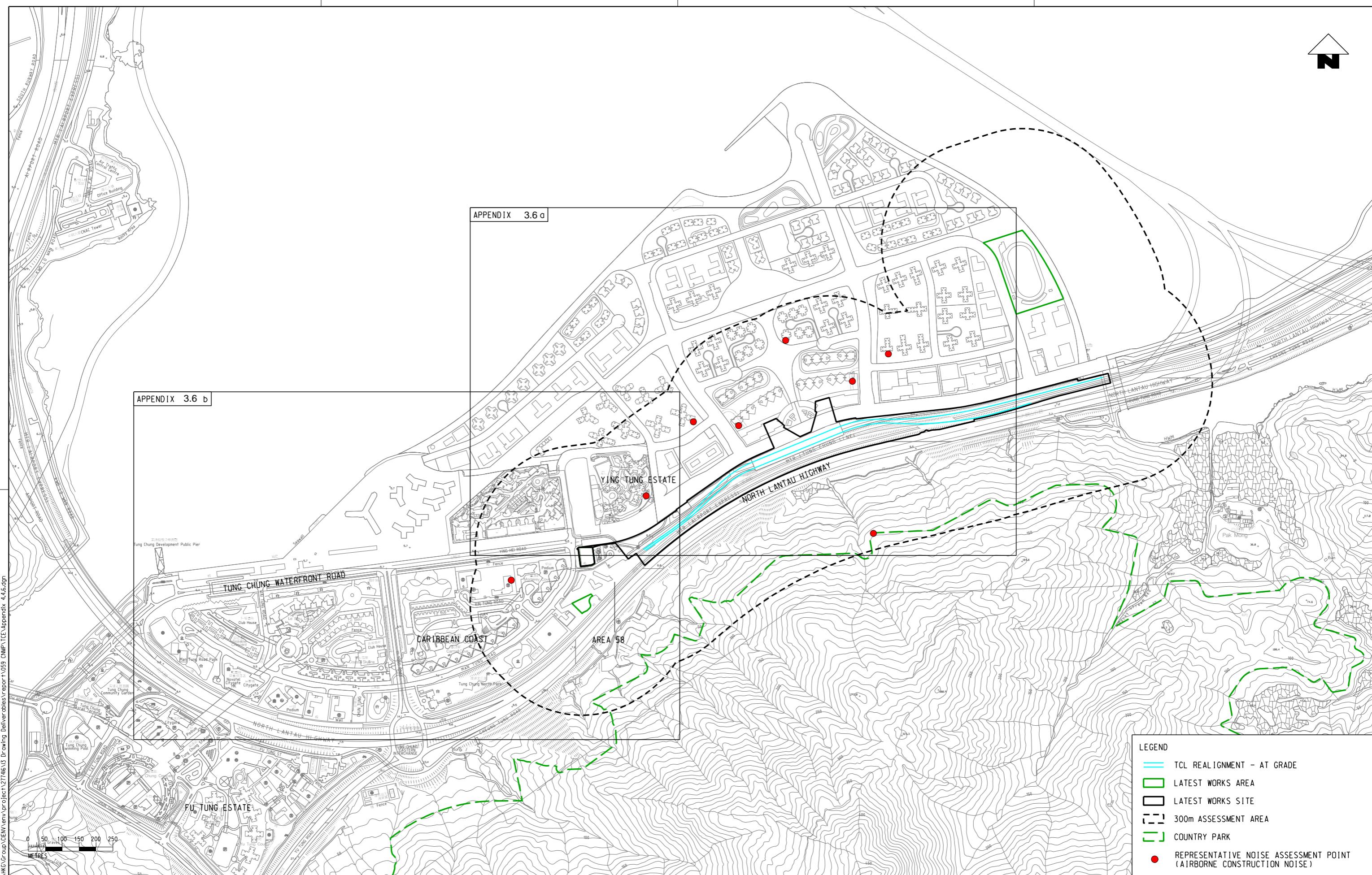
Note:

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.

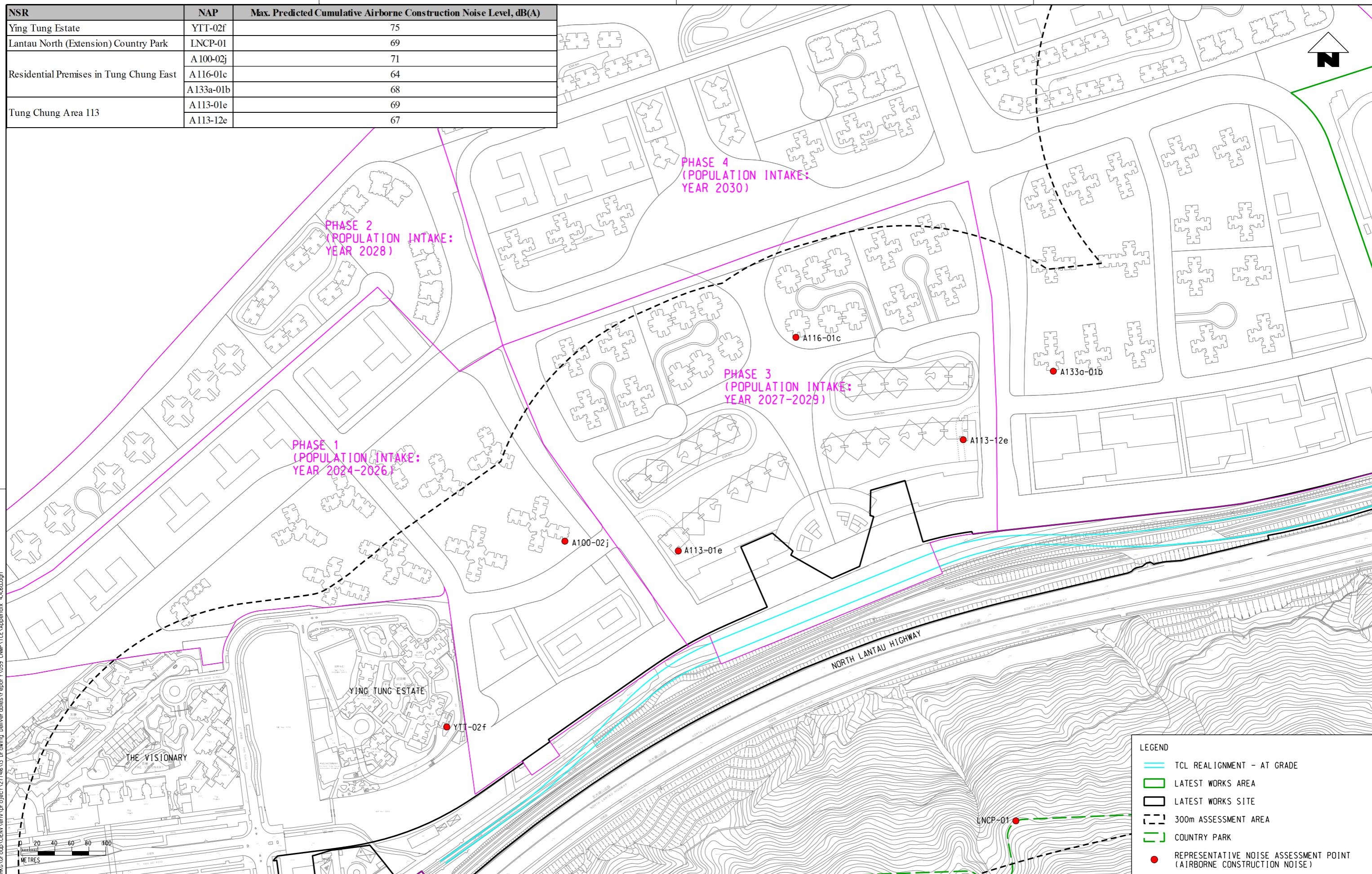
2. Text in red in shaded cell denotes exceedance of relevant criterion.

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).



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## 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
<b><i>Construction Noise</i></b>						
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"> <li>• only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme;</li> <li>• 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;</li> <li>• plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs;</li> <li>• silencers or mufflers which available on construction equipment should be properly fitted and maintained during the construction works;</li> <li>• spoil transportation routes should be directed away from NSRs as far as practicable;</li> <li>• mobile plant should be sited as far away from NSRs as possible and practicable;</li> <li>• material stockpiles, site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities; and</li> <li>• noise monitoring at selected NSRs should be conducted as far as possible.</li> </ul>	Control construction airborne noise	Contractor	All construction sites (Tung Chung East Station and realignment works)	Construction phase
S3.5.3	N2	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	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 <sup>2</sup> 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).