

FORM 5
ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE
(CHAPTER 499)
SECTION 13(1)

Application for Variation of an Environmental Permit

PART A PREVIOUS APPLICATIONS

- No previous application for variation of an environmental permit.
 The environmental permit was previously amended.

Application No. : VEP-428/2014 (Date of Application: 27 January 2014)

PART B DETAILS OF APPLICANT

B1. Name : (person or company)

North Development Office, Civil Engineering and Development Department

[Note : In accordance with section 13(1) of the Ordinance, the person holding an environmental permit or a person who assumes responsibility for the designated project may apply for variation of the environmental permit.]

B2. Business Registration No. :
(if applicable)

B3. Correspondence Address :

B4. Name of Contact Person :

B5. Position of Contact Person :

B6. Telephone No. :

B7. Fax No. :

B8. E-mail Address : (if any)

PART C DETAILS OF CURRENT ENVIRONMENTAL PERMIT

C1. Name of the Current Environmental Permit Holder :

Civil Engineering and Development Department

C2. Application No. of the Current Environmental Permit : VEP-428/2014

C3. The Current Environmental Permit was Issued in : month / year

06 | 2014

Important Notes : Please submit the application together with
(a) 3 copies of this completed form; and
(b) appropriate fee as stipulated in the Environmental Impact Assessment (Fees) Regulation
to the Environmental Protection Department at the following address :
The EIA Ordinance Register Office,
27th floor, Southorn Centre, 130 Hennessy Road,
Wan Chai, Hong Kong.

Tick (✓) the appropriate box

PART D PROPOSED VARIATIONS TO THE CONDITIONS IN CURRENT ENVIRONMENTAL PERMIT

D1. Condition(s) in the Current Environmental Permit :	D2. Proposed Variation(s) :	D3. Reason for Variation(s) :	D4. Describe the environmental changes arising from the proposed variation(s) :	D5. Describe how the environment and the community might be affected by the proposed variation(s) :	D6. Describe how and to what extent the environmental performance requirements set out in the EIA report previously approved or project profile previously submitted for this project may be affected :	D7. Describe any additional measures proposed to eliminate, reduce or control any adverse environmental impact arising from the proposed variation(s) and to meet the requirements in the Technical Memorandum on Environmental Impact Assessment Process :
<p>(a) EP Condition 3.4: "All measures recommended in the landscape proposal deposited under Condition 2.6 of this Permit shall be fully implemented and maintained."</p> <p>(b) EP Condition 5.2: "The Permit Holder shall deposit with the Director 3 copies of an audit report, certified by the ET Leader and verified by the IEC, demonstrating the satisfactory completion of the measures recommended in the landscape proposal as described in conditions 2.6 and 3.4 of this Permit. The audit report shall be deposited within 3 weeks after completion of the mitigation measures."</p> <p>(c) Figure 3, Figure 4 and Table 1</p>	<p>(a) EP Condition 3.4 is proposed to be varied to: "All measures recommended in the landscape proposal deposited under Condition 2.6 of this Permit shall be fully implemented."</p> <p>(b) EP Condition 5.2 is proposed to be varied to: "The Permit Holder shall submit 3 copies of <u>as-built drawing accepted by the maintenance parties</u> to the Director, demonstrating the satisfactory completion of the measures recommended in the landscape proposal as described in conditions 2.6 and 3.4 of this Permit. <u>The landscape areas shall be maintained in accordance with the submitted as-built drawings.</u>"</p> <p>(c) Vary the extent of noise mitigation measures in Figure 3, Figure 4 and Table 1 to exclude the portion of noise mitigation measures affected by the construction of the Revised Trunk Road T4 in Sha Tin (see Attachment 1).</p>	<p>(a) & (b) Update of as-built landscape drawing to clearly demarcate the maintenance parties for application of Further Environmental Permit.</p> <p>(c) The existing noise mitigation measures on Trunk Road T3 covered in EP-135/2002/J will need to be temporarily modified and reprovisioned / permanently removed to facilitate the construction of the Revised Trunk Road T4 in Sha Tin. The variation is to facilitate the recommended noise barrier modification works.</p>	<p>(a) & (b) There will be no environmental change arising from the proposed variation.</p> <p>(c) Please refer to Section 4.7.2.3 of the approved EIA Report of Revised Trunk Road T4 in Sha Tin (Register No. AEIAR 231/2021) (see Attachment 2). No adverse road traffic noise impact arising from the variation would be anticipated.</p>	<p>(a) & (b) The environment and the community will not be affected by the proposed variation.</p> <p>(c) Please refer to Section 4.7.2.3 of the approved EIA Report of Revised Trunk Road T4 in Sha Tin (Register No. AEIAR 231/2021) (see Attachment 2). No adverse road traffic noise impact arising from the variation would be anticipated.</p>	<p>(a) & (b) The environmental performance requirements set out in the EIA report previously approved for this project will not be affected.</p> <p>(c) Please refer to Section 4.7.2.7 of the approved EIA Report of Revised Trunk Road T4 in Sha Tin (Register No. AEIAR 231/2021) (see Attachment 2). No adverse road traffic noise impact arising from the variation would be anticipated.</p>	<p>(a) & (b) No additional measures will be needed.</p> <p>(c) Please refer to Section 4.11.1.1 of the approved EIA Report of Revised Trunk Road T4 in Sha Tin (Register No. AEIAR 231/2021) (see Attachment 2). The assessment results indicate that the mitigated noise levels at all NSRs would comply with the noise criteria set out in the EIAO-TM with the implementation of the proposed noise mitigation measures. Submission of Construction Noise Management Plan and Traffic Noise Mitigation Measures Plan before construction of the Revised Trunk Road T4 in Sha Tin would be required in accordance with Conditions 2.13 and 2.14 of EP-593/2021 to ascertain the performance of the noise mitigation measures (see Attachment 3).</p>

PART E DECLARATION BY APPLICANT

E1. I hereby certify that the particulars given above are correct and true to the best of my knowledge and belief. I understand the environmental permit may be suspended, varied or cancelled if any information given above is false, misleading, wrong or incomplete.

[Redacted Signature]

Signature of Applicant

[Redacted Full Name]

Full Name in Block Letters

[Redacted Position]

Position



on behalf of Civil Engineering and Development Department
Company Name and Chop (as appropriate)

23 December 2022
Date

NOTES :

1. A person who constructs or operates a designated project in Part I of Schedule 2 of the Ordinance or decommissions a designated project listed in Part II of Schedule 2 of the Ordinance without an environmental permit or contrary to the permit conditions commits an offence under the Ordinance and is liable to a maximum fine of \$5,000,000 and to a maximum imprisonment for 2 years.
2. A person for whom a designated project is constructed, operated or decommissioned and who permits the carrying out of the designated project in contravention of the Ordinance commits an offence and is liable to a maximum fine of \$5,000,000 and to a maximum imprisonment for 2 years.

Table 1 – Schedule of Recommended Noise Mitigation Measures to be implemented before commencement of operation of the Project (to be read in conjunction with Figures 2, 3, 4, 5, 7, 12, 14 and 15 attached to this Permit)

Mitigation Measures	Location
Low noise road surfacing (LNRS)	On Trunk Road T3 (see Figure 2)
A 5.8m high with 3m cantilever of approx. 55m long (see segment no. 1 in Figure 3), A 5.8m high with 5m cantilever of approx. 90m long (see segment no. 2 in Figure 3), A 5.8m high with 3m cantilever of approx. 75m long (see segment no. 3 in Figure 3), A 3m high vertical barrier of approx. 130m long (see segment no. 4 in Figure 3), and	near Hilton Plaza , Scenery Court and Vila le Parc
A 5.8m high with 1.5m cantilever of approx. 190m long (see segment no. 9 in Figure 3), and	near Sha Tin Clinic, Sha Tin Government School and Caritas School
A 5m high vertical barrier of approx. 120m long (see segment no. 10 in Figure 3), A 4m high vertical barrier of approx. 150m long (see segment no. 11 in Figure 3), A 5m high vertical barrier of approx. 275m long (see segment no. 12 in Figure 3), A 6m high vertical barrier of approx. 100m long (see segment no. 15 in Figure 3), and A 5m high vertical barrier of approx. 205m long (see segment no. 16 in Figure 3).	near Pine Ridge Church, Villa Maria, Man Lin Villa, On Ting Terrace and Tung Lo Wan Village
A 3m high vertical barrier of approx. 270m long (see segment no. 17 in Figure 3), A partial enclosure of approx. 180m long (see segment no. 18 in Figure 4), A 5.8m high with 5m cantilever of approx. 150m long (see segment no. 19 in Figure 4), A 5.8m high vertical barrier of approx. 15m long (see segment no. 20 in Figure 4), A 5.8m high with 5m cantilever of approx. 85m long (see segment no. 21 in Figure 4),	near Chik Chuen Street, Kam Shan Building, Sha Tin Public School and Mei Lam Estate

<p>A 3m high vertical barrier of approx. 120m long (see segment no. 22 in Figure 4),</p> <p>A 5.5m high vertical barrier of approx. 85m long (see segment no. 23 in Figure 4),</p> <p>A 5.8m high with 1.5m cantilever of approx. 215m long (see segment no. 24 in Figure 4),</p> <p>A full enclosure of approx. 130m long (see segment no. 25 in Figure 4),</p> <p>A partial enclosure of approx. 190m long (see segment no. 26 in Figures 4 and 15),</p> <p>A 5m high vertical barrier of approx. 75m long (see segment no. 27 in Figure 4), and</p> <p>A 5.8m high with 5m cantilever of approx. 145m long (see segment no. 28 in Figure 4).</p>	
<p>A 4m high vertical barrier of approx. 75m long (see segment no. 29 in Figure 4),</p> <p>A 4.5m high vertical barrier of approx. 50m long (see segment no. 54 in Figure 4).</p> <p>A 5.8m high with 4m cantilever of approx. 85m long (see segment no. 55 in Figure 4).</p>	<p>near Chik Chuen Street, Kam Shan Building, Sha Tin Public School and Mei Lam Estate</p>
<p>A 5m high vertical barrier of approx. 35m long (see segment no. 30 in Figure 4), and</p> <p>A 5.8m high with 1.5m cantilever of approx. 300m long (see segment no. 31 in Figures 4 and 12).</p> <p>A 4 m high vertical reflective barrier of approx 10m long (see segment no. 31a in Figures 5 and 12)</p> <p>A 3 m high vertical reflective barrier of approx. 5m long (see segment no. 31b in Figures 5 and 12)</p> <p>A 5.8m high with 1.5m cantilever of approx. 35m long (see segment no. 31c in Figures 5 and 12)</p> <p>A 5.8m high with 1.5m cantilever of approx. 50m long (see segment no. 31d in Figures 5 and 12)</p>	<p>near Tai Wai New Village</p>
<p>A 5.8m high with 3m cantilever of approx. 350m long (see segment no. 32 in Figures 4 and 15),</p>	<p>near Glamour Garden, Grandeur Garden, Holford Garden, Lau Pak Lok</p>

<p>A partial enclosure of approx. 295m long (see segment no. 33 in Figures 4, 5 and 15),</p> <p>A partial enclosure of approx. 125m long (see segment no. 34 in Figures 4 and 5),</p> <p>A 5.8m high with 1.5m cantilever of approx. 120m long (see segment no. 35 in Figures 4 and 5),</p> <p>A 5.5m high vertical barrier of approx. 75m long (see segment no. 36 in Figure 5), and</p> <p>A 5.8m high with 5m cantilever of approx. 115m long (see segment no. 37 in Figure 5).</p>	<p>Secondary School, Cheng Wing Gee College and planned development at Tai Wai Depot</p>
<p>A partial enclosure of approx. 50m long (see segment no. 38 in Figure 5),</p> <p>A 5.8m high with 5m cantilever of approx. 170m long, with the first 3.0m of this cantilever abutting the Underpass to be in the form of a vertical noise barrier type of 7.5m high. (see segment no. 39 in Figures 5 and 14),</p> <p>A 4m high vertical barrier of approx. 137m long (see segment no. 40 in Figures 5 and 7),</p> <p>A 3m high vertical barrier of approx. 50m long (see segment no. 41 in Figure 5),</p> <p>A 4m high vertical barrier of approx. 80m long (see segment no. 42 in Figure 5),</p> <p>A 5.8m high with 1.5m cantilever of approx. 70m long (see segment no. 52 in Figure 5), and</p> <p>A 5m high vertical barrier of approx. 35m long (see segment no. 53 in Figure 5).</p>	<p>near Glamour Garden, Grandeur Garden, Holford Garden, Lau Pak Lok Secondary School, Cheng Wing Gee College and planned development at Tai Wai Depot</p>
<p>A 5m high vertical barrier of approx. 120m long (see segment no. 43 in Figure 5),</p> <p>A 6m high vertical barrier of approx. 120m long (see segment no. 44 in Figure 5).</p>	<p>near planned development at Vista Do Vale, Area 37 and Area 38</p>
<p>A 5m high vertical barrier of approx. 55m long (see segment no. 48 in Figure 4).</p>	<p>near planned development at Mui Lee</p>

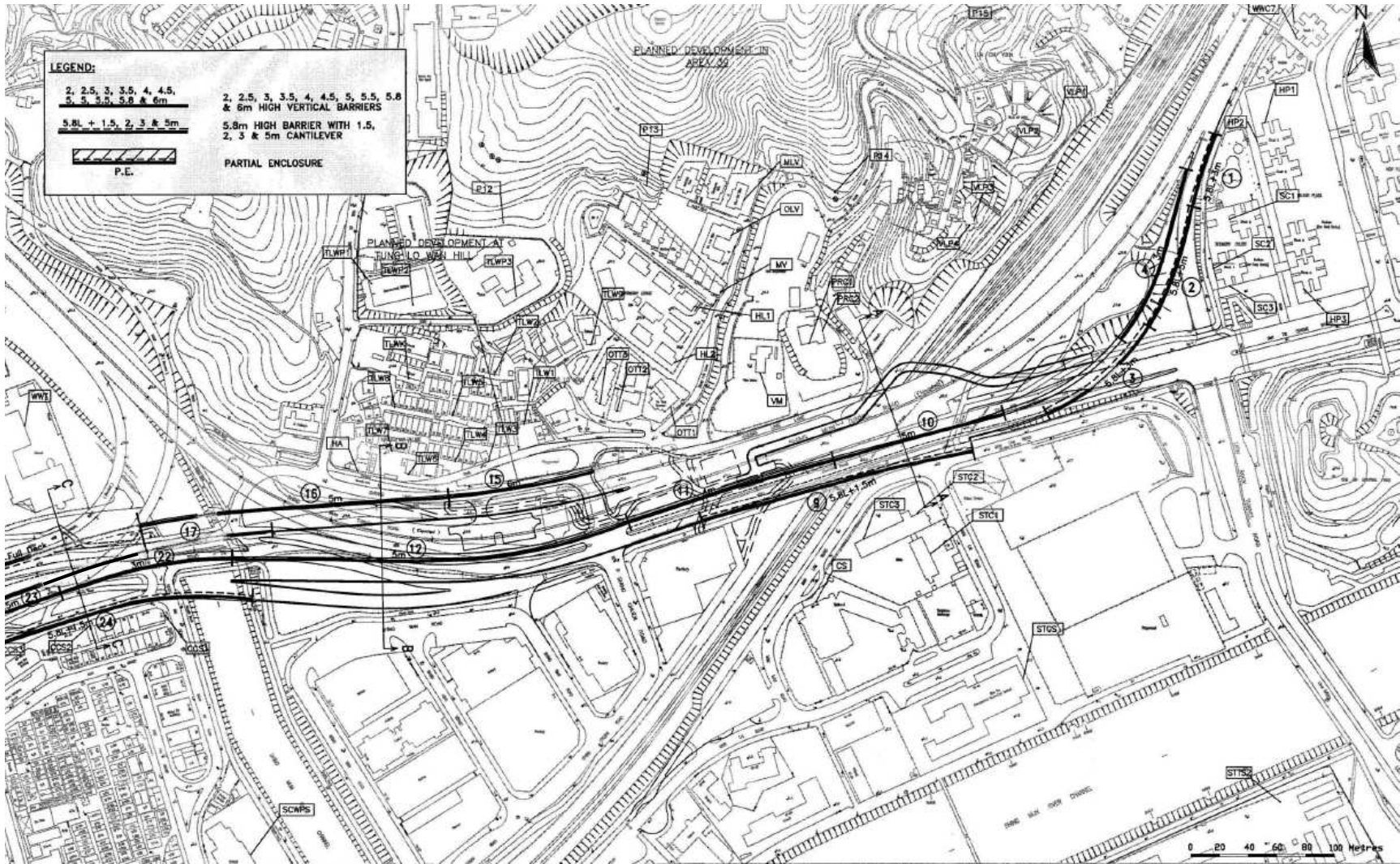


Figure 3

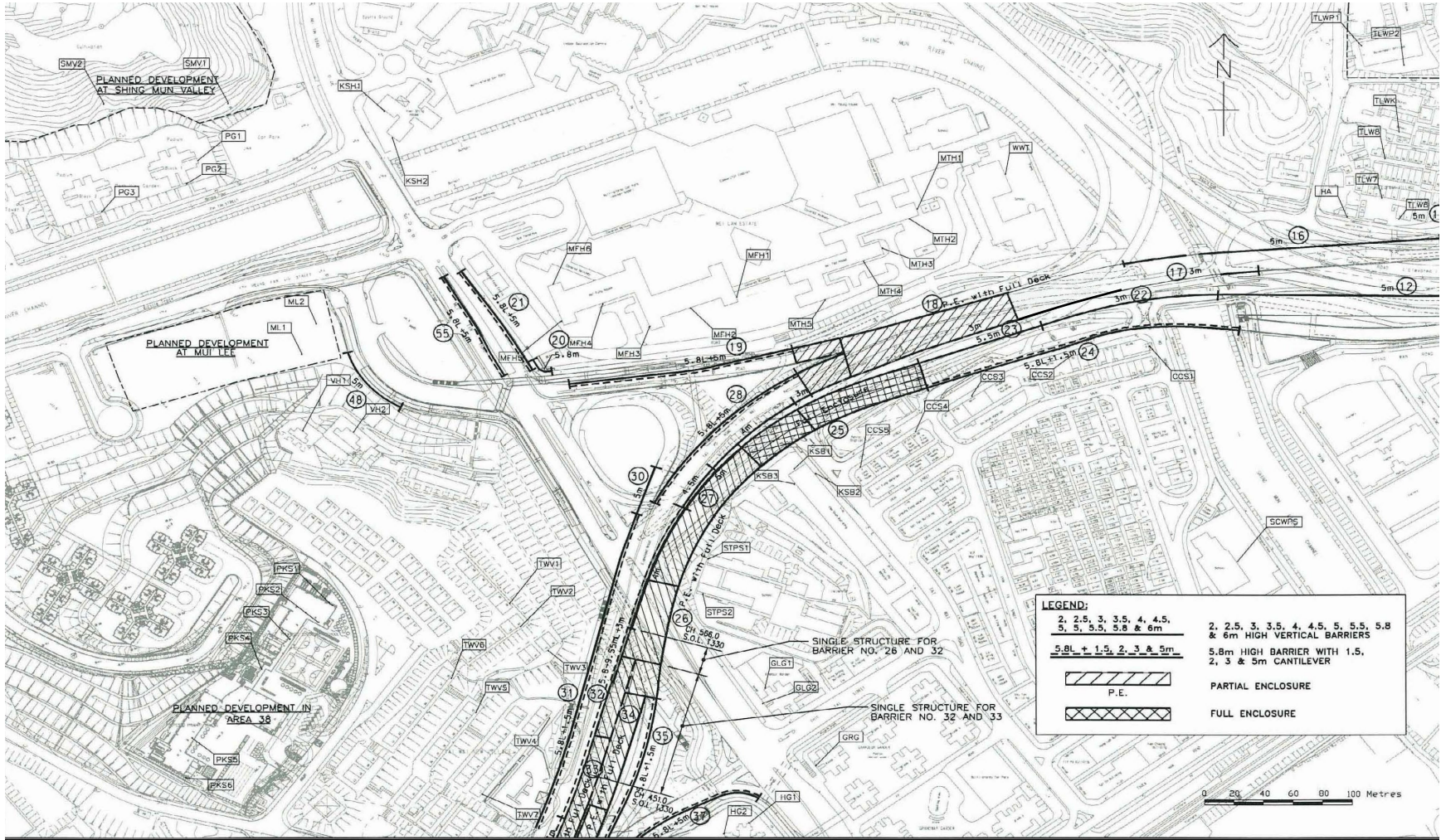


Figure 4

- 4.7.2.2 Referring to **Table 4.6** and [Appendix 4.9](#), the predicted noise levels at the representative NSRs are in the range of 45dB(A) to 82dB(A) respectively. Representative NSRs exceed the noise criteria by up to 17 dB(A). Hence, direct mitigation measures should be considered to alleviate the adverse traffic noise impact according to S4.6.2.8.

Traffic Noise Impact during Interim Period

- 4.7.2.3 Referencing the Environmental Permit (EP) of Sha Tin New Town – Stage II, Trunk Road T3 (Tai Wai) (EP-135/2002/J), there are four locations (refer to works ID 1A, 2, 3 and 4 in 60579757/R04/419 of [Appendix 4.2](#) for location and **Table 4.7** below for details) where existing noise mitigation measure covered in the EP will need to be temporarily modified and reprovisioned due to proposed works for the Project. This is due to insufficient headroom for the construction of proposed slip road SR2-1, SR3-1, SR4-1 and insufficient works area for the proposed road widening works for Shing Mun Tunnel Road (SMTR) (EB) near reserved T4 connection point CP-A. There is one location (refer to Works ID 1B in **Table 4.7** for details) where existing noise mitigation measure covered in the EP will be permanently removed. This is due to conflict at location of connection of proposed slip road SR3-1 to Tsing Sha Highway with the existing noise mitigation measure.

- 4.7.2.4 An assessment has been conducted for the interim period during the modification/temporary removal of existing noise mitigation measures of Trunk Road T3 (Tsing Sha Highway) in order to assess potential traffic noise impact on representative NSRs. A summary of the tentative schedule for modification/temporary removal and reprovision of existing noise mitigation measures is presented in **Table 4.7** (for details of the construction programme, refer to [Appendix 4.2](#)).

Table 4.7 Tentative Schedule for Modification/Temporary Removal and Reprovision of Existing Noise Mitigation Measures

Works ID	Location of Works	Existing Noise Mitigation Measures	Tentative Date for Modification/ Removal	Tentative Date for Reprovision	Approximate Extent, m	Duration without Measure, months
1A	Works Area A2	Semi-enclosure ^[1]	Sep 2026	Jan 2027 – Feb 2027	55m	6
1B	Works Area A2	3m Vertical Noise Barrier ^[2]	Oct 2026	Permanently removed for the construction of T4 (EB) Slip Road SR3-1	60m	N/A
2	Works Area A2	5m Vertical Noise Barrier ^[3]	Oct 2026	Feb 2027 – Mar 2027	10m	6
3	Works Area A3 (CP-A)	6m Vertical Noise Barrier ^[4]	Jun 2027 – Jul 2027	Sep 2027 – Nov 2027	5m	6
4	Works Area A3 (T4(WB) SR4-1)	5.8m (H) with 3m cantilever ^[5]	Nov 2026	Jan 2027 – Feb 2027	20m	4

Notes:

[1] Existing Noise Mitigation Measure ID “SE2” in Appendix 4.6. Only the horizontal top panels of the semi-enclosure SE2 will be temporarily removed and the vertical barriers on the sides of SE2 will be retained for Works ID 1A.

[2] Existing Noise Mitigation Measure ID “E17” in Appendix 4.6

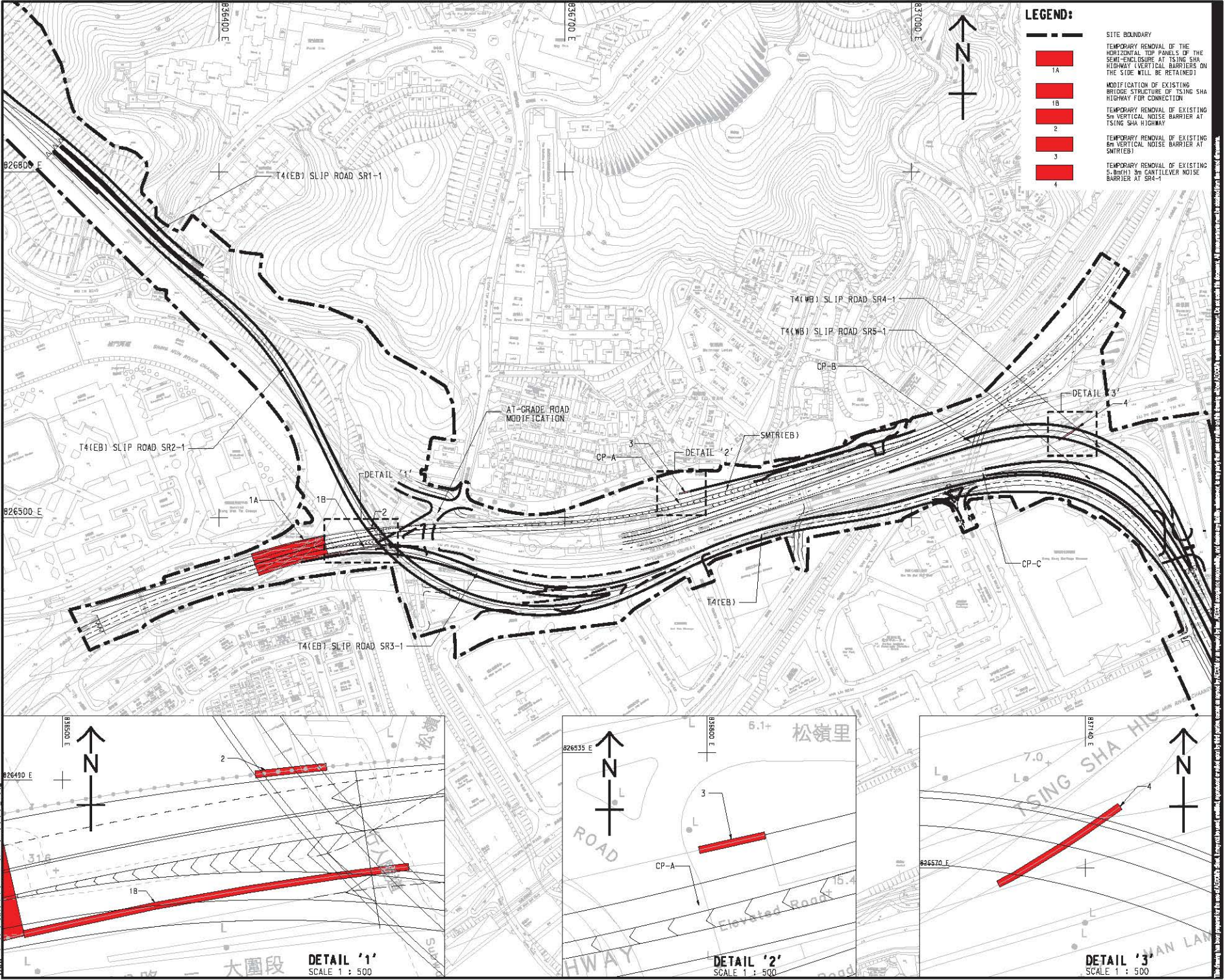
[3] Existing Noise Mitigation Measure ID “E15” in Appendix 4.6

[4] Existing Noise Mitigation Measure ID “E16” in Appendix 4.6

[5] Existing Noise Mitigation Measure ID “E24” in Appendix 4.6

- 4.7.2.5 With consideration of the tentative dates for the above works, road traffic noise assessment has been conducted for the representative NSRs for the below 2 scenarios, adopting traffic data for Year 2028 (as the highest traffic flow occurs between Year 2026 to Year 2028) for conservative assessment:

Project Management in Charge: Designer: Checker: Approver: IBO-A1 (B)mm x 617mm



LEGEND:

- 1A
- 1B
- 2
- 3
- 4

SITE BOUNDARY

TEMPORARY REMOVAL OF THE HORIZONTAL TOP PANELS OF THE SEMI-ENCLOSURE AT TSING SHA HIGHWAY VERTICAL BARRIERS ON THE SIDE WILL BE RETAINED

MODIFICATION OF EXISTING BRIDGE STRUCTURE OF TSING SHA HIGHWAY FOR CONNECTION

TEMPORARY REMOVAL OF EXISTING 5m VERTICAL NOISE BARRIER AT TSING SHA HIGHWAY

TEMPORARY REMOVAL OF EXISTING 8m VERTICAL NOISE BARRIER AT SMTR(EB)

TEMPORARY REMOVAL OF EXISTING 5.8m(19') 3m CANTILEVER NOISE BARRIER AT SR4-1

AECOM

PROJECT NO.
REVISED TRUNK ROAD T4 IN SHA TIN

CLIENT
 土木工程發展署
 Civil Engineering and Development Department

CONSULTANT
 AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS
 SPT&M&C

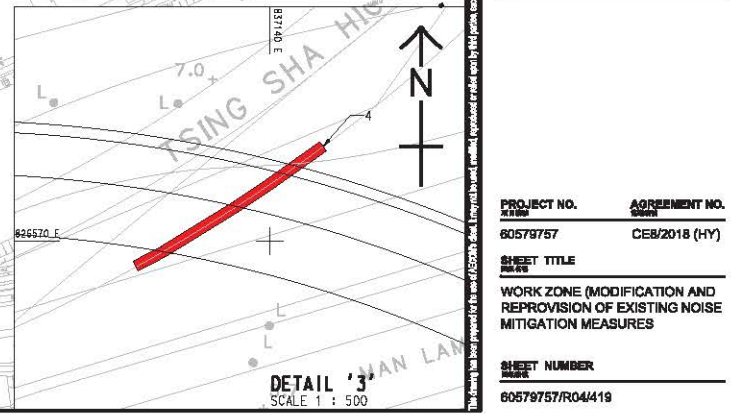
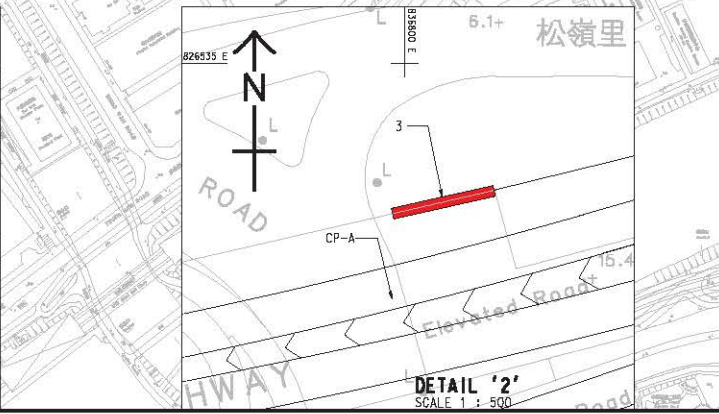
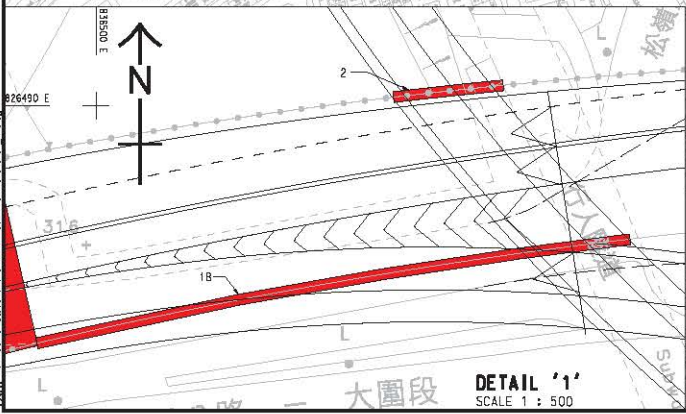
ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK

STATUS

SCALE: A3 1:3000 DIMENSION UNIT: METRES

KEY PLAN



PROJECT NO. 60579757 **AGREEMENT NO.** CE8/2018 (HY)

SHEET TITLE
 WORKS (MODIFICATION AND REPROVISION OF EXISTING NOISE MITIGATION MEASURES)

SHEET NUMBER
 60579757/R04419

This drawing has been prepared for the use of the project described above. It is not to be used for any other purpose without the written consent of AECOM. AECOM does not accept any liability for any loss or damage, howsoever caused, arising from the use of this drawing.

- Interim Scenario 1: Works ID 1A, 1B, 2 & 4; and
- Interim Scenario 2: Works ID 3.

4.7.2.6 The predicted noise levels at the representative NSRs nearest to the works (detailed in **Table 4.7**) with the existing noise mitigation measures has been compared with that during their modification/removal and is presented in [Appendix 4.18](#).

4.7.2.7 The detailed results indicate that the change in predicted noise levels at the representative NSRs during modification/temporary removal of the stated extent of mitigation measures (presented in **Table 4.7**) will be less than 1.0 dB(A) and considered to be insignificant. Furthermore, for both Interim Scenarios, except Works ID 1B in Interim Scenario 1, duration of absence of the noise mitigation measures is estimated to be 4 - 6 months before being reprovisioned, and the actual duration is subject to Contractor's arrangement during later construction phase.

4.8 Mitigation of Environmental Impacts

4.8.1 Construction Noise

Construction Noise during non-restricted working hours

4.8.1.1 In order to reduce the excessive noise impact at the affected NSRs during non-restricted working hours, mitigation measures such as adopting quiet PME, movable noise barriers and temporary noise barriers is recommended. The Contractor(s) may be able to obtain particular models of plant that are quieter than the PMEs given in GW-TM. It is considered too restrictive to specify that a Contractor has to use specific items of plant for the construction operations. It is practical to specify the total SWL of all plant to be used on site so that the Contractor has the flexibility to select plant to suit his needs.

4.8.1.2 The use of quality PME associated with the construction works is prescribed in EPD's Quality Powered Mechanical Equipment (QPME) database, which contains the SWLs for quality/quiet PME of various types, brands and models. The SWLs for quality PMEs adopted for construction noise assessment during non-restricted hours are detailed in [Appendix 4.10](#).

4.8.1.3 To alleviate the construction noise impact on the affected NSRs, movable noise barriers have been proposed for excavator, mobile crane, loader, backhoe, dump truck, dump truck with grab, piling (large diameter bored, RCD), piling (large diameter bored, oscillator), crawler crane (mobile, diesel), roller (vibratory), paint line marker, cherry picker, crane lorry, crane, welding set, lorry, breaker (hand-held, mass >10kg and <20kg), poker (vibratory, hand-held), concrete lorry mixer, concrete mixer, bar bender and cutter (electric), saw (circular, wood), water pump (submersible, electric), breaker (hand-held, mass <= 10kg), piling (vibrating hammer), chisel, drill rig (rotary type (diesel)), asphalt paver, cutter (circular, steel), drilling rig, etc. Movable temporary noise barriers that can be located close to noisy plant and be moved iteratively 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 14kg/m² on a skid footing with 25mm thick internal sound absorptive lining. A typical configuration of noise barrier and portable noise enclosure is shown in [Appendix 4.12](#). 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. It is anticipated that suitably designed barriers could achieve at least 5 - 10 dB(A) reduction.

4.8.1.4 The use of full enclosure has been considered in this assessment to shelter relatively static plant including concrete pump, air compressor, grout mixer, grout pump, and generator. This type of enclosure is expected to provide approximately 15 dB(A) noise reduction.

4.8.1.5 Quieter construction method such as silent piling by Press-in method is adopted as an alternative of traditional sheet piling. A sheet pile is clipped and pressed under the ground. Noise can be minimized by press-in sheet piles with drilling simultaneously for piling works

4.10.2 Operation Phase

- 4.10.2.1 No adverse traffic noise impact is anticipated from Project contribution with the proposed mitigation measures in place. Road traffic noise levels should be monitored at representative NSR, which are in the vicinity of the recommended direct mitigation measures, during the first year after road opening. The purpose of the monitoring is to ascertain that the recommended mitigation measures are effective in reducing the noise levels.

4.11 Conclusion

4.11.1 Construction Phase

- 4.11.1.1** The assessment for the potential construction noise impact of the Project has been conducted. The assessment results indicate that the mitigated noise levels at all NSRs would comply with the noise criteria set out in the EIAO-TM with the implementation of the proposed noise mitigation measures, including good site practices, use of QPME, deployment of construction noise barriers and enclosure, and provision of minimum separation between the affected school and the critical construction activity during examination period. Thus, no adverse construction noise impact arising from the Project would be anticipated. A construction noise management plan, which to verify the inventory of noise sources, and to assess the effectiveness and practicality of all identified measures for mitigating the construction noise impact of the project, would be prepared during the design / tendering and implementation stage of the construction works. Regular site environmental audit during construction phase is recommended to ensure proper implementation of mitigation measures and good site practices.

4.11.2 Operation Phase

- 4.11.2.1 The assessment for the potential road traffic noise impact from operation of the Project has been conducted. The assessment results indicate that the predicted road traffic noise levels at some of the representative NSRs would exceed the noise criteria under unmitigated scenario.
- 4.11.2.2 Although some of the NSRs still exceed the noise criteria under mitigated scenario, with the implementation of noise mitigation measures including LNRS, vertical noise barriers/cantilever noise barriers and semi/ full enclosures on some Project roads, the exceedances were dominantly contributed by the other existing roads. The contributions from the Project roads to the overall noise levels at all NSRs are all less than 1.0 dB(A) and all the predicted noise levels of the Project roads would comply with the noise criteria. Thus, no adverse road traffic noise impacts arising from the Project would be anticipated.

Submission of Construction Noise Management Plan before Construction

- 2.12 The Permit Holder shall include the construction noise mitigation measures recommended in Sections 4.8.1.1 to 4.8.1.10 of the EIA report (Register No. AEIAR-231/2021) and the plant inventory in Appendix 4.10 of the EIA Report (Register No. AEIAR-231/2021) into the tender document for the construction of the Project (tender document). If there is any change to the construction noise mitigation measures and/or plant inventory recommended in the EIA Report (Register No. AEIAR-231/2021) before the tender invitation for construction of the Project (the invitation), the Permit Holder shall, no later than 2 months before the invitation, deposit with the Director 3 hard copies and 1 electronic copy of a Pre-tender Construction Noise Management Plan (Pre-tender CNMP) and include the deposited Pre-tender CNMP in the tender document.
- 2.13 The Permit Holder shall, no later than 2 months before the commencement of construction of the Project, deposit with the Director 4 hard copies and 1 electronic copy of a Construction Noise Management Plan (CNMP). If there is any change to the construction noise mitigation measures and/or plant inventory recommended in the CNMP, the Permit Holder shall, no later than 1 month before the implementation of any such change, deposit with the Director 4 hard copies and 1 electronic copy of an updated CNMP. The Pre-tender CNMP, CNMP and updated CNMP shall verify and update the inventory of noise sources, and recommend all identifiable construction noise mitigation measures in Sections 4.8.1.2 to 4.8.1.6 of the EIA Report (Register No. AEIAR-231/2021), including the use of quieter powered mechanical equipment such as hydraulic crusher for demolition; quieter construction methods such as silent piling by Press-in method for sheet piles and use of chemical expansion agent for excavation; and the use of temporary noise barriers, enclosures and insulation fabric, for mitigating the construction noise impact of the project. The CNMP and updated 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. The CNMP and updated CNMP shall be certified by the ET Leader and verified by the IEC as conforming to the relevant information and recommendations of the EIA Report (Register No. AEIAR-231/2021). All mitigation measures recommended and requirements specified in the CNMP and the updated CNMP shall be fully implemented.

Submission of Traffic Noise Mitigation Measures Plan

- 2.14 The Permit Holder shall, no later than 1 month before the commencement of construction of the Project, submit 4 hard copies and 1 electronic copy of a Traffic Noise Mitigation Measures Plan (TNMMP) to the Director for approval. If there is any change to the traffic noise mitigation measures recommended in the approved TNMMP, the Permit Holder shall, no later than 1 month before the implementation of any such change, deposit with the Director 4 hard copies and 1 electronic copy of an updated TNMMP. The TNMMP and the updated TNMMP shall review the noise mitigation measures and demonstrate that the traffic noise performance requirements set out in the EIA Report (Register No. AEIAR-231/2021) will not be exceeded with the mitigation measures in place. The TNMMP and the updated TNMMP 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. The TNMMP and the updated TNMMP shall be certified by the ET Leader and verified by the IEC as conforming to the findings and recommendations of the



Environmental Permit No. EP-593/2021
環境許可證編號 EP-593/2021

EIA Report (Register No. AEIAR-231/2021). All mitigation measures recommended and requirements specified in the approved TNMMP and the updated TNMMP shall be fully implemented.

Measures to Mitigate Construction Noise Impact

- 2.15 In order to minimize the construction noise impact, the Permit Holder or any person constructing the Project shall liaise with Hong Kong Bible Research and Education Centre and Christ College to obtain the examination schedule, and shall schedule the noisy construction activities in the vicinity of schools and kindergartens outside school examination period and during summer recess as far as practicable.

Design of Noise Barrier to avoid Bird Collision

- 2.16 To avoid bird collision, the design of noise barriers shall avoid/minimize the use of transparent/reflective materials or adopt bird-friendly design on such surfaces.

Submission of Pre-construction Ardeid Survey Plan

- 2.17 The Permit Holder shall no later than 3 months before the commencement of construction works of the Project, submit 4 hard copies and 1 electronic copy of a Pre-construction Ardeid Survey Plan (PASP) to the Director for approval providing details including but not limited to the programme, methodology and location of the pre-construction ardeid survey. The PASP shall be prepared by the qualified ecologist(s) appointed under Condition 2.5 above, and shall be certified by the ET Leader and verified by the IEC as conforming to the relevant information and recommendations contained in the approved EIA Report (Register No. AEIAR-231/2021). The Permit Holder shall conduct a pre-construction ardeid survey in accordance with the approved PASP.

Submission of Pre-construction Ardeid Survey Report

- 2.18 The Permit Holder shall submit 4 hard copies and 1 electronic copy of the Pre-construction Ardeid Survey Report (PASR) in accordance with the approved PASP to the Director for approval. Subject to the findings of the survey, the PASR shall list out details of all measures to minimise impact on any ardeid night roost during construction of the Project. The PASR 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. The PASR shall be prepared by the qualified ecologist(s) appointed under Condition 2.5 above, and shall be certified by the ET Leader and verified by the IEC as conforming to the relevant information and recommendations contained in the approved EIA Report (Register No. AEIAR-231/2021). The mitigation measures recommended and requirements specified in the approved PASR shall be fully implemented

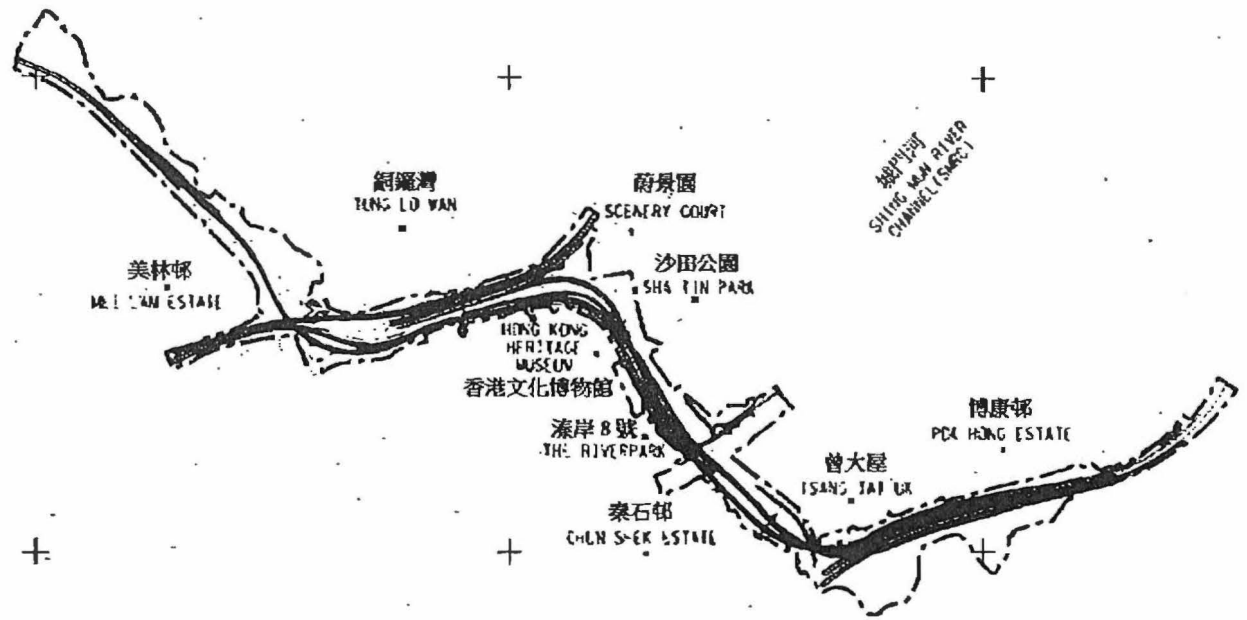
Submission of Monthly Ardeid Monitoring Plan


- 2.19 The Permit Holder shall no later than 3 months before the commencement of construction works of the Project, submit 4 hard copies and 1 electronic copy of a Monthly Ardeid Monitoring Plan (MAMP) to the Director for approval providing details including but not limited to the programme, methodology and location of the monthly ardeid survey. The MAMP shall include an implementation schedule in table form to clearly list out the mitigation measures to be implemented, and the





LEGEND 圖例：
 - - - Project Boundary 工程項目範圍
 — Revised Trunk Road T4 T4 號主幹路優化方案



Project Title 工程項目名稱	Revised Trunk Road T4 in Sha Tin 沙田 T4 號主幹路優化方案	Environmental Permit No.: 環境許可證編號：EP-593/2021	
Figure 1 圖 1	Location of the Project 工程項目位置圖 [This figure was prepared based on Figure 1.1 of the EIA Report (Register No.: AEIAR-231/2021)] [此圖是根據《環境評估報告》(註冊編號：AEIAR-231/2021) 的圖 1.1 編制]		

