EPD185

Application No.: VEP-638/2024 Reference No.: (For official use)

#### FORM 5

## ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE (CHAPTER 499) SECTION 13(1)

## **Application for Variation of an Environmental Permit**

PART A PR	EVIOUS APPLICATIONS
No previou	s application for variation of an environmental permit.
V The enviro	nmental permit was previously amended.
Application	No. : VEP-506/2016
7 (pp.1104.1101)	
PART B DET	AILS OF APPLICANT
B1. Name : (perso	,
MTR Corporation	Limited
	dance with section 13(1) of the Ordinance, the person holding an environmental permit or a person who responsibility for the designated project may apply for variation of the environmental permit.]
B2. Business Reg	istration No. :
(if applicable)	
B3. Corresponder	nce Address :
B4. Name of Cont	act Person: B5. Position of Contact Person:
B6. Telephone No	B7. Fax No. :
Bo. Telephone No	
B8. E-mail Addres	ss: (if any)
PART C DET	AILS OF CURRENT ENVIRONMENTAL PERMIT
	Current Environmental Permit Holder :
MTR Corporation	
C2. Application N	o. of the Current Environmental Permit : EP-438/2012/K
	invironmental Permit was Issued in : month / year
20. 1110 04110110 1	
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 10 to the Environmental Protection Department at the following address:
	The FIA Ordinary Projector Office
	27th floor, Southorn Centre,130 Hennessy Road,
	Wan Chai, Hong Kong.

## PART D PROPOSED VARIATIONS TO THE CONDITIONS IN CURRENT ENVIRONMENTAL PERMIT

D4	D2	D3.	D4.	D5.	D6.	D7.
D1.  Condition(s) in the Current Environmental Permit:	D2. Proposed Variation(s):	Reason for Variation(s) :	Describe the environmental changes arising from the proposed variation(s):	Describe how the environment and the community might be affected by the proposed variation(s):	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:	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:
2.26 Submissions and Measures for Mitigating Operational Noise Impacts	Refer to Section 2.1 of the Environmental Review Report, condition 2.26 is proposed to be amended.	Refer to Section 1.2 of the Environmental Review Report, the reason for variation is to facilitate the need to uplift the TML daytime and evening headway to meet the future demand and support the occasional special services during night-time.	Refer to Section 2 to 4 of the Environmental Review Report, the uplift of headway may lead to an increase in operational rail noise impact and may affect nearby Noise Sensitive Reveivers (NSRs) along SCL (TAW-HUH) alignment.	Refer to Section 2 to 4 of the Environmental Review Report, the predicted airborne and groundborne rail noise levels at the NSRs after the headway uplift are all well below their respective noise criteria. The proposed variation would comply with the requirements in the Technical Memorandum on EIA Process (EIAO-TM).	Refer to Section 2 to 4 of the Environmental Review Report, the environmental performance requirements set out in the approved EIA Report will be maintained. The proposed variation would not change the extent of environmental impacts predicted in the approved EIA report.	Refer to Section 2 to 4 of the Environmental Review Report, no adverse environmental impact will arise from the proposed uplift of headway and no additional measures were proposed.

#### PART E DECLARATION BY APPLICANT

belief. I und	derstand the environr	given above are correct and true to nental permit may be suspended sleading, wrong or incomplete.	
Signat	ture of Applicant	Full Name in Block Letters	Position
	朝	Corporation Line Control of Contr	
on behalf of		oration Limited ne and Chop (as appropriate)	1 8 JUL 2024  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.

## MTR Corporation Limited

Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML)

Environmental Review Report (SCL – TAW to HUH) for Application of Variation of Environmental Permit (VEP)

297592-00-REP-008-03

Jun 2024

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

Job number 297592-00

Ove Arup & Partners Hong Kong Ltd Level 5 Festival Walk 80 Tat Chee Avenue Kowloon Tong Kowloon Hong Kong www.arup.com



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Figure 1.1 Alignment of SCL – TAW to HUH

Figure 3.1 Location of Representative NSRs in EIA and New Identified NSRs

#### **Appendices**

#### Appendix 3.1

Noise Sensitive Receivers

#### Appendix 3.2

Predicted Rail Noise Results

#### 1 Introduction

#### 1.1 Background

- 1.1.1 Shatin to Central Link Tai Wai to Hung Hom Section (SCL TAW to HUH) is a railway with approximately 11 km long. The alignment connects 7 stations, including Hin Keng, Diamond Hill, Kai Tak, Sung Wong Toi, To Kwa Wan, Ho Man Tin and Hung Hom. Most of the sections would be underground except for part of the sections at Hin Keng and Hung Hom. The locations of the railway stations and the alignment are shown in **Figure 1.1.**
- 1.1.2 SCL TAW to HUH is a separate Designated Project (DP) under the Environmental Impact Assessment Ordinance (EIAO), it was subsequently absorbed into Tuen Ma Line (TML) after opening, forming a train service running from Wu Kai Sha Station (WKS) to Tuen Mun Station (TUM).
- 1.1.3 TML is at present made up of, from west to east: West Rail Line (WRL), Kowloon Southern Link (KSL), East Rail Extensions Hung Hom to Tsim Sha Tsui (ERE ETST), SCL TAW to HUH and Ma On Shan Line (MOL). A future extension to the west of TUM, Tuen Mun South Extension (TME) is being constructed and will further expand the TML.
- 1.1.4 With rail project being a DP under the EIAO, each of the abovementioned rail projects was constructed and is currently operating under the conditions imposed by their respective Environmental Permits (EPs). Operating conditions include headway restrictions for daytime and evening (0700 2300) and night-time (2300 0700), which are either bounded by EP conditions or assumptions made in their respective Environmental Impact Assessment Reports (EIAR)/ Noise Assessment Reports (NAR)/ Environmental Review Reports (ERR). The headway conditions for TML are presented in **Table 1.1**.

Table 1.1 Headway Cor	aaitions io	riML
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TML Sections	Headway Restrictions by EP/EIA, tphpd <sup>[1]</sup>			
TWIL Sections	Daytime and Evening	Night-time		
TME	28	20		
WRL	28	20		
KSL	34	34		
ERE – ETST	24	14		
SCL – TAW to HUH	24	12		
MOL	24	10		

[1] tphpd – Trains per hour per direction.

## 1.2 Need for the Proposed Amendments

- 1.2.1 The Hong Kong Transport Service unit of MTR Corporation Limited (MTRCL) periodically updates the forecast in demand of networks under their portfolio. A need to uplift the TML daytime and evening headway to 28 tphpd was identified to meet the future demand. A need of night-time headway uplift for ERE ETST and SCL (TAW to HUH) to 24 tphpd was also identified to support the occasional special services.
- 1.2.2 As shown in **Table 1.1**, the daytime and evening headway conditions for TML is currently restricted at 24 tphpd by ERE ETST <sup>1</sup>, SCL TAW to HUH <sup>2</sup> and MOL <sup>3</sup>. The operational parameters for the above 3 projects will need to be revised to suit the operational needs of TML in the future. It is proposed that daytime and evening headways would be increased from 24 tphpd to 28 tphpd and no physical changes in terms of alteration or addition of alignment is involved in the amendment.
- 1.2.3 In addition, night-time headway uplift of ERE ETST and SCL TAW to HUH to 24 tphpd are also required to support the occasional special services. The current night-time headway conditions for the two sections are 14 tphpd and 12 tphpd respectively.

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<sup>&</sup>lt;sup>1</sup> East Rail Extension - Hung Hom to Tsim Sha Tsui EIA Report (AEIAR-033/2000)

<sup>&</sup>lt;sup>2</sup> Shatin to Central Link – Tai Wai to Hung Hom Section EIA Report (AEIAR-167/2012)

<sup>&</sup>lt;sup>3</sup> East Rail Extension – Tai Wai to Ma On Shan EIA Report (AEIAR-028/1999)

## 1.3 Purpose of This Environmental Review Report

- 1.3.1 This ERR provides information to identify, describe and evaluate the potential impacts of the proposed amendments on the sensitive uses, and to confirm the compliance of relevant environmental standards. The purpose of this ERR is to demonstrate that no unacceptable impacts will be resulted from the proposed amendments and there is no exceedance or violation of environmental performance requirement as set out in the approved EIA report for SCL TAW to HUH (AEIAR-167/2012).
- 1.3.2 If other sections of TML requiring headway uplift, submissions will be provided separately.

## 1.4 Structure of the Environmental Review Report

- 1.4.1 The structure of the ERR is given below:
  - **Section 1** Introduces the project background, purposes and objectives of this ERR. Describes the need for the proposed amendments.
  - **Section 2** Describes the proposed amendments as well as the proposed variation of the EP condition. Identifies and reviews the relevant environmental impacts arising from the proposed amendments.
  - **Section 3** Identifies and reviews the operational rail noise impacts arising from the proposed amendments during operational phases.
  - **Section 4** Summarises and concludes the findings.

# 2 Proposed Amendments and Potential Environmental Impacts

#### 2.1 Proposed Amendments

2.1.1 As explained in **Section 1.2**, in order to meet the forecast growth in demand of TML, there would be amendments to the operational parameters of SCL – TAW to HUH as compared to the SCL – TAW to HUH EIA and clauses stipulated in EP-438/2012/K respectively. During daytime and evening periods (i.e. 0700 – 2300), the maximum total headway would need to be increased from 24 to 28 tphpd. For night-time (i.e. 2300 – 0700) periods, the maximum total headway would increase from 12 to 24 tphpd. Other operational parameters such as number of train cars and operating speed remain unchanged. **Table 2.1** summarises the proposed amendments to the EP.

**Table 2.1 Proposed amendment items** 

EP Condition	Original Conditions in EP- 438/2012/K	Proposed Amendment		
Increasing I	Maximum Train Frequency			
2.26	The Permit Holder shall operate 8-car type SP 1900 / SP 1950 train or other train type with equivalent or better noise performance supported with justifications by the ET Leader and verified by the IEC as conforming to the information, requirements and recommendations as set out in the approved SCL(TAW-HUH) EIA Report (Register No. AEIAR-167/2012) and SCL(HHS) EIA Report (Register No. AEIAR-164/2012). The maximum train frequency operating on the Project from hours 0700 to 2300 shall not exceed 12 trains per 30 minutes in each direction. The maximum train frequency operating on the Project from hours 2300 to 0700 of the following day shall not exceed 6 trains per 30 minutes in each direction.	The condition is proposed to be amended.		

#### **2.2** Potential Environmental Impacts

2.2.1 Details of the potential environmental impacts arising from the proposed amendments are given in the following section.

#### **Operational Rail Noise**

As discussed in **Section 2.1**, it is proposed that the daytime and evening headway of SCL – TAW to HUH would uplift from 24 tphpd to 28 tphpd, and night-time headway would uplift from 12 tphpd to 24 tphpd. The alignment of SCL – TAW to HUH comprises of at-grade, viaduct and underground tracks, and the uplift of headway may lead to an increase in operational rail noise impact and may affect nearby Noise Sensitive Receivers (NSRs) along the SCL – TAW to HUH alignment. Hence, operational rail noise impacts arising from the headway uplift would need to be assessed. A review of the operational rail noise impacts is provided in **Section 3**.

## 3 Review of Operational Rail Noise Impact

# 3.1 Review of Environmental Legislation and Assessment Criteria

3.1.1 Related legislation, standards or criteria have been reviewed. Annex 5 of the Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM) has stipulated the noise standards for rail noise as shown in **Table 3.1**.

Table 3.1 Noise Standards for Rail Noise

Common Use	Rail Noise Standards
<ul> <li>All domestic premises</li> <li>Temporary housing accommodation</li> <li>Hostels</li> <li>Convalescent homes, and</li> <li>Homes for the aged</li> <li>Educational institutions (including kindergartens and nurseries)</li> <li>Places of public worship, and</li> <li>Courts of law</li> <li>Hospitals and medical clinics</li> </ul>	The appropriate Acceptable Noise Levels (ANLs) shown in the Technical Memorandum for the Assessment of Noise from Places Other than Domestic Premises, Public Places or Construction Sites

3.1.2 Compared to the approved EIA report for SCL – TAW to HUH, the criterion for  $L_{max}$  and  $L_{eq(24hrs)}$  have been removed from the current version of EIAO-TM.

#### 3.2 Review of Noise Sensitive Receivers

- 3.2.1 A desktop research has been conducted to review the representative NSRs in the approved EIA report for SCL TAW to HUH. The following information has been reviewed in the desktop research:
  - Approved SCL TAW to HUH EIA (AEIAR-167/2012);
  - Topographic maps and aerial photos;
  - Sha Tin Outline Zoning Plan (OZP) (S/ST/36);
  - Tsz Wan Shan, Diamond Hill & San Po Long OZP (S/K11/31);
  - Kai Tak OZP (S/K22/8);
  - Ma Tau Kok OZP (S/K10/30);
  - Ho Man Tin OZP (S/K7/24);

- Hung Hom OZP (S/K9/28);
- Tsim Sha Tsui OZP (S/K1/28); and
- Sale of Home Ownership Scheme Flats<sup>4</sup>.
- 3.2.2 The environmental conditions and Influencing Factor (IF) along the SCL TAW to HUH alignment have been reviewed and the Area Sensitivity Rating (ASR) of the identified NSRs in the approved EIA report for SCL TAW to HUH have been revisited as appropriate. The representative NSRs in the approved EIA report for SCL TAW to HUH have been summarised in **Appendix 3.1**. New NSRs have also been identified.
- 3.2.3 The representative NSRs affected by airborne and groundborne rail noise in the approved EIA report for SCL TAW to HUH are listed in **Table 3.2** and **Table 3.3** respectively and their locations are shown in **Figure 3.1**.

Table 3.2 Representative NSRs in the Approved EIA Report for SCL – TAW to HUH (Airborne Rail Noise)

NSR ID	NSR	Uses <sup>[1]</sup>	No. of Storey	ASR
TAW-1-1	Block 6, Carado Garden	R	28	В
TAW-2-1	Shatin Heights	R	4-8	C <sup>[2]</sup>
TAW-3-1	K K Terrace	R	3	С
TAW-4-1	Block 2&3, Woodcrest Hill	R	1	С
TAW-5-1	Chan's Garden, The Blossom	R	2	C <sup>[3]</sup>
TAW-5-2	L Louey, The Blossom	R	1	В
TAW-5-3	Joyville	R	1	C <sup>[4]</sup>
TAW-6-1	Hin Yiu House, Hin Keng Estate	R	34	В
TAW-6-2	Carmel Alison Lam Primary School, Hin Keng Estate	R	7	В
TAW-6-3	Hin Tak House, Hin Keng Estate	R	34	В
TAW-6-4	Hin Yeung House, Hin Keng Estate	R	34	В
TAW-7-1	Kam Cheong Building	R	35	В
TAW-8-1	Block 2, Grandway Garden	R	24	В
TAW-9-1	Christian Alliance Cheng Wing Gee College	Е	7	В
TAW-10-1	Holford Garden	R	25	В
TAW-P1-1	Tower 5, Festival City III <sup>[5]</sup>	R	47	C <sup>[6]</sup>

<sup>&</sup>lt;sup>4</sup> Hong Kong Housing Authority (2023). https://www.housingauthority.gov.hk/en/home-ownership/hos-flats/index.html.

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NSR ID	NSR	Uses <sup>[1]</sup>	No. of Storey	ASR
TAW-P1-2	Tower 1, Festival City II <sup>[7]</sup>	R	43	$C^{[8]}$
TAW-P2-1	Tower 7, The Pavilia Farm <sup>[9]</sup>	R	48	$C^{[10]}$
HUH-1-3	Wing Fung Mansion	R	8	С
HUH-3-1	Block 2, Royal Peninsula	R	42	С
HUH-4-1	Tower 2, The Metropolis Residence <sup>[11]</sup>	S	18	В
HUH-4-2	Tower 1, The Metropolis Residence <sup>[11]</sup>	S	18	В
HUH-8-1	2 Gillies Avenue South	R	6	С
HUH-10-1	Harbourfront Horizon <sup>[11]</sup>	R <sup>[12]</sup>	22	В

- [1] R Residential, E Educational Institutions, S Service Apartment.
- [2] An ASR of "B" was assigned to Shatin Heights in the approved EIA report for SCL TAW to HUH. However, it is observed from desktop review that the NSR shall fall into type(iv) "Area other than those above" and it was directly affected by Eagle's Nest Tunnel with an Annual Average Daily Traffic (AADT) of 56,110 in Year 2022, which was considered as an IF under IND-TM. Hence, an ASR of "C" is assigned to the NSR.
- [3] An ASR of "B" was assigned to Chan's Garden, The Blossom in the approved EIA report for SCL TAW to HUH. However, it is observed from desktop review that the NSR shall fall into type(iv) "Area other than those above" and it was directly affected by Eagle's Nest Tunnel with an Annual Average Daily Traffic (AADT) of 56,110 in Year 2022, which was considered as an IF under IND-TM. Hence, an ASR of "C" is assigned to the NSR.
- [4] An ASR of "B" was assigned to Joyville in the approved EIA report for SCL TAW to HUH. However, it is observed from desktop review that the NSR shall fall into type(iv) "Area other than those above" and it was directly affected by Eagle's Nest Tunnel with an Annual Average Daily Traffic (AADT) of 56,110 in Year 2022, which was considered as an IF under IND-TM. Hence, an ASR of "C" is assigned to the NSR.
- [5] Tower 5, Festival City III was previously known as Festival City (Facade facing Mei Tin Road) in the approved EIA Report for SCL TAW to HUH.
- [6] An ASR of "B" was assigned to Tower 5, Festival City III in the approved EIA report for SCL TAW to HUH. However, it is observed from desktop review that the NSR shall fall into type(iv) "Area other than those above" and it was directly affected by Mei Tin Road with an Annual Average Daily Traffic (AADT) of 38,880 in Year 2022, which was considered as an IF under IND-TM. Hence, an ASR of "C" is assigned to the NSR.
- [7] Tower 1, Festival City II was previously known as Festival City (Facade not facing Mei Tin Road) in the approved EIA Report for SCL TAW to HUH.
- [8] An ASR of "B" was assigned to Tower 1, Festival City II in the approved EIA report for SCL TAW to HUH. However, it is observed from desktop review that the NSR shall fall into type(iv) "Area other than those above" and it was directly affected by Eagle's Nest Tunnel with an Annual Average Daily Traffic (AADT) of 56,110 in Year 2022, which was considered as an IF under IND-TM. Hence, an ASR of "C" is assigned to the NSR.
- [9] Tower 7, The Pavilia Farm was previously known as Property above Tai Wai Station (Façade facing Mei Tin Road) in the approved EIA Report for SCL TAW to HUH.
- [10] An ASR of "B" was assigned to Tower 7, The Pavilia Farm in the approved EIA report for SCL TAW to HUH. However, it is observed from desktop review that the NSR shall fall into type(iv) "Area other than those above" and it was directly affected by Mei Tin Road with an Annual Average Daily Traffic (AADT) of 38,880 in Year 2022, which was considered as an IF under IND-TM. Hence, an ASR of "C" is assigned to the NSR.
- [11] The NSR shall not rely on openable windows for ventilation. Nonetheless, for conservative consideration that occupier might open window under special circumstances, this premise has been considered as an assessment point.

[12] According to S16 Application (A/K9/282), the use of Harbourfront Horizon will be changed from hotel to residential use.

Table 3.3 Representative NSRs in the Approved EIA Report for SCL-TAW to HUH (Groundborne Rail Noise)

NSR ID	NSR	Uses <sup>[1]</sup>	No. of Storey	ASR
DIH-1-1	Tsui Chuk Garden Block 5	R	22	В
DIH 2-1	Pak Yuen House, Chuk Yuen North Estate	R	34	В
DIH-3-1	Wah Yuen House, Chuk Yuen South Estate	R	18	В
DIH-3-2	Nga Yuen House, Chuk Yuen South Estate	R	18	В
DIH-3-3	Kwai Yuen House, Chuk Yuen South Estate	R	18	В
DIH-3-4	Chui Yuen House, Chuk Yuen South Estate	R	18	В
DIH-4-1	Pang Ching Court	R	34	В
DIH-4-2	Tsui Chuk Peace Evangelical Centre <sup>[2]</sup>	W	2	В
DIH-5-1	Rainbow Home <sup>[3]</sup>	R	11	В
DIH-5-2	Residential premises along Fung Tak Road	R	6	В
DIH-5-5	Our Lady's Kindergarten	Е	2	В
DIH 6-1	Wong Tai Sin Fire Station and Quarters Block A	R	34	В
DIH-7-1	Tropicana Gardens Block 2	R	25	В
DIH-7-2	Tropicana Gardens Block 3	R	25	В
DIH-8-1	Redemption Lutheran Church	W	3	В
DIH-9-1	Shek On Building	R	5	В
DIH-10-1	Hong Kong Sheung Keung Hui Nursing Home	Н	9	В
DIH-11-1	Lung Wan House, Lung Poon Court	R	34	В
DIH-12-1	Galaxia Tower B	R	44	В
DIH-12-2	Galaxia Tower E	R	43	В
DIH-13-1	Canossa Primary School	Е	5	В
DIH-14-1	Rhythm Garden Block 2	R	22	В
DIH-14-2	Rhythm Garden Block 5	R	22	В
DIH-14-3	Rhythm Garden Block 8	R	22	В
DIH-14-4	Canossa Primary School (San Po Kong)	Е	6	В
DIH-14-5	Rhythm Garden Block 1	R	22	В
DIH-14-6	Rhythm Garden Block 3	R	22	В

NSR ID	NSR	Uses <sup>[1]</sup>	No. of Storey	ASR
DIH-15-1	Kam Wan House, Choi Hung Estate	R	20	В
DIH-15-2	Kam Pik House, Choi Hung Estate	R	6	В
DIH-16-1	Wong Tai Sin Temple	W	1	В
DIH-17-1	Chuk Yuen United Village	R	1-3	В
DIH-18-1	Upper Wong Tai Sin Estate Po Sin House	R	34	В
DIH-18-2	Upper Wong Tai Sin Estate Tat Sin House	R	34	В
DIH-19-1	Lung Cheung Government Secondary School	Е	5	В
DIH-20-1	Baptist Rainbow Primary School	Е	7	В
DIH-21-1	Tin Wang Court Wang King House	R	21	В
DIH-22-1	Price Memorial Catholic Primary School	Е	7	В
DIH-23-1	Tin Ma Court, Chun On House	R	37	В
DIH-24-1	Shing Wong Temple	W	1	В
DIH-P1-1	Wing Sin House, Wong Tai Sin Estate <sup>[4]</sup>	R	37	В
DIH-P2-1	TBA <sup>[5]</sup>	NA <sup>[6]</sup>	NA <sup>[6]</sup>	В
DIH-P2-2	Kai Chuen Court <sup>[7]</sup>	R	39	В
DIH-P2-3	Kai Cheung Court <sup>[7]</sup>	R	34	В
DIH-P2-4	Confucian Academy (being constructed) [7]	W	5	В
KAT-P1-1	Kai Long Court <sup>[8]</sup>	R	22-31	В
KAT-P1-2	One Kai Tak (II) <sup>[8]</sup>	R	33	В
KAT-P1-3	Upper Riverbank <sup>[8]</sup>	R	35-40	В
KAT-P1-4	Residential premises near Kai Tak Station	R	NA <sup>[6]</sup>	В
KAT-P1-5	Mun Ching House, Kai Ching Estate <sup>[9]</sup>	R	40	В
KAT-P1-6	Tower H3, De Novo <sup>[10]</sup>	R	21	В
KAT-P1-7	Residential premises near Kai Tak Station <sup>[11]</sup>	R	40	В
TKW-1-1	Parc 22	R	11	В
TKW-1-2	Sanford Mansion	R	14	В
TKW-2-1	Skytower Tower 1	R	47	В
TKW-2-2	Skytower Tower 2	R	47	В
TKW-2-3	Skytower Tower 7	R	47	В
TKW-3-1	Prince Ritz	R	29	В
TKW-3-2	Prosperity House	R	3	В

NSR ID	NSR	Uses <sup>[1]</sup>	No. of Storey	ASR
TKW-P1-1	Kai Yuet Court (being constructed) <sup>[12]</sup>	R	31-35	В
MTW-6-1	Fok On Building	R	11	В
MTW-6-2	HK Society for the Protection of Children	R	4	В
MTW-6-3	Chung Nam Mansion	R	10	В
MTW-6-4	Pok Oi Lau	R	6	В
MTW-7-1	Geranium House	R	13	В
MTW-8-1	Horae Palace	R	17	В
MTW-9-1	Majestic Park	R	18	В
MTW-10-1	18 Farm Road	R	42	В
MTW-11-1	Farm Road Government Primary School	Е	3	В
MTW-12-1	Yuet Fai Mansion	R	10	В
MTW-12-2	Delight Court	R	21	В
MTW-12-3	Lucky Mansion	R	14	В
MTW-12-4	352-354 Ma Tau Wai Road	R	8	В
MTW-12-5	Seng Cheong Building	R	10	В
MTW-12-6	Great Wall Building	R	10	В
MTW-12-7	197-199 Ma Tau Wai Road	R	6	В
MTW-12-8	Pak Tai Mansion	R	8	В
MTW-12-9	Residential premises along Hung Kwong Street	R	8	В
MTW-12-10	Lucky Building	R	18	В
MTW-12-11	Jing Ming Building	R	5	В
MTW-12-12	One Elegance	R	19	В
MTW-13-1	PLK Madam Chan Wai Chow Memorial School <sup>[13]</sup>	Е	3	В
MTW-14-1	PLK Lam Man Chan English Primary School	Е	3	В
MTW-15-1	Hung Hom Lutheran Primary School	Е	4	В
MTW-16-1	SKH Good Shepherd Primary School	Е	5	В
MTW-17-1	Loyal Mansion	R	14	В
MTW-18-1/2	City Hub <sup>[14]</sup>	R	28	В
MTW-19-1	Holy Trinity Church	W	1	В
HOM-1-1	Ko Shan Theatre	P	3	В
HOM-2-1	Faerie Court	R	26	В
HOM-2-2	Lee Wing Building	R	22	В
HOM-2-3	Wing Lam Mansion	R	23	В

NSR ID	NSR	Uses <sup>[1]</sup>	No. of Storey	ASR
HOM-2-4	Tak Lee Court	R	24	В
HOM-2-5	Chat Ma Mansion	R	8	В
HOM-2-6	Chatham Mansion	R	9	В
HOM-3-1	Fook Sing Mansion	R	18	В
HOM-3-2	Marigold Mansion, Block A	R	20	В
HOM-4-1	Yee Fu Building	R	25	В
HOM-5-1	271 Chatham Road North	R	5	В
HOM-P2	PolyU Student Halls of Residence (Ho Man Tin) <sup>[15]</sup>	R	27	В
HOM-P3-1	Residential Building, HOM Development	R	NA <sup>[6]</sup>	В
HUH-1-1	Get Nice Centre <sup>[16]</sup>	C	13	В
HUH-1-2	Lok Ka House	R	7	В
HUH-1-3	Wing Fung Building	R	8	В

- [1] R Residential, E Educational Institutions, C Commercial, W place of worship, P performance centre.
- [2] Tsui Chuk Peace Evangelical Centre was previously known as Carbo Anglo-Chinese Kindergarten in the approved EIA report for SCL TAW to HUH.
- [3] Rainbow Home was demolished and will be reconstructed to residential development.
- [4] Wing Sin House, Upper Wong Tai Sin Estate was previously known as Upper Wong Tai Sin Estate Phase 3 in the approved EIA report for SCL TAW to HUH.
- [5] DIH-P2-1 (TBA) will be redeveloped into a water feature park. It is no longer considered as an NSR.
- [6] NA Not Applicable.
- [7] Kai Chuen Court, Kai Chueng Court and Confucian Academy were previously known as TBA in the approved EIA report for SCL TAW to HUH.
- [8] Kai Long Court, One Kai Tak (II) and Upper Riverbank were previously known as Residential premises near Kai Tak Station in the approved EIA report for SCL TAW to HUH.
- [9] Mun Ching House, Kai Ching Estate was previously known as Residential premises near Kai Tak Station Site 1A in the approved EIA report for SCL TAW to HUH.
- [10] Tower H3, De Novo was previously known as Residential premises near Kai Tak Station Site 1B in the approved EIA report for SCL TAW to HUH.
- [11] The approved EIA report for SCL TAW to HUH did not illustrate the specific location of KAT-P1-7. After reviewing the OZP, the location of KAT-P1-7 has been assigned to the residential premises of that zone with nearest distance to the rail alignment.
- [12] Kai Yuet Court (being constructed) was previously known as Residential premises near To Kwa Wan Station in the approved EIA report for SCL TAW to HUH.
- [13] Madam Chan Wai Chow Memorial School was previously known as Cheung Chuk Shan Memorial School in the approved EIA report for SCL TAW to HUH.
- [14] MTW-18-1 (Residential premises along Chi Kiang Street) and MTW-18-2 (No. 2 Kowloon City Road) were demolished. City Hub was built on the same address.
- [15] PolyU Student Halls of Residence (Ho Man Tin) was previously known as HKPU Phase 3 in the approved EIA report for SCL TAW to HUH.
- [16] Get Nice Centre was previously known as Cartas Branchi College of Careers in the approved EIA report for SCL TAW to HUH.

In addition to the NSRs in the approved EIA report for SCL – TAW to HUH, new NSRs within the 300m assessment area have also been identified and summarised in **Appendix 3.1**. The locations of the NSRs are shown in **Figure 3.1**. Despite additional NSRs have been identified, these NSRs could be represented by the representative NSRs identified in the approved EIA report for SCL – TAW to HUH with similar distance to the track. Hence, representative NSRs presented in the approved EIA are considered still valid.

## 3.3 Evaluation of Noise Impact

- 3.3.1 Based on the assessment results in the approved EIA report for SCL TAW to HUH, correction factors given in **Table 3.4** are applied to representative NSRs in the approved EIA report for SCL TAW to HUH to predict the airborne rail noise impact after the uplifting of headway.
- 3.3.2 For groundborne rail noise impact, it is noted that the assessment results in the approved EIA for SCL TAW to HUH have been updated in the Final Operational Groundborne Noise Mitigation Measures Plan (OGNMMP)<sup>5</sup> submitted in June 2017 for fulfilling EP Condition 2.26. Assumptions such as line source response (LSR), tunnel coupling factor (TCF) and building coupling factor (BCF), geological profile and turnouts have been reviewed and verified in the OGNMMP. Other assumptions on operational parameters such as number of train cars and operating speed remain the same as those adopted in the approved EIA Report. After the review, the assumptions made in the OGNMMP are considered applicable to the current assessment. Therefore, the assessment results in the OGNMMP are adopted for groundborne rail noise impact prediction in this ERR with correction factors in **Table 3.4** applied.

**Table 3.4** Correction Factors for Representative NSRs in the Approved EIA Report for SCL – TAW to HUH

Parameters	Assumptions	Remarks
Train Frequency	10log(N <sub>1</sub> /N <sub>2</sub> )	$N_1$ is the proposed maximum train frequency in 30 minutes.
		Frequency (trains / 30 minutes)

<sup>&</sup>lt;sup>5</sup> MTR Corporation Limited (2017). Final Operational Groundborne Noise Mitigation Measures Plan.

 $<sup>\</sup>frac{https://www.epd.gov.hk/eia/register/english/permit/vep5062016/documents/femar201706/pdf/femar201706.pdf}{ar201706.pdf}$ 

Parameters	Assumptions	Remarks
		28 trains during daytime and evening and 24 trains during night-time (combined frequency of both directions)
		$N_2$ is the maximum train frequency in the approved EIA report for SCL $-$ TAW to HUH.
		24 trains during daytime and evening and 12 trains during night-time (combined frequency of both directions)

3.3.1 Other operational parameters, including number of train cars, car types and operating speed remain the same as the assumptions stated in the approved EIA report for SCL – TAW to HUH.

#### 3.4 Assessment Results – Airborne Rail Noise

3.4.1 The predicted airborne rail noise levels at 28 tphpd during daytime and evening periods and 24 tphpd during night-time periods are given in **Appendix 3.2** and are summarized in **Table 3.5** and **Table 3.6** below respectively.

Table 3.5 Summary of Predicted Airborne Rail Noise Levels (Daytime and Evening)

NSR ID	NSR	ASR	Criterion Leq(30min), dB(A)	Predicted Noise Levels Leq(30min) ,dB(A)	Comply? (Y/N)
TAW-1-1	Block 6, Carado Garden	В	55 <sup>[1]</sup>	43	Y
TAW-2-1	Shatin Heights	C	60 <sup>[1]</sup>	47	Y
TAW-3-1	K K Terrace	C	$60^{[1]}$	45	Y
TAW-4-1	Block 2&3, Woodcrest Hill	С	60 <sup>[1]</sup>	42	Y
TAW-5-1	Chan's Garden, The Blossom	С	60 <sup>[1]</sup>	45	Y
TAW-5-2	L Louey, The Blossom	В	55 <sup>[1]</sup>	<30	Y
TAW-5-3	Joyville	С	60 <sup>[1]</sup>	45	Y
TAW-6-1	Hin Yiu House, Hin Keng Estate	В	55 <sup>[1]</sup>	45	Y
TAW-6-2	Carmel Alison Lam Primary School, Hin Keng Estate	В	55 <sup>[1]</sup>	37	Y
TAW-6-3	Hin Tak House, Hin Keng Estate	В	55 <sup>[1]</sup>	46	Y
TAW-6-4	Hin Yeung House, Hin Keng Estate	В	55 <sup>[1]</sup>	46	Y
TAW-7-1	Kam Cheong Building	В	55 <sup>[1]</sup>	43	Y
TAW-8-1	Block 2, Grandway Garden	В	55 <sup>[1]</sup>	38	Y

NSR ID	NSR	ASR	Criterion Leq(30min), dB(A)	Predicted Noise Levels Leq(30min) ,dB(A)	Comply? (Y/N)
TAW-9-1	Christian Alliance Cheng Wing Gee College	В	55 <sup>[1]</sup>	43	Y
TAW-10-1	Holford Garden	В	55 <sup>[1]</sup>	36	Y
TAW-P1-1	Tower 5, Festival City III	C	60 <sup>[1]</sup>	48	Y
TAW-P1-2	Tower 1, Festival City II	C	60 <sup>[1]</sup>	49	Y
TAW-P2-1	Tower 7, The Pavilia Farm	C	60 <sup>[1]</sup>	48	Y
HUH-1-3	Wing Fung Building	C	60 <sup>[1][2]</sup> 49		Y
HUH-3-1	Block 2, Royal Peninsula	C	60 <sup>[1][2]</sup>	50 <sup>[3]</sup>	Y
HUH-4-1	Tower 2, The Metropolis Residence	В	55 <sup>[1][2]</sup>	46	Y
HUH-4-2	Tower 1, The Metropolis Residence	В	55 <sup>[1][2]</sup>	45	Y
HUH-8-1	2 Gillies Avenue South	С	60 <sup>[1][2]</sup>	48	Y
HUH-10-1	Harbourfront Horizon	В	65 <sup>[2]</sup>	51	Y

- [1] With reference to the approved EIA report for SCL TAW to HUH, ANL-10 dB(A) is adopted to the criterion to consider the cumulative operational rail noise impacts from existing East Rail and Intercity Train.
- [2] Cumulative impact from operation of Shatin to Central Link Mong Kok East to Hung Hom Section (SCL MKK to HUH) and Shatin to Central Link Stabling Sidings at Hung Hom Freight Yard (SCL HHS) are included.
- [3] The predicted daytime/evening noise level at Block 2, Royal Peninsula (HUH-3-1), based on previous EIA assumption after headway uplift is 52 dB(A). Nevertheless, consider a new 26-storey hotel was developed in January 2024 between the SCL TAW to HUH alignment and the NSR, the new development with taller height could provide screening for the NSR and achieve noise reduction of at least 2 dB(A). Hence, the predicted noise level at the NSR would be 50 dB(A).

Table 3.6 Summary of Predicted Airborne Rail Noise Levels (Night-time)

NSR ID	NSR	ASR	$\begin{array}{c} \textbf{Criterion} \\ \textbf{L}_{eq(30min),} \\ \textbf{dB(A)} \end{array}$	Predicted Noise Levels Leq(30min) ,dB(A)	Comply? (Y/N)
TAW-1-1	Block 6, Carado Garden	В	45 <sup>[1]</sup>	42	Y
TAW-2-1	Shatin Heights	C	50[1]	46	Y
TAW-3-1	K K Terrace	C	50 <sup>[1]</sup>	44	Y
TAW-4-1	Block 2&3, Woodcrest Hill	С	50 <sup>[1]</sup>	41	Y
TAW-5-1	Chan's Garden, The Blossom	С	50 <sup>[1]</sup>	44	Y
TAW-5-2	L Louey, The Blossom	В	45 <sup>[1]</sup>	<30	Y
TAW-5-3	Joyville	С	50 <sup>[1]</sup>	44	Y
TAW-6-1	Hin Yiu House, Hin Keng Estate	В	45 <sup>[1]</sup>	44	Y

NSR ID	NSR	ASR	Criterion Leq(30min), dB(A)	Predicted Noise Levels Leq(30min) ,dB(A)	Comply? (Y/N)
TAW-6-2	Carmel Alison Lam Primary School, Hin Keng Estate <sup>[3]</sup>	В	-	-	-
TAW-6-3	Hin Tak House, Hin Keng Estate	В	45 <sup>[1]</sup>	45	Y
TAW-6-4	Hin Yeung House, Hin Keng Estate	В	45 <sup>[1]</sup>	45	Y
TAW-7-1	Kam Cheong Building	В	45 <sup>[1]</sup>	42	Y
TAW-8-1	Block 2, Grandway Garden	В	45 <sup>[1]</sup>	37	Y
TAW-9-1	Christian Alliance Cheng Wing Gee College <sup>[3]</sup>	В	-	-	-
TAW-10-1	Holford Garden	В	45 <sup>[1]</sup>	35	Y
TAW-P1-1	Tower 5, Festival City III	C	50[1]	47	Y
TAW-P1-2	Tower 1, Festival City II	C	50[1]	48	Y
TAW-P2-1	Tower 7, The Pavilia Farm	C	50[1]	47	Y
HUH-1-3	Wing Fung Building	С	50 <sup>[1][2]</sup>	48	Y
HUH-3-1	Block 2, Royal Peninsula	С	50[1][2]	49 <sup>[4]</sup>	Y
HUH-4-1	Tower 2, The Metropolis Residence	В	45[1][2]	45	Y
HUH-4-2	Tower 1, The Metropolis Residence	В	45 <sup>[1][2]</sup>	44	Y
HUH-8-1	2 Gillies Avenue South	C	50[1][2]	48	Y
HUH-10-1	Harbourfront Horizon	В	55 <sup>[2]</sup>	50	Y

- [1] With reference to the approved EIA report for SCL TAW to HUH, ANL-10 dB(A) is adopted to the criterion to consider the cumulative operational rail noise impacts from existing East Rail and Intercity Train.
- [2] Cumulative impact from operation of Shatin to Central Link Mong Kok East to Hung Hom Section (SCL MKK to HUH) and Shatin to Central Link Stabling Sidings at Hung Hom Freight Yard (SCL HHS) are included.
- [3] Night-time noise criterion is not applicable for the NSR.
- [4] The predicted night-time noise level at Block 2, Royal Peninsula (HUH-3-1), based on previous EIA assumption after headway uplift is 51 dB(A). Nevertheless, consider a new 26-storey hotel was developed in January 2024 between the SCL TAW to HUH alignment and the NSR, the new development with taller height could provide screening for the NSR and achieve noise reduction of at least 2 dB(A). Hence, the predicted noise level at the NSR would be 49 dB(A).

- 3.4.2 Based on the results above, the predicted airborne rail noise levels of the representative NSRs after the proposed headway uplift are all well below the noise criteria. Adverse airborne rail noise impact is not anticipated and additional mitigation measures are not required.
- 3.4.3 In addition, the approved EIA report for SCL TAW to HUH has conducted a sensitivity test to examine the airborne rail noise impact of future operation with train frequency at 26 and 28 tphpd, an increase of 0.3dB(A) and 0.7dB(A) respectively were predicted. The uplift adjustment would still result in compliance of the daytime and evening noise criteria at all NSRs.

#### 3.5 Assessment Results – Groundborne Rail Noise

3.5.1 The predicted groundborne rail noise levels at 28 tphpd during daytime and evening periods and 24 tphpd during night-time periods are given in **Appendix 3.2** and are summarized in **Table 3.7** and **Table 3.8** below respectively.

Table 3.7 Summary of Predicted Groundborne Rail Noise Levels (Daytime and Evening)

NSR ID	NSR	ASR	Criterion Leq(30min), dB(A)	Predicted Noise Levels Leq(30min) ,dB(A)	Comply ? (Y/N)
DIH-1-1	Tsui Chuk Garden Block 5	В	55	35	Y
DIH 2-1	Pak Yuen House, Chuk Yuen North Estate	В	55	30	Y
DIH-3-1	Wah Yuen House, Chuk Yuen South Estate	В	55	33	Y
DIH-3-2	Nga Yuen House, Chuk Yuen South Estate	В	55	32	Y
DIH-3-3	Kwai Yuen House, Chuk Yuen South Estate	В	55	36	Y
DIH-3-4	Chui Yuen House, Chuk Yuen South Estate	В	55	34	Y
DIH-4-1	Pang Ching Court	В	55	31	Y
DIH-4-2	Tsui Chuk Peace Evangelical Centre	В	55	37	Y
DIH-5-1	Rainbow Home	В	55	38	Y
DIH-5-2	Residential premises along Fung Tak Road	В	55	37	Y

NSR ID	NSR	ASR	$\begin{array}{c} \text{Criterion} \\ L_{eq(30\text{min}),} \\ dB(A) \end{array}$	$\begin{array}{c} \textbf{Predicted} \\ \textbf{Noise} \\ \textbf{Levels} \\ \textbf{L}_{eq(30min)} \\ \textbf{,dB(A)} \end{array}$	Comply ? (Y/N)
DIH-5-5	Our Lady's Kindergarten	В	55	37	Y
DIH 6-1	Wong Tai Sin Fire Station and Quarters Block A	В	55	39	Y
DIH-7-1	Tropicana Gardens Block 2	В	55	30	Y
DIH-7-2	Tropicana Gardens Block 3	В	55	31	Y
DIH-8-1	Redemption Lutheran Church	В	55	34	Y
DIH-9-1	Shek On Building	В	55	37	Y
DIH-10-1	Hong Kong Sheung Keung Hui Nursing Home	В	55	31	Y
DIH-11-1	Lung Wan House, Lung Poon Court	В	55	30	Y
DIH-12-1	Galaxia Tower B	В	55	<30	Y
DIH-12-2	Galaxia Tower E	В	55	<30	Y
DIH-13-1	Canossa Primary School	В	55	36	Y
DIH-14-1	Rhythm Garden Block 2	В	55	34	Y
DIH-14-2	Rhythm Garden Block 5	В	55	<30	Y
DIH-14-3	Rhythm Garden Block 8	В	55	<30	Y
DIH-14-4	Canossa Primary School (San Po Kong)	В	55	33	Y
DIH-14-5	Rhythm Garden Block 1	В	55	34	Y
DIH-14-6	Rhythm Garden Block 3	В	55	33	Y
DIH-15-1	Kam Wan House, Choi Hung Estate	В	55	33	Y
DIH-15-2	Kam Pik House, Choi Hung Estate	В	55	34	Y
DIH-16-1	Wong Tai Sin Temple	В	55	37	Y
DIH-17-1	Chuk Yuen United Village	В	55	37	Y
DIH-18-1	Upper Wong Tai Sin Estate Po Sin House	В	55	37	Y
DIH-18-2	Upper Wong Tai Sin Estate Tat Sin House	В	55	36	Y
DIH-19-1	Lung Cheung Government Secondary School	В	55	40	Y
DIH-20-1	Baptist Rainbow Primary School	В	55	39	Y
DIH-21-1	Tin Wang Court Wang King House	В	55	37	Y
DIH-22-1	Price Memorial Catholic Primary School	В	55	39	Y

NSR ID	NSR	ASR	$\begin{array}{c} \textbf{Criterion} \\ \textbf{L}_{eq(30\text{min}),} \\ \textbf{dB(A)} \end{array}$	Predicted Noise Levels Leq(30min) ,dB(A)	Comply ? (Y/N)
DIH-23-1	Tin Ma Court, Chun On House	В	55	33	Y
DIH-24-1	Shing Wong Temple	В	55	38	Y
DIH-P1-1	Wing Sin House, Wong Tai Sin Estate	В	55	35	Y
DIH-P2-2	Kai Chuen Court	В	55	<30	Y
DIH-P2-3	Kai Cheung Court	В	55	31	Y
DIH-P2-4	Confucian Academy (being constructed)	В	55	35	Y
KAT-P1-1	Kai Long Court	В	55	<30	Y
KAT-P1-2	One Kai Tak (II)	В	55	<30	Y
KAT-P1-3	Upper Riverbank	В	55	<30	Y
KAT-P1-4	Residential premises near Kai Tak Station	В	55	<30	Y
KAT-P1-5	Mun Ching House, Kai Ching Estate	В	55	35	Y
KAT-P1-6	Tower H3, De Novo	В	55	<30	Y
KAT-P1-7	Residential premises near Kai Tak Station	В	55	40	Y
TKW-1-1	Parc 22	В	55	<30	Y
TKW-1-2	Sanford Mansion	В	55	<30	Y
TKW-2-1	Skytower Tower 1	В	55	<30	Y
TKW-2-2	Skytower Tower 2	В	55	<30	Y
TKW-2-3	Skytower Tower 7	В	55	<30	Y
TKW-3-1	Prince Ritz	В	55	<30	Y
TKW-3-2	Prosperity House	В	55	<30	Y
TKW-P1-1	Kai Yuet Court (being constructed)	В	55	<30	Y
MTW-6-1	Fok On Building	В	55	35	Y
MTW-6-2	HK Society for the Protection of Children	В	55	42	Y
MTW-6-3	Chung Nam Mansion	В	55	34	Y
MTW-6-4	Pok Oi Lau	В	55	39	Y
MTW-7-1	Geranium House	В	55	38	Y
MTW-8-1	Horae Palace	В	55	36	Y
MTW-9-1	Majestic Park	В	55	33	Y
MTW-10-1	18 Farm Road	В	55	36	Y

NSR ID	NSR	ASR	$\begin{array}{c} \text{Criterion} \\ L_{eq(30\text{min}),} \\ dB(A) \end{array}$	$Predicted\\Noise\\Levels\\L_{eq(30min)}\dB(A)$	Comply ? (Y/N)
MTW-11-1	Farm Road Government Primary School	В	55	39	Y
MTW-12-1	Yuet Fai Mansion	В	55	39	Y
MTW-12-2	Delight Court	В	55	33	Y
MTW-12-3	Lucky Mansion	В	55	<30	Y
MTW-12-4	352-354 Ma Tau Wai Road	В	55	<30	Y
MTW-12-5	Seng Cheong Building	В	55	33	Y
MTW-12-6	Great Wall Building	В	55	34	Y
MTW-12-7	197-199 Ma Tau Wai Road	В	55	38	Y
MTW-12-8	Pak Tai Mansion	В	55	40	Y
MTW-12-9	Residential premises along Hung Kwong Street	В	55	36	Y
MTW-12-10	Lucky Building	В	55	<30	Y
MTW-12-11	Jing Ming Building	В	55	<30	Y
MTW-12-12	One Elegance	В	55	36	Y
MTW-13-1	PLK Madam Chan Wai Chow Memorial School	В	55	38	Y
MTW-14-1	PLK Lam Man Chan English Pri mary School	В	55	33	Y
MTW-15-1	Hung Hom Lutheran Primary School	В	55	37	Y
MTW-16-1	SKH Good Shepherd Primary School	В	55	35	Y
MTW-17-1	Loyal Mansion	В	55	31	Y
MTW-18-1/2	City Hub	В	55	<30	Y
MTW-19-1	Holy Trinity Church	В	55	31	Y
HOM-1-1	Ko Shan Theatre	В	55	36	Y
HOM-2-1	Faerie Court	В	55	35	Y
HOM-2-2	Lee Wing Building	В	55	36	Y
HOM-2-3	Wing Lam Mansion	В	55	37	Y
HOM-2-4	Tak Lee Court	В	55	35	Y
HOM-2-5	Chat Ma Mansion	В	55	35	Y
HOM-2-6	Chatham Mansion	В	55	38	Y
HOM-3-1	Fook Sing Mansion	В	55	32	Y
HOM-3-2	Marigold Mansion, Block A	В	55	32	Y
HOM-4-1	Yee Fu Building	В	55	30 <sup>[1]</sup>	Y
HOM-5-1	271 Chatham Road North	В	55	<30[1]	Y

NSR ID	NSR	ASR	Criterion Leq(30min), dB(A)	$\begin{array}{c} \textbf{Predicted} \\ \textbf{Noise} \\ \textbf{Levels} \\ \textbf{L}_{eq(30min)} \\ \textbf{,dB(A)} \end{array}$	Comply ? (Y/N)
HOM-P2	PolyU Student Halls of Residence (Ho Man Tin)	В	55	30 <sup>[1]</sup>	Y
HOM-P3-1	Residential Building, HOM Development	В	55	37 <sup>[1]</sup>	Y
HUH-1-1	Get Nice Centre	В	55	32[1]	Y
HUH-1-2	Lok Ka House	В	55	31 <sup>[1]</sup>	Y
HUH-1-3	Wing Fung Building	В	55	31 <sup>[1]</sup>	Y

[1] Cumulative impact from operation of SCL - MKK to HUH, SCL - HHS and Kwun Tong Line Extension (KTE) are included.

Table 3.8 Summary of Predicted Groundborne Rail Noise Levels (Night-time)

NSR ID	NSR	ASR	$\begin{array}{c} \textbf{Criterion} \\ \textbf{L}_{eq(30min),} \\ \textbf{dB(A)} \end{array}$	Predicted Noise Levels Leq(30min) ,dB(A)	Comply ? (Y/N)
DIH-1-1	Tsui Chuk Garden Block 5	В	45	34	Y
DIH 2-1	Pak Yuen House, Chuk Yuen North Estate	В	45	<30	Y
DIH-3-1	Wah Yuen House, Chuk Yuen South Estate	В	45	32	Y
DIH-3-2	Nga Yuen House, Chuk Yuen South Estate	В	45	31	Y
DIH-3-3	Kwai Yuen House, Chuk Yuen South Estate	В	45	35	Y
DIH-3-4	Chui Yuen House, Chuk Yuen South Estate	В	45	33	Y
DIH-4-1	Pang Ching Court	В	45	30	Y
DIH-4-2	Tsui Chuk Peace Evangelical Centre	В	45	36	Y
DIH-5-1	Rainbow Home	В	45	37	Y
DIH-5-2	Residential premises along Fung Tak Road	В	45	36	Y
DIH-5-5	Our Lady's Kindergarten <sup>[2]</sup>	В	-	-	-
DIH 6-1	Wong Tai Sin Fire Station and Quarters Block A	В	45	38	Y
DIH-7-1	Tropicana Gardens Block 2	В	45	<30	Y
DIH-7-2	Tropicana Gardens Block 3	В	45	30	Y
DIH-8-1	Redemption Lutheran Church	В	45	33	Y

NSR ID	NSR	ASR	$\begin{array}{c} \textbf{Criterion} \\ \textbf{L}_{eq(30\text{min}),} \\ \textbf{dB(A)} \end{array}$	$\begin{aligned} & \textbf{Predicted} \\ & \textbf{Noise} \\ & \textbf{Levels} \\ & \textbf{L}_{eq(30min)} \\ & \textbf{,dB(A)} \end{aligned}$	Comply ? (Y/N)
DIH-9-1	Shek On Building	В	45	36	Y
DIH-10-1	Hong Kong Sheung Keung Hui Nursing Home	В	45	30	Y
DIH-11-1	Lung Wan House, Lung Poon Court	В	45	<30	Y
DIH-12-1	Galaxia Tower B	В	45	<30	Y
DIH-12-2	Galaxia Tower E	В	45	<30	Y
DIH-13-1	Canossa Primary School <sup>[2]</sup>	В	-	-	-
DIH-14-1	Rhythm Garden Block 2	В	45	33	Y
DIH-14-2	Rhythm Garden Block 5	В	45	<30	Y
DIH-14-3	Rhythm Garden Block 8	В	45	<30	Y
DIH-14-4	Canossa Primary School (San Po Kong) <sup>[2]</sup>	В	-	-	-
DIH-14-5	Rhythm Garden Block 1	В	45	33	Y
DIH-14-6	Rhythm Garden Block 3	В	45	32	Y
DIH-15-1	Kam Wan House, Choi Hung Estate	В	45	32	Y
DIH-15-2	Kam Pik House, Choi Hung Estate	В	45	33	Y
DIH-16-1	Wong Tai Sin Temple	В	45	36	Y
DIH-17-1	Chuk Yuen United Village	В	45	36	Y
DIH-18-1	Upper Wong Tai Sin Estate Po Sin House	В	45	36	Y
DIH-18-2	Upper Wong Tai Sin Estate Tat Sin House	В	45	35	Y
DIH-19-1	Lung Cheung Government Secondary School <sup>[2]</sup>	В	-	-	-
DIH-20-1	Baptist Rainbow Primary School <sup>[2]</sup>	В	-	-	-
DIH-21-1	Tin Wang Court Wang King House	В	45	36	Y
DIH-22-1	Price Memorial Catholic Primary School <sup>[2]</sup>	В	-	-	-
DIH-23-1	Tin Ma Court, Chun On House	В	45	32	Y
DIH-24-1	Shing Wong Temple	В	45	37	Y
DIH-P1-1	Wing Sin House, Wong Tai Sin Estate	В	45	34	Y
DIH-P2-2	Kai Chuen Court	В	45	<30	Y
DIH-P2-3	Kai Cheung Court	В	45	30	Y

NSR ID	NSR	ASR	$\begin{array}{c} \text{Criterion} \\ L_{eq(30\min),} \\ dB(A) \end{array}$	Predicted Noise Levels Leq(30min) ,dB(A)	Comply ? (Y/N)
DIH-P2-4	Confucian Academy (being constructed)	В	45	34	Y
KAT-P1-1	Kai Long Court	В	45	<30	Y
KAT-P1-2	One Kai Tak (II)	В	45	<30	Y
KAT-P1-3	Upper Riverbank	В	45	<30	Y
KAT-P1-4	Residential premises near Kai Tak Station	В	45	<30	Y
KAT-P1-5	Mun Ching House, Kai Ching Estate	В	45	34	Y
KAT-P1-6	Tower H3, De Novo	В	45	<30	Y
KAT-P1-7	Residential premises near Kai Tak Station	В	45	39	Y
TKW-1-1	Parc 22	В	45	<30	Y
TKW-1-2	Sanford Mansion	В	45	<30	Y
TKW-2-1	Skytower Tower 1	В	45	<30	Y
TKW-2-2	Skytower Tower 2	В	45	<30	Y
TKW-2-3	Skytower Tower 7	В	45	<30	Y
TKW-3-1	Prince Ritz	В	45	<30	Y
TKW-3-2	Prosperity House	В	45	<30	Y
TKW-P1-1	Kai Yuet Court (being constructed)	В	45	<30	Y
MTW-6-1	Fok On Building	В	45	34	Y
MTW-6-2	HK Society for the Protection of Children <sup>[2]</sup>	В	-	-	-
MTW-6-3	Chung Nam Mansion	В	45	33	Y
MTW-6-4	Pok Oi Lau	В	45	38	Y
MTW-7-1	Geranium House	В	45	37	Y
MTW-8-1	Horae Palace	В	45	35	Y
MTW-9-1	Majestic Park	В	45	32	Y
MTW-10-1	18 Farm Road	В	45	35	Y
MTW-11-1	Farm Road Government Primary School <sup>[2]</sup>	В	-	-	-
MTW-12-1	Yuet Fai Mansion	В	45	38	Y
MTW-12-2	Delight Court	В	45	32	Y
MTW-12-3	Lucky Mansion	В	45	<30	Y
MTW-12-4	352-354 Ma Tau Wai Road	В	45	<30	Y
MTW-12-5	Seng Cheong Building	В	45	32	Y

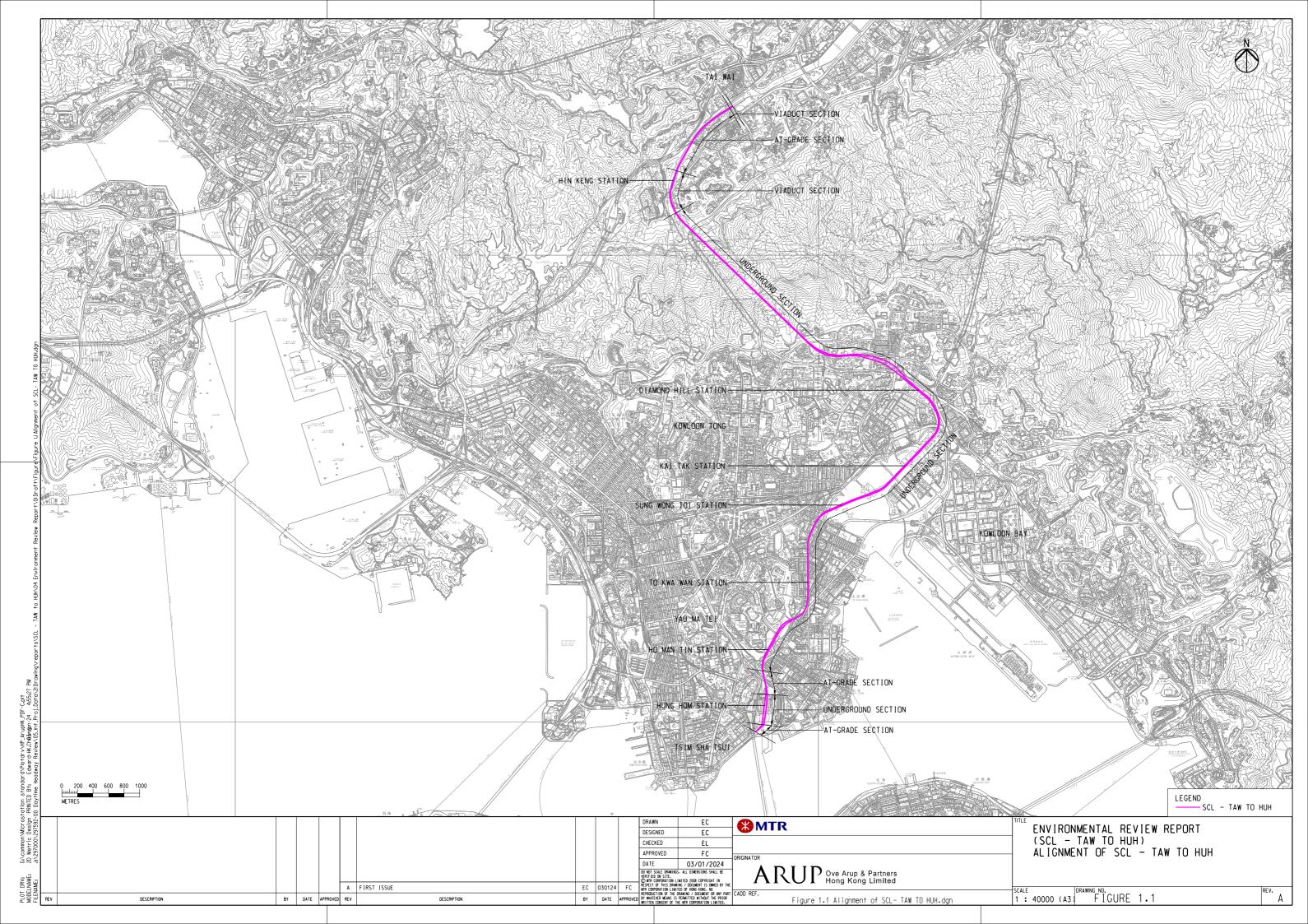
NSR ID	NSR	ASR	$\begin{array}{c} \text{Criterion} \\ L_{eq(30\text{min}),} \\ dB(A) \end{array}$	$\begin{aligned} & \textbf{Predicted} \\ & \textbf{Noise} \\ & \textbf{Levels} \\ & \textbf{L}_{eq(30min)} \\ & \textbf{,dB(A)} \end{aligned}$	Comply ? (Y/N)
MTW-12-6	Great Wall Building	В	45	33	Y
MTW-12-7	197-199 Ma Tau Wai Road	В	45	37	Y
MTW-12-8	Pak Tai Mansion	В	45	39	Y
MTW-12-9	Residential premises along Hung Kwong Street	В	45	35	Y
MTW-12-10	Lucky Building	В	45	<30	Y
MTW-12-11	Jing Ming Building	В	45	<30	Y
MTW-12-12	One Elegance	В	45	35	Y
MTW-13-1	PLK Madam Chan Wai Chow Memorial School <sup>[2]</sup>	В	-	-	-
MTW-14-1	PLK Lam Man Chan English Pri mary School <sup>[2]</sup>	В	-	-	-
MTW-15-1	Hung Hom Lutheran Primary School <sup>[2]</sup>	В	-	-	-
MTW-16-1	SKH Good Shepherd Primary School <sup>[2]</sup>	В	-	-	-
MTW-17-1	Loyal Mansion	В	45	30	Y
MTW-18-1/2	City Hub	В	45	<30	Y
MTW-19-1	Holy Trinity Church	В	45	30	Y
HOM-1-1	Ko Shan Theatre	В	45	35	Y
HOM-2-1	Faerie Court	В	45	34	Y
HOM-2-2	Lee Wing Building	В	45	35	Y
HOM-2-3	Wing Lam Mansion	В	45	36	Y
HOM-2-4	Tak Lee Court	В	45	34	Y
HOM-2-5	Chat Ma Mansion	В	45	34	Y
HOM-2-6	Chatham Mansion	В	45	37	Y
HOM-3-1	Fook Sing Mansion	В	45	31	Y
HOM-3-2	Marigold Mansion, Block A	В	45	31	Y
HOM-4-1	Yee Fu Building	В	45	<30[1]	Y
HOM-5-1	271 Chatham Road North	В	45	<30[1]	Y
HOM-P2	PolyU Student Halls of Residence (Ho Man Tin)	В	45	<30[1]	Y
НОМ-Р3-1	Residential Building, HOM Development	В	45	37 <sup>[1]</sup>	Y
HUH-1-1	Get Nice Centre <sup>[2]</sup>	В	-	-	-
HUH-1-2	Lok Ka House	В	45	31 <sup>[1]</sup>	Y
HUH-1-3	Wing Fung Building	В	45	30[1]	Y

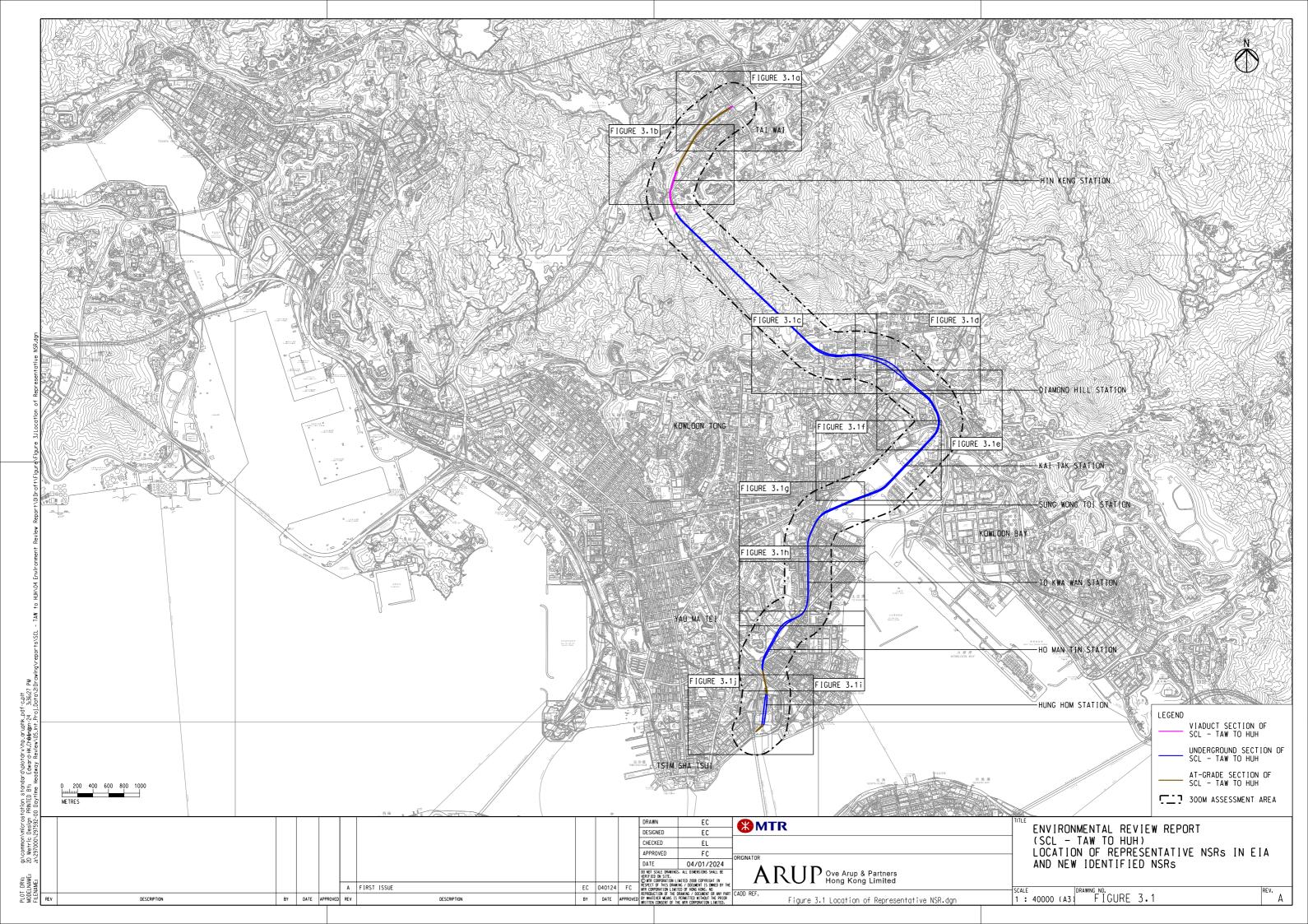
- [1] Cumulative impact from operation of SCL MKK to HUH, SCL HHS and Kwun Tong Line Extension (KTE) are included.
- [2] Night-time noise criterion is not applicable for the NSR.
- 3.5.2 Based on the results above, the predicted groundborne rail noise levels of the representative NSRs after the proposed headway uplift are all well below the noise criteria. Adverse groundborne rail noise impact is not anticipated and additional mitigation measures are not required.
- 3.5.3 In addition, the approved EIA report for SCL TAW to HUH has conducted a sensitivity test to examine the airborne rail noise impact of future operation with train frequency at 26 and 28 tphpd, an increase of 0.3dB(A) and 0.7dB(A) respectively were predicted. The uplift adjustment would still result in compliance of the daytime and evening noise criteria at all NSRs.

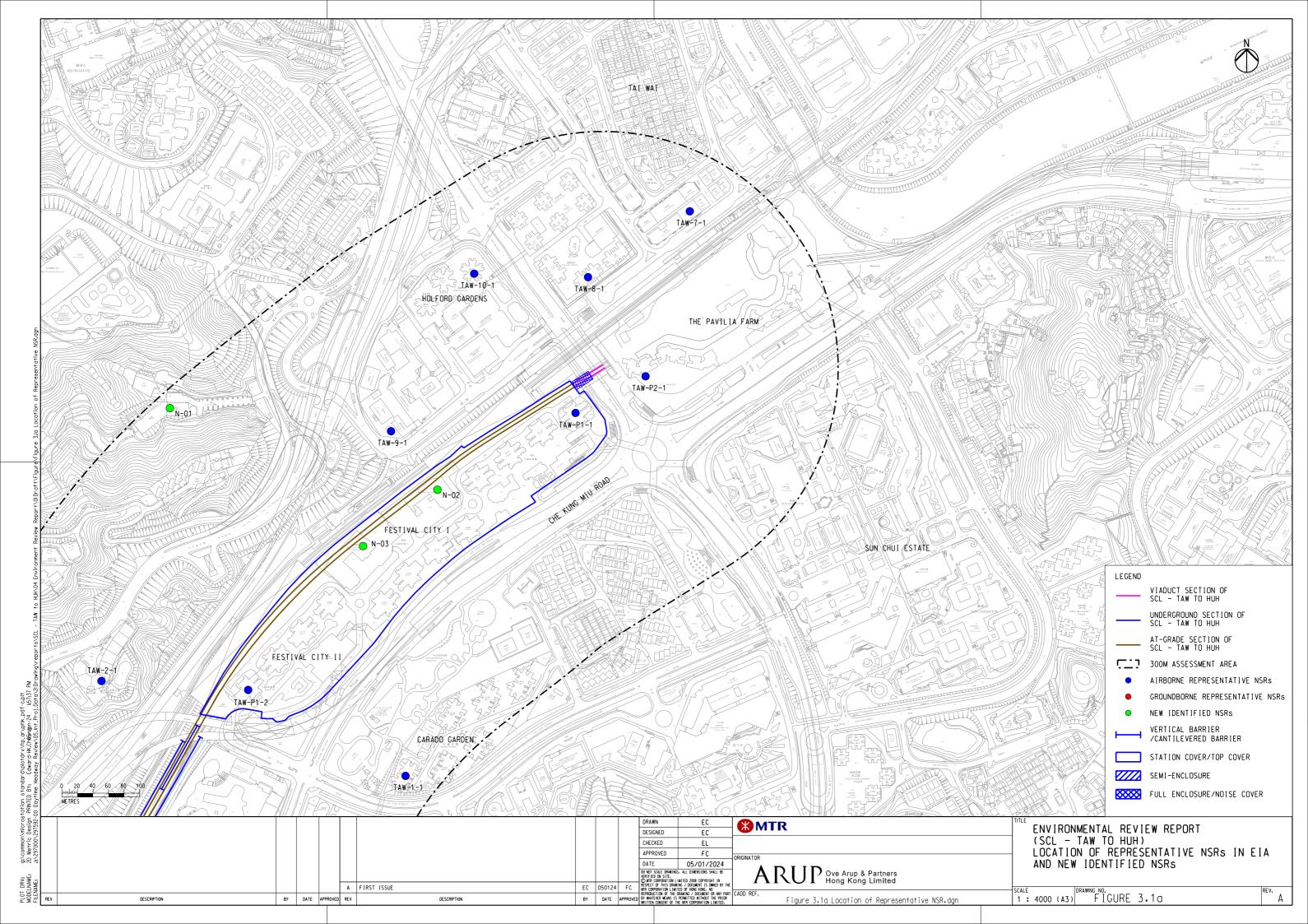
## 4 Conclusion

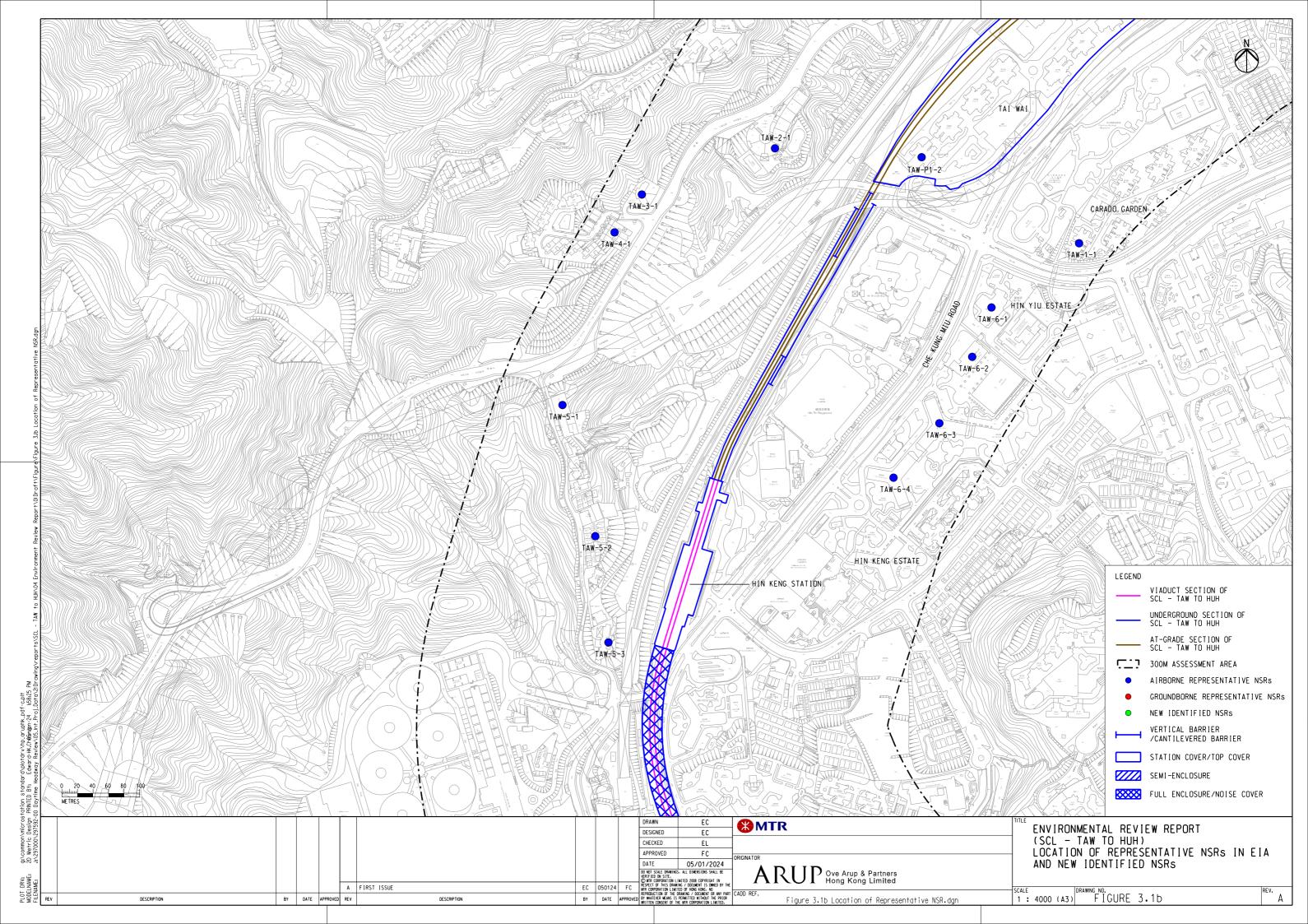
- 4.1.1 This document has discussed the possible environmental changes resulting from the proposed amendments:
  - Uplift of daytime and evening headway of SCL TAW to HUH from 24 tphpd to 28 tphpd
  - Uplift of night-time headway of SCL TAW to HUH from 12 tphpd to 24 tphpd
- 4.1.2 An environmental review has been conducted for the proposed variation on operational rail noise impact. Evaluation results indicate that there is no adverse environmental impact arising from the proposed uplift of daytime and evening headway and there will be no material change to the environmental impact. The project will remain in compliance with the EIAO-TM requirements.

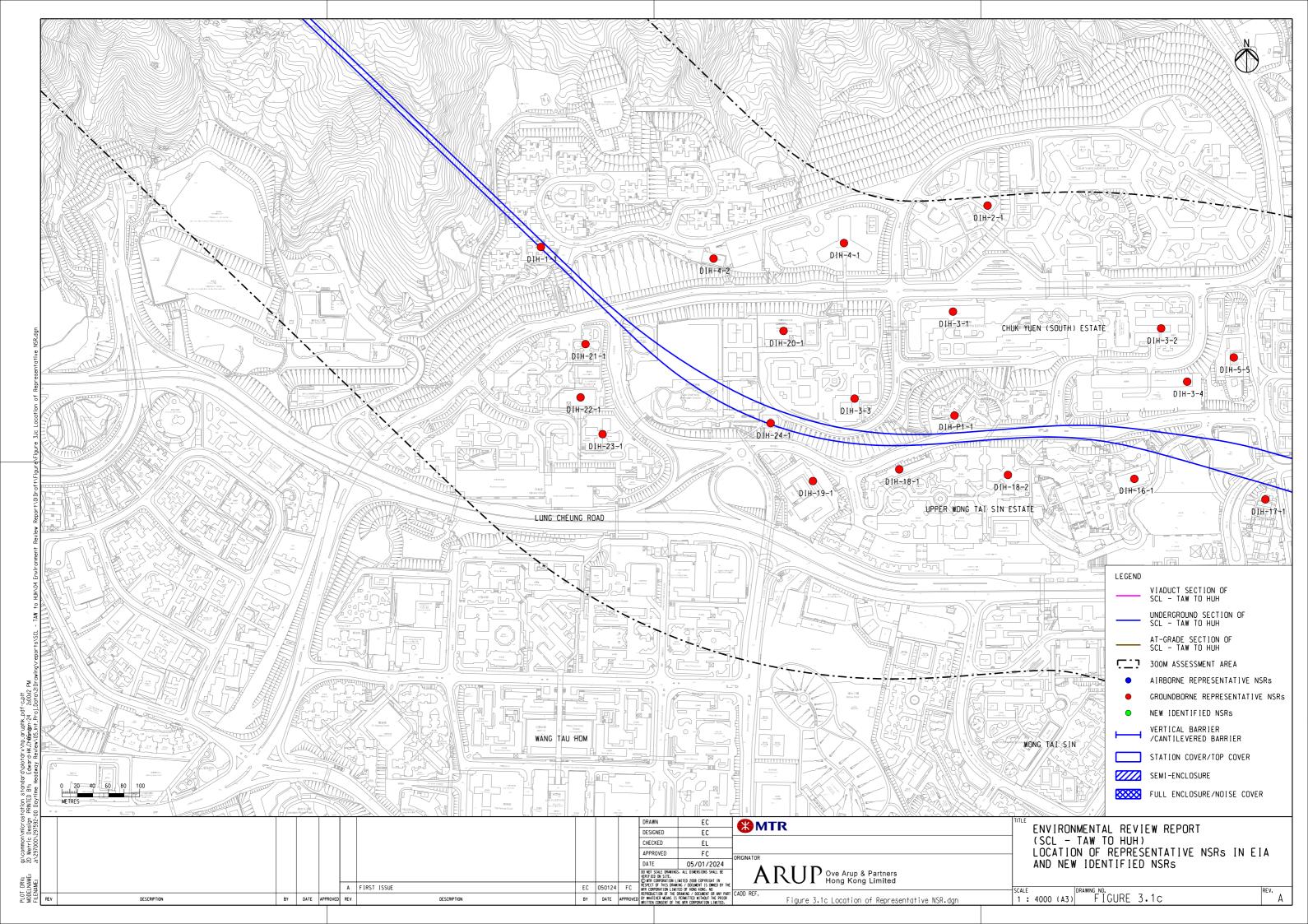
## **Figure**

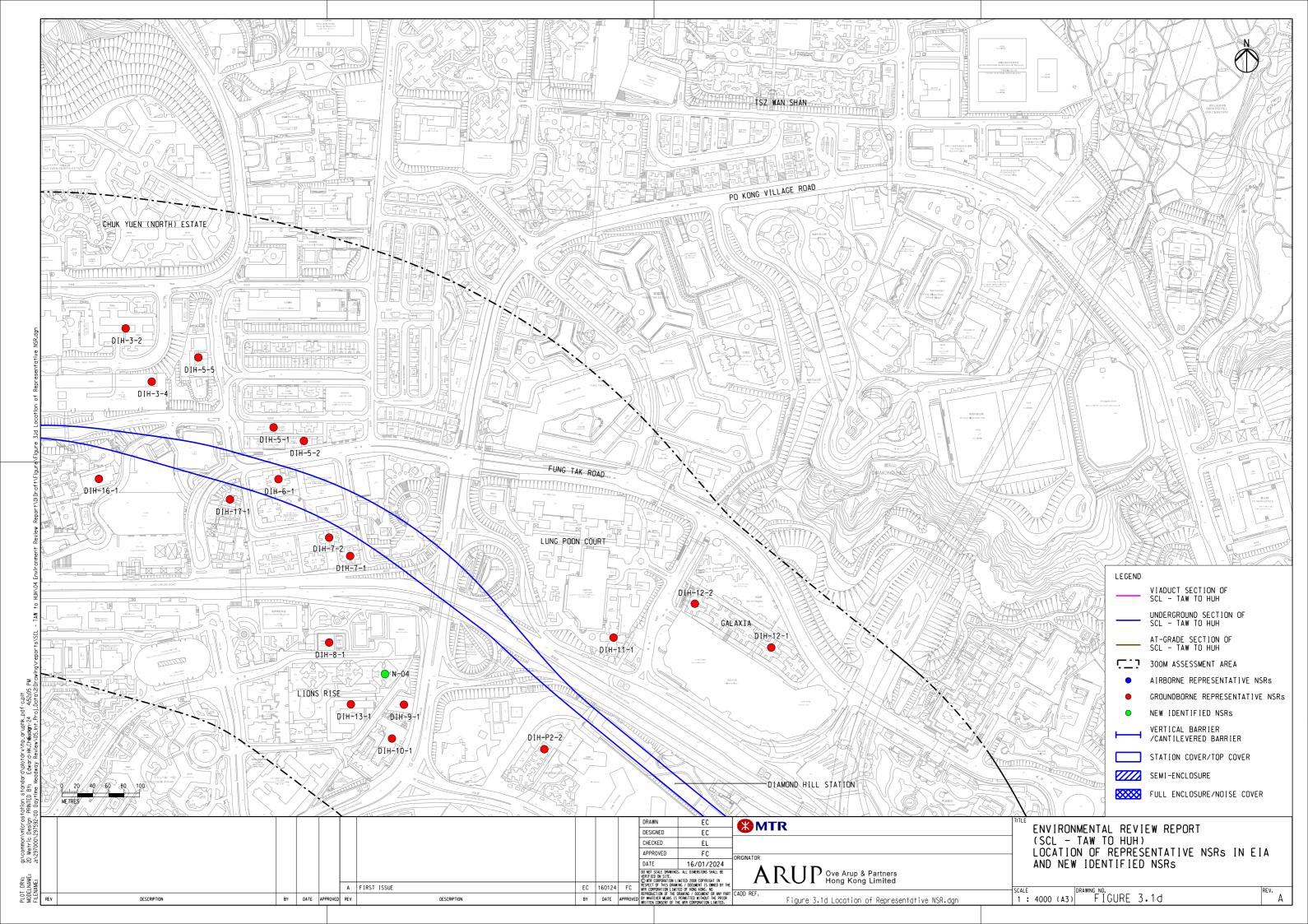


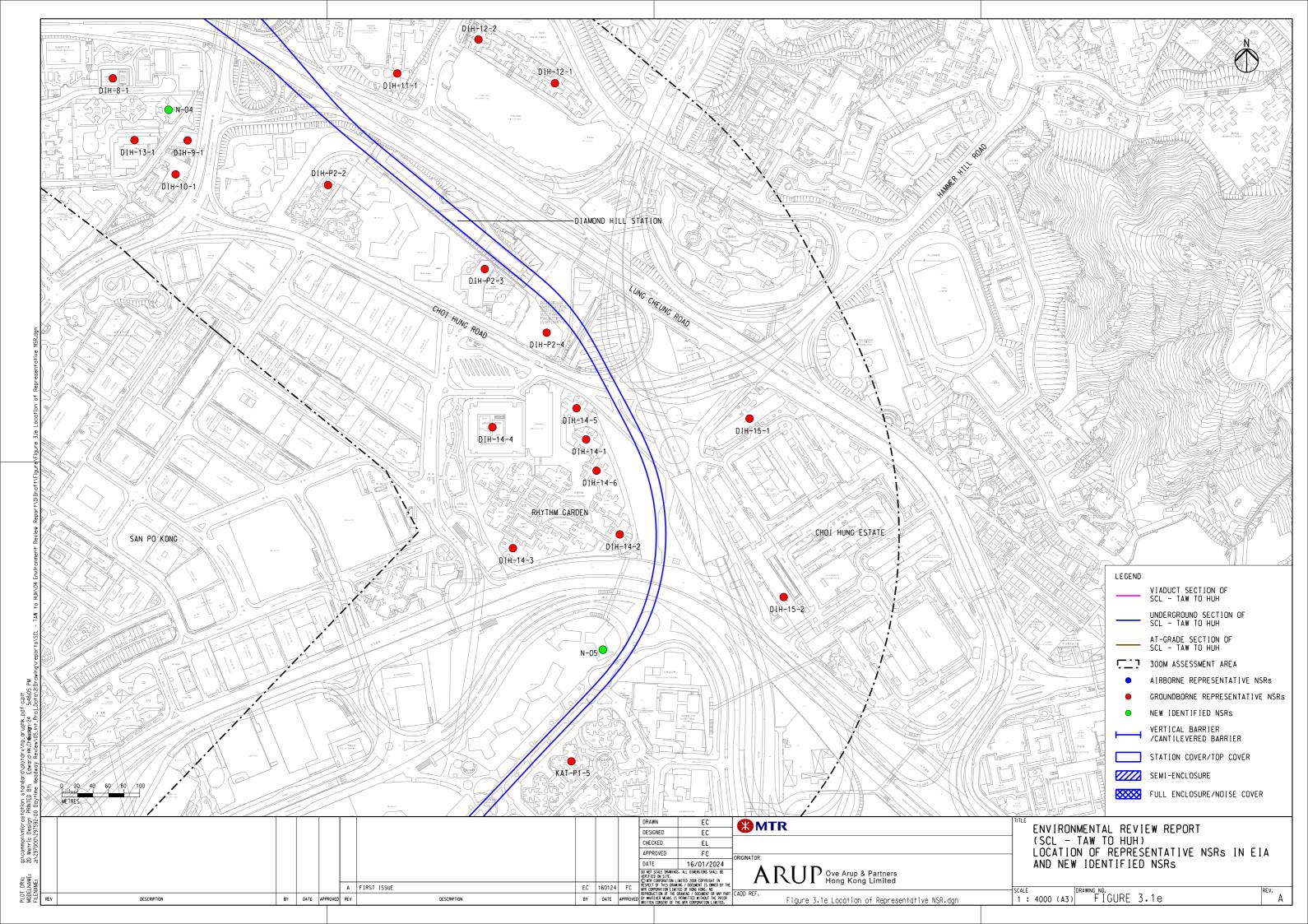


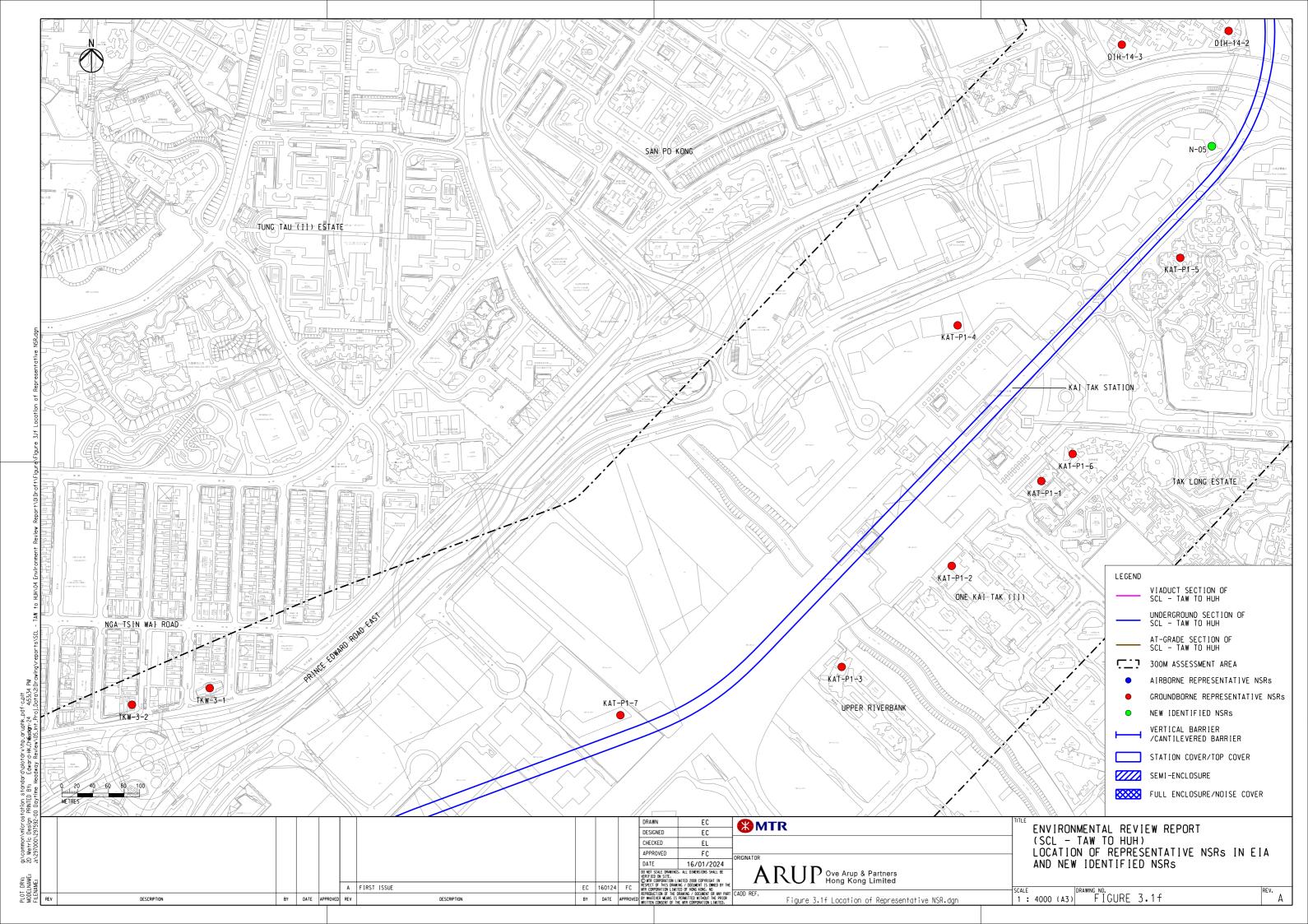


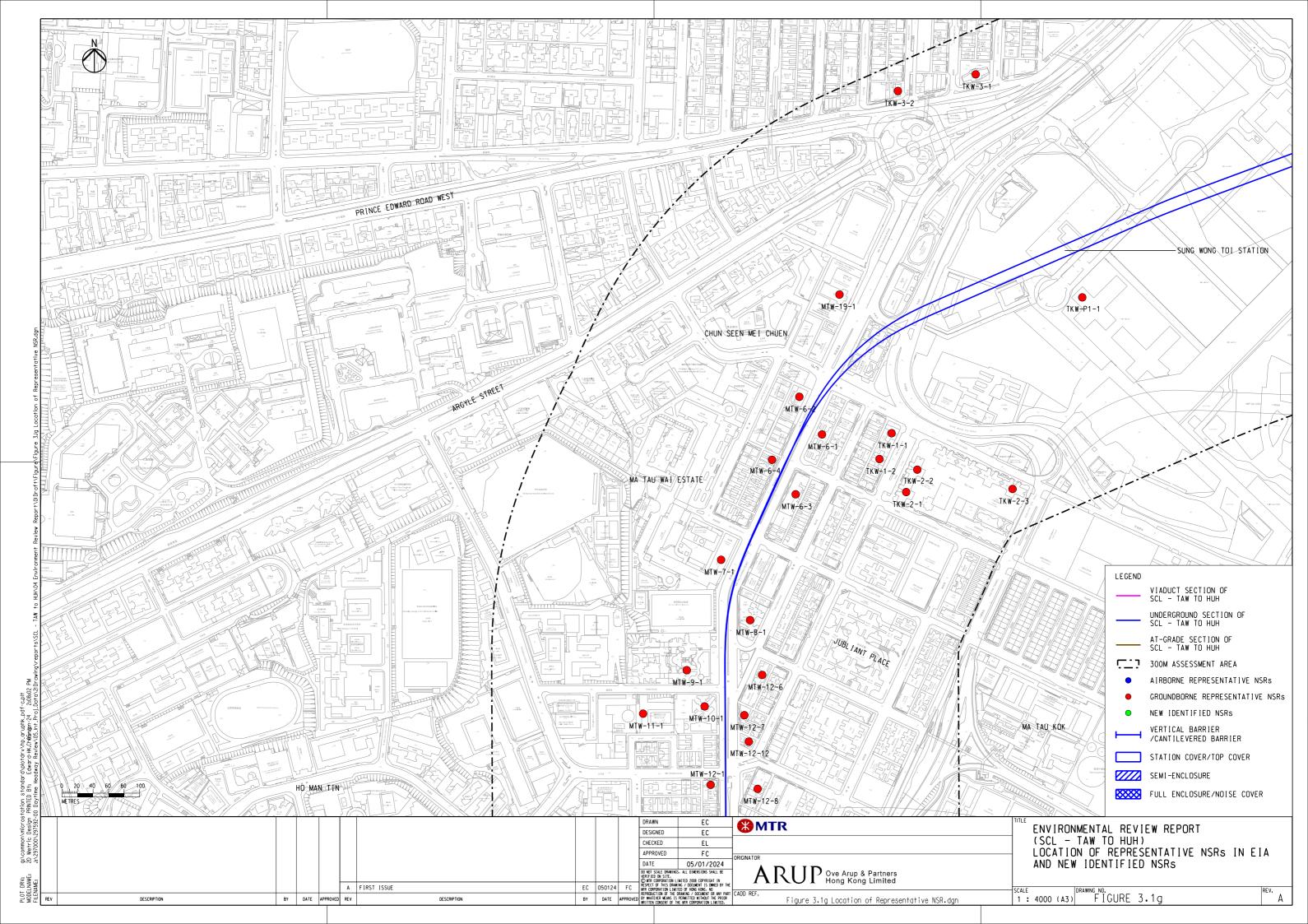


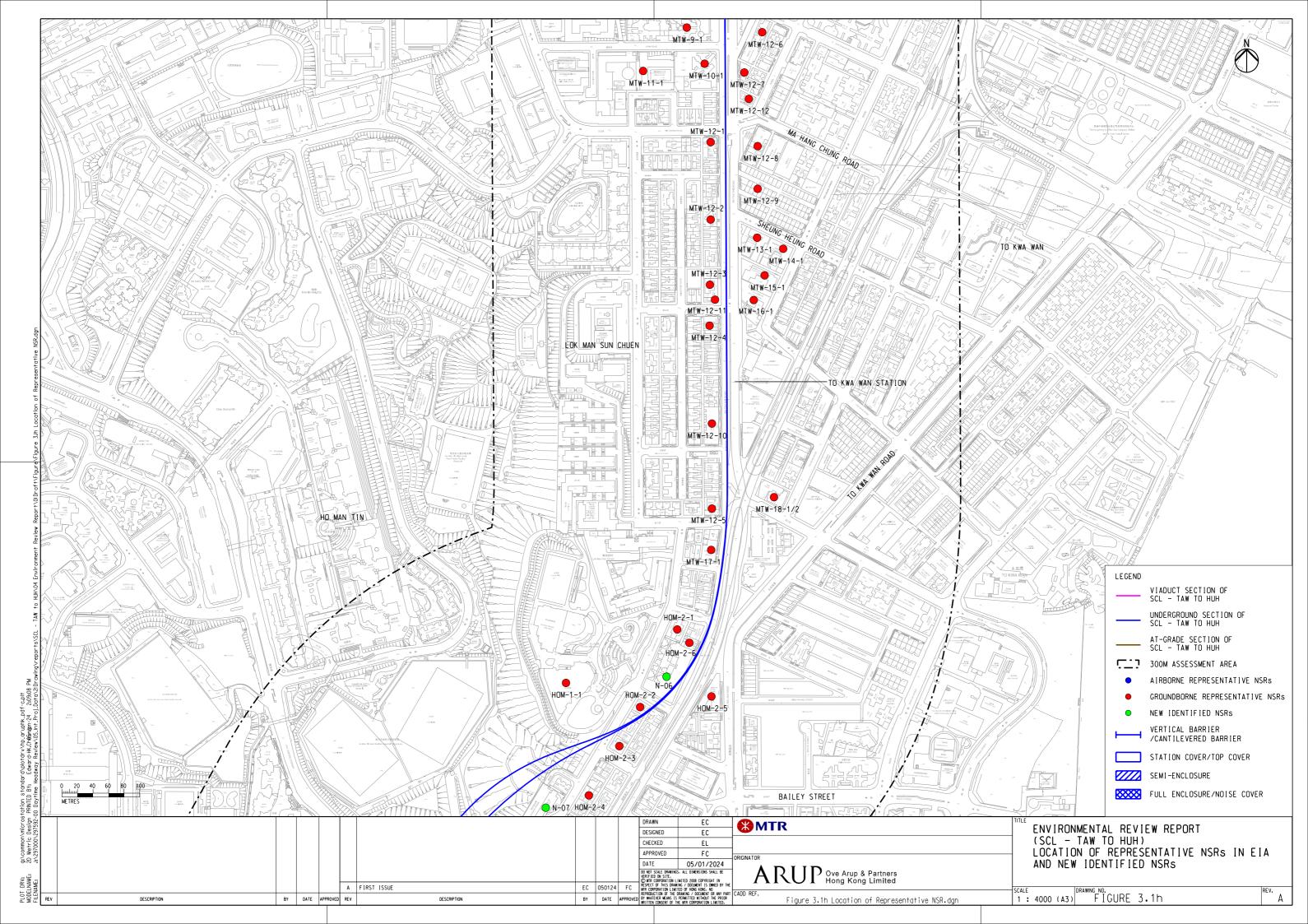


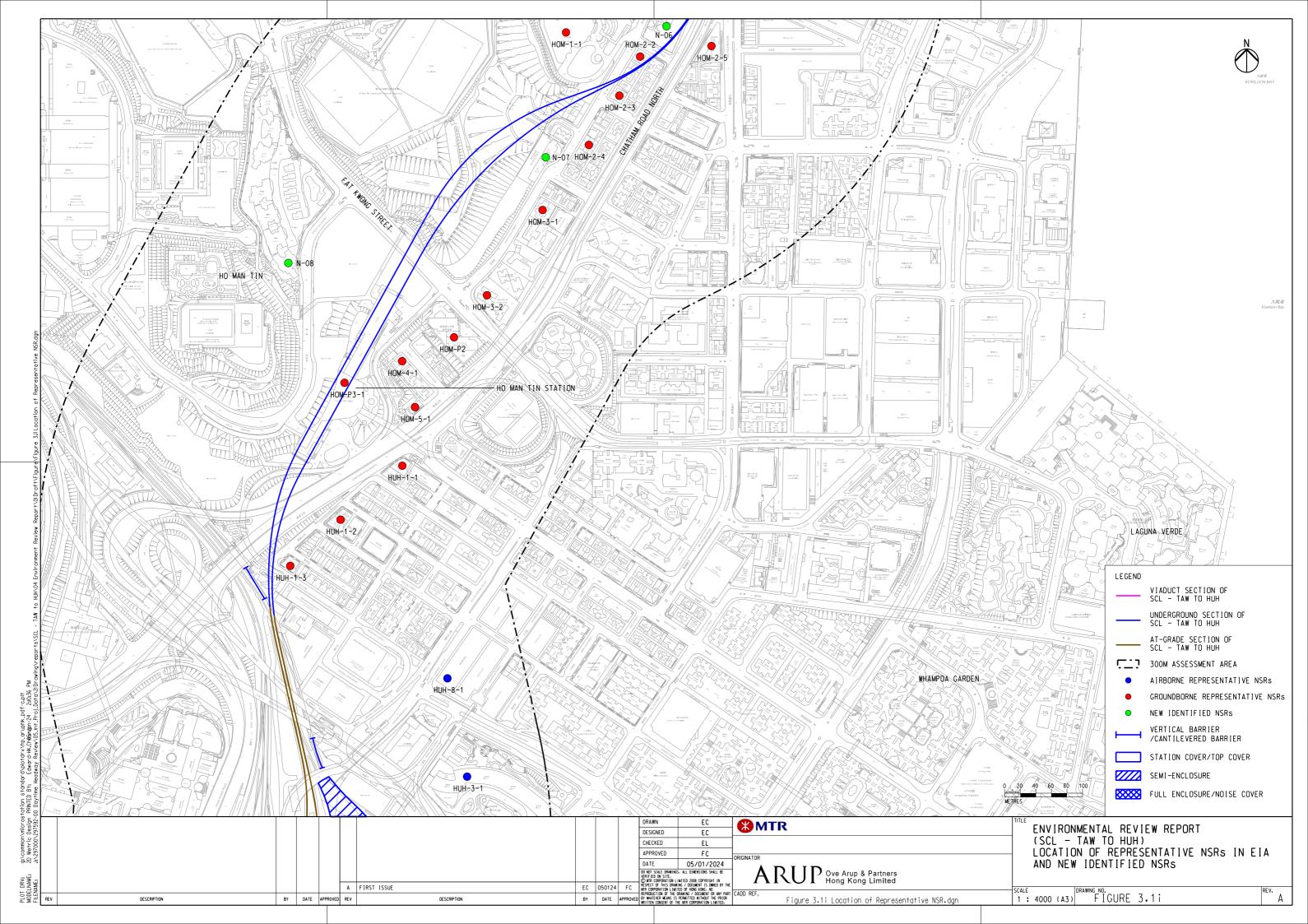


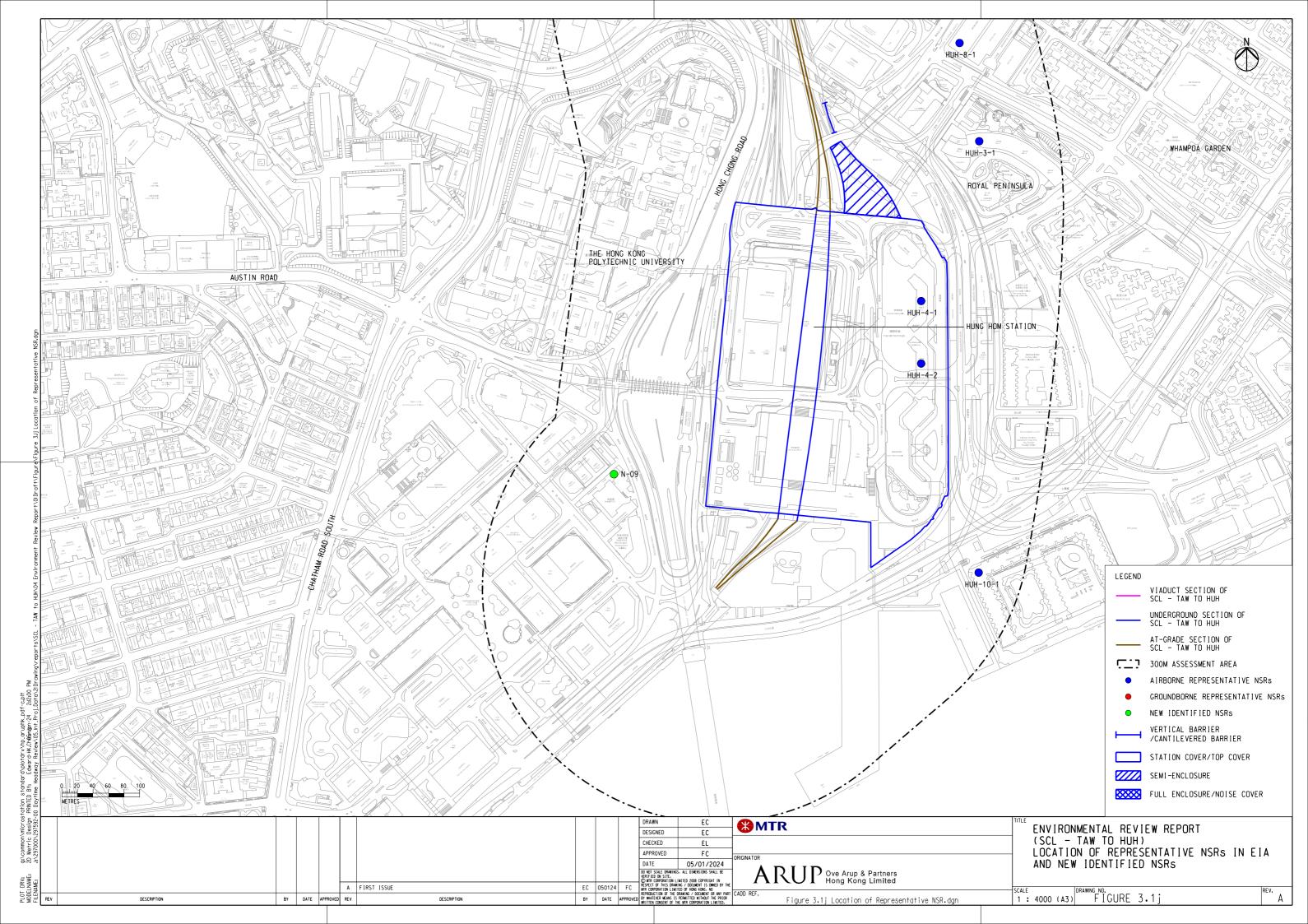












# Appendix 3.1

## Noise Sensitive Receivers

Project number:

Title:

Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML)

297592-00

Representative NSRs affected by Airborne Rail Noise in the Approved EIA Report for SCL - TAW to HUH

				Criterion, $L_{ec}$	<sub>I(30min)</sub> dB(A)	Predicted Noise Le	vel, L <sub>eq(30min)</sub> dB(A)	
NSR ID	NSR	Uses <sup>[1]</sup>	ASR	Daytime/Evening	Night-time	Daytime/Evenng	Night-time	Remarks
TAW-1-1	Block 6, Carado Garden	R	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>	42	39	-
TAW-2-1	Shatin Heights	R	С	60 <sup>[2]</sup>	50 <sup>[2]</sup>	46	43	An ASR of "B" was assigned to Shatin Heights in the approved EIA report for SCL - TAW to HUH. However, it is observed from desktop review that the NSR shall fall into type(iv) "Area other than those above" and it was directly affected by Eagle's Nest Tunnel with an Annual Average Daily Traffic (AADT) of 56,110 in Year 2022, which was considered as an IF under IND-TM. Hence, an ASR of "C" is assigned to the NSR.
TAW-3-1	K K Terrace	R	С	60 <sup>[2]</sup>	50 <sup>[2]</sup>	44	41	-
TAW-4-1	Block 2&3, Woodcrest Hill	R	С	60 <sup>[2]</sup>	50 <sup>[2]</sup>	41	38	-
TAW-5-1	Chan's Garden, The Blossom	R	С	60 <sup>[2]</sup>	50 <sup>[2]</sup>	44	41	An ASR of "B" was assigned to Chan's Garden, The Blossom in the approved EIA report for SCL - TAW to HUH. However, it is observed from desktop review that the NSR shall fall into type(iv) "Area other than those above" and it was directly affected by Eagle's Nest Tunnel with an Annual Average Daily Traffic (AADT) of 56,110 in Year 2022, which was considered as an IF under IND-TM. Hence, an ASR of "C" is assigned to the NSR.
TAW-5-2	L Louey, The Blossom	R	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>	<30	<30	-
TAW-5-3	Joyville	R	С	60 <sup>[2]</sup>	50 <sup>[2]</sup>	44	41	An ASR of "B" was assigned to Joyville in the approved EIA report for SCL - TAW to HUH. However, it is observed from desktop review that the NSR shall fall into type(iv) "Area other than those above" and it was directly affected by Eagle's Nest Tunnel with an Annual Average Daily Traffic (AADT) of 56,110 in Year 2022, which was considered as an IF under IND-TM. Hence, an ASR of "C" is assigned to the NSR.
TAW-6-1	Hin Yiu House, Hin Keng Estate	R	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>	44	41	-
TAW-6-2	Carmel Alison Lam Primary School, Hin Keng Estate	R	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>	36	_[4]	-
TAW-6-3	Hin Tak House, Hin Keng Estate	R	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>	45	42	-
TAW-6-4	Hin Yeung House, Hin Keng Estate	R	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>	45	42	-
TAW-7-1	Kam Cheong Building	R	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>	42	39	-
TAW-8-1	Block 2, Grandway Garden	R	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>	37	34	-
TAW-9-1	Christian Alliance Cheng Wing Gee College	Е	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>	42	<u>[</u> 4]	-
TAW-10-1	Holford Garden	R	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>	35	32	-
TAW-P1-1	Tower 5, Festival City III	R	С	60 <sup>[2]</sup>	50 <sup>[2]</sup>	47	44	Tower 5, Festival City III was previously known as Festival City (Facade facing Mei Tin Road) in the approved EIA Report for SCL - TAW to HUH. An ASR of "B" was assigned to Tower 5, Festival City III in the approved EIA report for SCL - TAW to HUH. However, it is observed from desktop review that the NSR shall fall into type(iv) "Area other than those above" and it was directly affected by Mei Tin Road with an Annual Average Daily Traffic (AADT) of 38,880 in Year 2022, which was considered as an IF under IND-TM. Hence, an ASR of "C" is assigned to the NSR.
TAW-P1-2	Tower 1, Festival City II	R	С	60 <sup>[2]</sup>	50 <sup>[2]</sup>	48	45	Tower 1, Festival City II was previously known as Festival City (Facade not facing Mei Tin Road) in the approved EIA Report for SCL - TAW to HUH. An ASR of "B" was assigned to Tower 1, Festival City II in the approved EIA report for SCL - TAW to HUH. However, it is observed from desktop review that the NSR shall fall into type(iv) "Area other than those above" and it was directly affected by Eagle's Nest Tunnel with an Annual Average Daily Traffic (AADT) of 56,110 in Year 2022, which was considered as an IF under IND-TM. Hence, an ASR of "C" is assigned to the NSR.

				Criterion, L <sub>eq</sub>	<sub>l(30min)</sub> dB(A)	Predicted Noise Le	evel, L <sub>eq(30min)</sub> dB(A)	
NSR ID	NSR	Uses <sup>[1]</sup>	ASR	Daytime/Evening	Night-time	Daytime/Evenng	Night-time	Remarks
TAW-P2-1	Tower 7, The Pavilia Farm	R	С	60 <sup>[2]</sup>	50 <sup>[2]</sup>	47	44	Tower 7, The Pavilia Farm was previously known as Property above Tai Wai Station (Façade facing Mei Tin Road) in the approved EIA Report for SCL - TAW to HUH. An ASR of "B" was assigned to Tower 7, The Pavilia Farm in the approved EIA report for SCL - TAW to HUH. However, it is observed from desktop review that the NSR shall fall into type(iv) "Area other than those above" and it was directly affected by Mei Tin Road with an Annual Average Daily Traffic (AADT) of 38,880 in Year 2022, which was considered as an IF under IND-TM. Hence, an ASR of "C" is assigned to the NSR.
HUH-1-3	Wing Fung Building	R	С	60 <sup>[2][3]</sup>	50 <sup>[2][3]</sup>	42	39	-
HUH-3-1	Block 2, Royal Peninsula	R	C	60 <sup>[2][3]</sup>	50 <sup>[2][3]</sup>	51	48	-
HUH-4-1	Tower 2, The Metropolis Residence	S	В	55 <sup>[2][3]</sup>	45 <sup>[2][3]</sup>	45	42	According to the approved EIA Report for SCL - TAW to HUH, Metropolis Residence is a service apartment and shall not rely on openable windows for ventilation. Nonetheless, for conservative
HUH-4-2	Tower 1, The Metropolis Residence	S	В	55 <sup>[2][3]</sup>	45 <sup>[2][3]</sup>	44	41	consideration that occupier might open window under special circumstances, this premise has been considered as an assessment point.
HUH-8-1	2 Gillies Avenue South	R	C	60 <sup>[2][3]</sup>	50 <sup>[2][3]</sup>	47	44	2 Gillies Avenue South was demolished and will be reconstructed to residential development.
HUH-10-1	Harbourfront Horizon	R	В	65	55	50	47	According to S16 Application (A/K9/282), the use of Harbourfront Horizon will be changed from hotel to residential use. According to the approved EIA Report for SCL - TAW to HUH, Harbourfront Horizon shall not rely on openable windows for ventilation. Nonetheless, for conservative consideration that occupier might open window under special circumstances, this premise has been considered as an assessment point.

- [1] R Residential, E Educational Institutions, S Service Apartment.
- [2] With reference to the approved EIA report for SCL TAW to HUH, ANL-10 dB(A) is adopted to the criterion to consider the cumulative operational rail noise impacts from existing East Rail and Intercity Train.
- [3] Cumulative impact from operation of SCL (MKK-HUH) is included.
- [4] The NSR was identified as school in the approved EIA report for SCL TAW to HUH. Night-time noise criteria and operation conditions are not applicable.

Project number:

Title:

Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML)

297592-00

Representative NSRs affected by Groundborne Rail Noise in the Approved EIA Report for SCL - TAW to HUH

		<i>z</i> .,			<sub>q(30min)</sub> dB(A)	Predicted Noise Lev	vel, L <sub>eq(30min)</sub> dB(A)	
NSR ID	NSR	Uses <sup>[1]</sup>	ASR	Daytime/Evening	Night-time	Daytime/Evening	Night-time	Remarks
DIH-1-1	Tsui Chuk Garden Block 5	R	В	55	45	43	40	-
DIH 2-1	Pak Yuen House, Chuk Yuen North Estate	R	В	55	45	42	39	-
DIH-3-1	Wah Yuen House, Chuk Yuen South Estate	R	В	55	45	42	39	-
DIH-3-2	Nga Yuen House, Chuk Yuen South Estate	R	В	55	45	42	39	-
DIH-3-3	Kwai Yuen House, Chuk Yuen South Estate	R	В	55	45	45	42	-
DIH-3-4	Chui Yuen House, Chuk Yuen South Estate	R	В	55	45	42	39	-
DIH-4-1	Pang Ching Court	R	В	55	45	42	39	-
DIH-4-2	Tsui Chuk Peace Evangelical Centre	W	В	55	45	44	_[3]	Tsui Chuk Peace Evangelical Centre was previously known as Carbo Anglo-Chinese Kindergarten in the approved EIA reprot for SCL – TAW to HUH.
DIH-5-1	Rainbow Home	R	В	55	45	37	34	Rainbow Home was demolished and will be reconstructed to residential development.
DIH-5-2	Residential premises along Fung Tak Road	R	В	55	45	38	35	-
DIH-5-5	Our Lady's Kindergarten	Е	В	55	45	34	_[3]	-
DIH 6-1	Wong Tai Sin Fire Station and Quarters Block A	R	В	55	45	42	39	-
DIH-7-1	Tropicana Gardens Block 2	R	В	55	45	38	35	-
DIH-7-2	Tropicana Gardens Block 3	R	В	55	45	40	37	-
DIH-8-1	Redemption Lutheran Church	W	В	55	45	<30	<30	-
DIH-9-1	Shek On Building	R	В	55	45	<30	_[3]	-
DIH-10-1	Hong Kong Sheung Keung Hui Nursing Home	Н	В	55	45	<30	<30	-
DIH-11-1	Lung Wan House, Lung Poon Court	R	В	55	45	<30	<30	-
DIH-12-1	Galaxia Tower B	R	В	55	45	<30	<30	-
DIH-12-2	Galaxia Tower E	R	В	55	45	<30	<30	-
DIH-13-1	Canossa Primary School[2]	Е	В	55	45	<30	<30	-
DIH-14-1	Rhythm Garden Block 2	R	В	55	45	31	<30	-
DIH-14-2	Rhythm Garden Block 5	R	В	55	45	33	30	-
DIH-14-3	Rhythm Garden Block 8	R	В	55	45	<30	<30	-
DIH-14-4	Canossa Primary School (San Po Kong)	E	В	55	45	<30	_[3]	-
DIH-14-5	Rhythm Garden Block 1	R	В	55	45	32	<30	-
DIH-14-6	Rhythm Garden Block 3	R	В	55	45	31	<30	-
DIH-15-1	Kam Wan House, Choi Hung Estate	R	В	55	45	<30	<30	-
DIH-15-2	Kam Pik House, Choi Hung Estate	R	В	55	45	<30	<30	-
DIH-16-1	Wong Tai Sin Temple	W	В	55	45	39	36	-
DIH-17-1	Chuk Yuen United Village	R	В	55	45	39	36	-
DIH-18-1	Upper Wong Tai Sin Estate Po Sin House	R	В	55	45	41	38	-
DIH-18-2	Upper Wong Tai Sin Estate Tat Sin House	R	В	55	45	44	41	-
DIH-19-1	Lung Cheung Government Secondary School	E	В	55	45	45	<u>[</u> [3]	-

				Criterion, L <sub>eq</sub>	(30min) dB(A)	Predicted Noise Lev	vel, L <sub>eq(30min)</sub> dB(A)	
NSR ID	NSR	Uses <sup>[1]</sup>	ASR	Daytime/Evening	Night-time	Daytime/Evening	Night-time	Remarks
DIH-20-1	Baptist Rainbow Primary School	Е	В	55	45	44	_[3]	-
DIH-21-1	Tin Wang Court, Wang King House	R	В	55	45	36	33	-
DIH-22-1	Price Memorial Catholic Primary School	Е	В	55	45	34	_[3]	-
DIH-23-1	Tin Ma Court, Chun On House	R	В	55	45	32	<30	-
DIH-24-1	Shing Wong Temple	W	В	55	45	47	44	-
DIH-P1-1	Wing Sin House, Wong Tai Sin Estate	R	В	55	45	35	32	Wing Sin House, Wong Tai Sin Estate was previously known as Upper Wong Tai Sin Estate Phase 3 in the approved EIA report for SCL - TAW to HUH.
DIH-P2-1	ТВА	NA <sup>[2]</sup>	В	55	45	<30	<30	DIH-P2-1 (TBA) will be redeveloped into a water feature park. It is no longer considered as an NSR.
DIH-P2-2	Kai Chuen Court	R	В	55	45	46	43	Kai Chuen Court was previously known as TBA in the approved EIA report for SCL - TAW to HUH.
DIH-P2-3	Kai Cheung Court	R	В	55	45	48	45	Kai Cheung Court was previously known as TBA in the approved EIA report for SCL - TAW to HUH.
DIH-P2-4	Confucian Academy (being constructed)	W	В	55	45	<30	<30	Confucian Academy (being constructed) was previously known as TBA in the approved EIA report for SCL - TAW to HUH.
KAT-P1-1	Kai Long Court	R	В	55	45	<30	<30	Kai Long Court was previously known as Residential premises near Kai Tak Station in the approved EIA report for SCL - TAW to HUH.
KAT-P1-2	One Kai Tak (II)	R	В	55	45	<30	<30	One Kai Tak (II) was previously known as Residential premises near Kai Tak Station in the approved EIA report for SCL - TAW to HUH.
KAT-P1-3	Upper Riverbank	R	В	55	45	34	31	Upper Riverbank was previously known as Residential premises near Kai Tak Station in the approved EIA report for SCL - TAW to HUH.
KAT-P1-4	Residential premises near Kai Tak Station	R	В	55	45	<30	<30	-
KAT-P1-5	Mun Ching House, Kai Ching Estate	R	В	55	45	43	40	Mun Ching House, Kai Ching Estate was previously known as Residential premises near Kai Tak Station in the approved EIA report for SCL - TAW to HUH.
KAT-P1-6	Tower H3, De Novo	R	В	55	45	<30	<30	Tower H3, De Novo was previously known as Residential premises near Kai Tak Station in the approved EIA report for SCL - TAW to HUH.
KAT-P1-7	Residential premises near Kai Tak Station	R	В	55	45	48	45	The approved EIA report for SCL – TAW to HUH did not illustrate the specific location of KAT-P1-7. After reviewing the OZP, the location of KAT-P1-7 has been assigned to the residential premises of that zone with nearest distance to the rail alignment.
TKW-1-1	Parc 22	R	В	55	45	<30	<30	-
TKW-1-2	Sanford Mansion	R	В	55	45	<30	<30	-
TKW-2-1	Skytower Tower 1	R	В	55	45	<30	<30	-
	Skytower Tower 2	R	В	55	45	<30	<30	-
	Skytower Tower 7	R	В	55	45	<30	<30	-
TKW-3-1	Prince Ritz	R	В	55	45	<30	<30	-
TKW-3-2	Prosperity House	R	В	55	45	<30	<30	-
	Kai Yuet Court (being constructed)	R	В	55	45	33	30	Kai Yuet Court (being constructed) was previously known as Residential premises near To Kwa Wan Station in the approved EIA report for SCL - TAW to HUH.
MTW-6-1	Fok On Building	R	В	55	45	40	37	-
	HK Society for the Protection of Children	R	В	55	45	50	_[3]	-
	Chung Nam Mansion	R	В	55	45	38	35	-
	Pok Oi Lau	R	В	55	45	48	45	-
MTW-7-1	Geranium House	R	В	55	45	43	40	-
MTW-8-1	Horae Palace	R	В	55	45	38	35	-
MTW-9-1	Majestic Park	R	В	55	45	31	<30	<del>-</del>
	18 Farm Road Farm Road Government Primary School	R E	В	55 55	45 45	38	35 _ <sup>[3]</sup>	-  -
	Yuet Fai Mansion	D					20	
1V1 1 VV -1 Z-1	I UCI FAI IVIAIISIOII	R	В	55	45	41	38	<u> </u> -

				Criterion, L <sub>eq</sub>	$_{\text{q(30min)}}  \text{dB(A)}$	Predicted Noise Lev	vel, L <sub>eq(30min)</sub> dB(A)	
NSR ID	NSR	Uses <sup>[1]</sup>	ASR	Daytime/Evening	Night-time	Daytime/Evening	Night-time	Remarks
MTW-12-2	Delight Court	R	В	55	45	36	33	-
MTW-12-3	Lucky Mansion	R	В	55	45	32	<30	-
MTW-12-4	352-354 Ma Tau Wai Road	R	В	55	45	32	<30	-
MTW-12-5	Seng Cheong Building	R	В	55	45	35	32	-
MTW-12-6	Great Wall Building	R	В	55	45	33	30	-
MTW-12-7	197-199 Ma Tau Wai Road	R	В	55	45	40	37	-
MTW-12-8	Pak Tai Mansion	R	В	55	45	43	40	-
MTW-12-9	Residential premises along Hung Kwong Street	R	В	55	45	41	38	-
MTW-12-10	Lucky Building	R	В	55	45	34	31	-
MTW-12-11	Jing Ming Building	R	В	55	45	32	<30	-
MTW-12-12	One Elegance	R	В	55	45	39	36	-
MTW-13-1	PLK Madam Chan Wai Chow Memorial School	Е	В	55	45	44	41	PLK Madam Chan Wai Chow Memorial School was previously known as Cheung Chuk Shan Memorial School in the approved EIA Report for SCL – TAW to HUH.
1 101 1 00 - 14-1	PLK Lam Man Chan English Primary School	E	В	55	45	<30	<30	-
MTW-15-1	Hung Hom Lutheran Primary School	Е	В	55	45	43	40	-
MTW-16-1	SKH Good Shepherd Primary School	Е	В	55	45	42	39	-
MTW-17-1	Loyal Mansion	R	В	55	45	35	32	-
MTW-18-1/2	City Hub	R	В	55	45	<30	<30	MTW-18-1 (Residential premises along Chi Kiang Street) and MTW-18-2 (No. 2 Kowloon City Road) were demolished. City Hub was built on the same address.
MTW-19-1	Holy Trinity Church	W	В	55	45	32	<30	-
HOM-1-1	Ko Shan Theatre	P	В	55	45	33	30	-
HOM-2-1	Faerie Court	R	В	55	45	38	35	-
HOM-2-2	Lee Wing Building	R	В	55	45	44	41	-
HOM-2-3	Wing Lam Mansion	R	В	55	45	39	36	-
HOM-2-4	Tak Lee Court	R	В	55	45	38	35	-
HOM-2-5	Chat Ma Mansion	R	В	55	45	31	<30	-
HOM-2-6	Chatham Mansion	R	В	55	45	46	43	-
HOM-3-1	Fook Sing Mansion	R	В	55	45	<30	<30	-
HOM-3-2	Marigold Mansion, Block A	R	В	55	45	40	37	-
HOM-4-1	Yee Fu Building	R	В	55	45	36	33	-
HOM-5-1	271 Chatham Road North	R	В	55	45	31	<30	-
HOM-P2	PolyU Student Halls of Residence (Ho Man Tin)	R	В	55	45	36	<u>[</u> [3]	PolyU Student Halls of Residence (Ho Man Tin) was previously known as HKPU Phase 3 in the approved EIA report for SCL – TAW to HUH.
HOM-P3-1	Residential Building, HOM Development	R	В	55	45	44	41	-
HUH-1-1	Get Nice Centre	С	В	55	45	<30	_[3]	Get Nice Centre was previously known as Cartas Branchi College of Careers in the approved EIA report for SCL – TAW to HUH.
HUH-1-2	Lok Ka House	R	В	55	45	<30	<30	-
HUH-1-3	Wing Fung Building	R	В	55	45	41	38	-

<sup>[1]</sup> R - Residential, E - Educational Institutions, C - Commercial, W - Place of Public Worship, P - Performance Centre.

<sup>[2]</sup> NA - Not Applicable.

<sup>[3]</sup> The NSR was identified as school in the approved EIA report for SCL - TAW to HUH. Night-time noise criteria and operation conditions are not applicable.

Project Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML)

Project number: 297592-00

Title: New Identified NSRs affected by Airborne Rail Noise

					<sub>q(30min)</sub> dB(A)	Representative	
NSR ID	NSR	Uses <sup>[1]</sup>	ASR	Daytime/Evening	Night-time	NSR? (Y/N)	Remarks
N-01	The Met. Acappella	R	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>	N	The Met. Acappella falls into type(iv) "Area other than those above" according to IND-TM. It is not affected by IF. Hence, an ASR of "B" is assigned to the NSR. The NSR could be represent by Shatin Heights (NSR TAW-2-1) and it is therefore not considered as a representative NSR.
N-02	Immaculate Heart of Mary School	E	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>		Immaculate Heart of Mary School falls into type(iv) "Area other than those above" according to IND-TM. It is not affected by IF. Hence, an ASR of "B" is assigned to the NSR. The alignment runs below the podium deck of the NSR, noise impact is not anticipated and it is therefore not considered as a representative NSR.
N-03	Shatin Tsung Tsin Secondary School	E	В	55 <sup>[2]</sup>	45 <sup>[2]</sup>	N	Shatin Tsung Tsin Secondary School falls into type(iv) "Area other than those above" according to IND-TM. It is not affected by IF. Hence, an ASR of "B" is assigned to the NSR. The alignment runs below the podium deck of the NSR, noise impact is not anticipated and it is therefore not considered as a representative NSR.
N-09	University House	R	С	60 <sup>[2]</sup>	50 <sup>[2]</sup>	N	University House falls into type(iv) "Area other than those above" according to IND-TM. It is directly affected by Hong Chong Road with an AADT of 124,940 according to the Annual Traffic Census (ATC) for Year 2022 which is considered as an IF. Hence, an ASR of "C" is assigned to the NSR. The NSR could be represent by Tower 1, The Metropolis Residence (NSR HUH-4-2) and it is therefore not considered as a representative NSR.

<sup>[1]</sup> R – Residential, E – Educational Institutions.

<sup>[2]</sup> With reference to the approved EIA report for SCL - TAW to HUH, ANL-10 dB(A) is adopted to the criterion to consider the cumulative operational rail noise impacts from existing East Rail and Intercity Train.

Project

Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML)

Project number: 297592-00

Title:

New Identified NSRs affected by Groundborne Rail Noise

					q(30min) dB(A)	Representative	
NSR ID	NSR	Uses <sup>[1]</sup>	ASR	Daytime/Evening	Night-time	NSR? (Y/N)	Remarks
N-04	Tower 6, Lions Rise	R	В	55	45	N	Tower 6, Lions Rise falls into type(iv) "Area other than those above" according to IND-TM. It is not affected by IF. Hence, an ASR of "B" is assigned to the NSR. The NSR could be represent by Shek On House (NSR DIH-9) and it is therefore not considered as a representative NSR.
N-05	Proposed Residential Development at Kai Tak 1E1	R	В	55	45	N	Proposed Residential Development at Kai Tak 1E1 falls into type(iv) "Area other than those above" according to IND-TM. It is It is not affected by IF. Hence, an ASR of "B" is assigned to the NSR. The NSR could be represent by Kai Ching Estate (NSR KAT-P1-5) and it is therefore not considered as a representative NSR.
N-06	Kwun Shan Court	R	В	55	45		Kwun Shan Court falls into type(iv) "Area other than those above" according to IND-TM. It is not affected by IF. Hence, an ASR of "B" is assigned to the NSR. The NSR could be represent by Lee Wing Building (NSR HOM-2-2) and it is therefore not considered as a representative NSR.
N-07	Homantin Hillside	R	В	55	45	N	Homantin Hillside falls into type(iv) "Area other than those above" according to IND-TM. It is not affected by IF. Hence, an ASR of "B" is assigned to the NSR. The NSR could be represent by Lee Wing Building (NSR HOM-2-2) and it is therefore not considered as a representative NSR.
N-08	Tower 1, Ultima Phase 2	R	В	55	45	N	Tower 1, Ultima Phase 2 falls into type(iv) "Area other than those above" according to IND-TM. It is not affected by IF. Hence, an ASR of "B" is assigned to the NSR according to IND-TM. The NSR could be represent by Residential Building, HOM Development (NSR HOM-P3-1) and it is therefore not considered as a representative NSR.

Remarks:

[1] R – Residential.

# Appendix 3.2

## Predicted Rail Noise Results

Title:

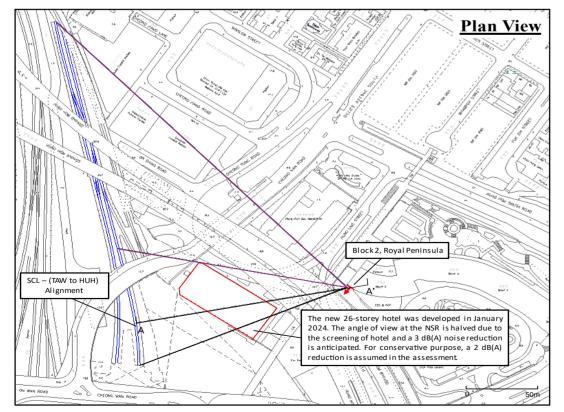
Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML)

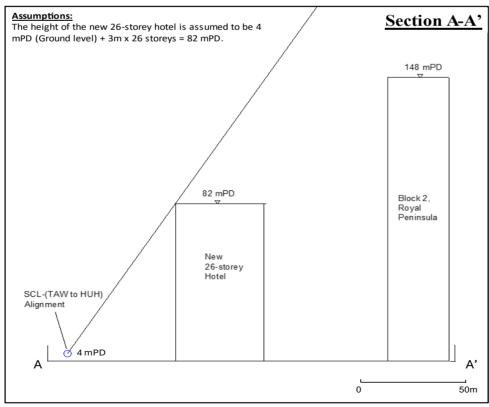
297592-00

Predicted Airborne Rail Noise Results of Representative NSRs in SCL - TAW to HUH EIA (Daytime/Evening)

NSR ID	NSR	ASR	Daytime/Evening Headway in SCL - TAW to HUH EIA, tphpd	Proposed Daytime/Evening Headway, tphpd	Predicted Daytime/Evening Noise Level in SCL - TAW to HUH EIA, L <sub>eq (30min)</sub> dB(A)	Correction, dB(A) Headway <sup>[1]</sup>	Predicted Daytime/Evening Noise Level, L <sub>eq (30min)</sub> dB(A)	Daytime/Evening Criterion, L <sub>eq (30min)</sub> dB(A)	Comply? (Y/N)
TAW-1-1	Block 6, Carado Garden	В	24	28	42	1	43	55 <sup>[2]</sup>	Υ
TAW-2-1	Shatin Heights	С	24	28	46	1	47	60 <sup>[2]</sup>	Υ
TAW-3-1	K K Terrace	С	24	28	44	1	45	60 <sup>[2]</sup>	Υ
TAW-4-1	Block 2&3, Woodcrest Hill	С	24	28	41	1	42	60 <sup>[2]</sup>	Υ
TAW-5-1	Chan's Garden, The Blossom	С	24	28	44	1	45	60 <sup>[2]</sup>	Υ
TAW-5-2	L Louey, The Blossom	В	24	28	<30	1	<30	55 <sup>[2]</sup>	Υ
TAW-5-3	Joyville	С	24	28	44	1	45	60 <sup>[2]</sup>	Υ
TAW-6-1	Hin Yiu House, Hin Keng Estate	В	24	28	44	1	45	55 <sup>[2]</sup>	Υ
TAW-6-2	Carmel Alison Lam Primary School, Hin Keng Estate	В	24	28	36	1	37	55 <sup>[2]</sup>	Υ
TAW-6-3	Hin Tak House, Hin Keng Estate	В	24	28	45	1	46	55 <sup>[2]</sup>	Υ
TAW-6-4	Hin Yeung House, Hin Keng Estate	В	24	28	45	1	46	55 <sup>[2]</sup>	Υ
TAW-7-1	Kam Cheong Building	В	24	28	42	1	43	55 <sup>[2]</sup>	Υ
TAW-8-1	Block 2, Grandway Garden	В	24	28	37	1	38	55 <sup>[2]</sup>	Υ
TAW-9-1	Christian Alliance Cheng Wing Gee College	В	24	28	42	1	43	55 <sup>[2]</sup>	Υ
TAW-10-1	Holford Garden	В	24	28	35	1	36	55 <sup>[2]</sup>	Υ
TAW-P1-1	Tower 5, Festival City III	С	24	28	47	1	48	60 <sup>[2]</sup>	Υ
TAW-P1-2	Tower 1, Festival City II	С	24	28	48	1	49	60 <sup>[2]</sup>	Υ
TAW-P2-1	Tower 7, The Pavilia Farm	С	24	28	47	1	48	60 <sup>[2]</sup>	Υ
	Wing Fung Building	С	24	28	42	1	43	60 <sup>[2]</sup>	Υ
HUH-3-1	Block 2, Royal Peninsula	С	24	28	49 <sup>[3]</sup>	1	50	60 <sup>[2]</sup>	Υ
HUH-4-1	Tower 2, The Metropolis Residence	В	24	28	45	1	46	55 <sup>[2]</sup>	Υ
HUH-4-2	Tower 1, The Metropolis Residence	В	24	28	44	1	45	55 <sup>[2]</sup>	Υ
	2 Gillies Avenue South	С	24	28	47	1	48	60 <sup>[2]</sup>	Υ
HUH-10-1	Harbourfront Horizon	В	24	28	50	1	51	65	Υ

- [1] Headway correction due to the increase of train frequency = +10log(Proposed No. of Headway/No. of Headway in the approved EIA report for SCL TAW to HUH).
- [2] With reference to the approved EIA report for SCL TAW to HUH, ANL-10 dB(A) is adopted to the criterion to consider the cumulative operational rail noise impacts from existing East Rail and Intercity Train.
- [3] The predicted daytime/evening noise level at Block 2, Royal Peninsula (HUH-3-1) in the approved EIA report for SCL TAW to HUH is 51 dB(A). Nevertheless, consider a new 26-storey hotel at Cheong Tung Road was developed in January 2024, the new development with taller height could provide screening for the NSR and achieve noise reduction of at least 2 dB(A). Hence, the predicted noise level at the NSR would be 49 dB(A).





Title:

Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML)

297592-00

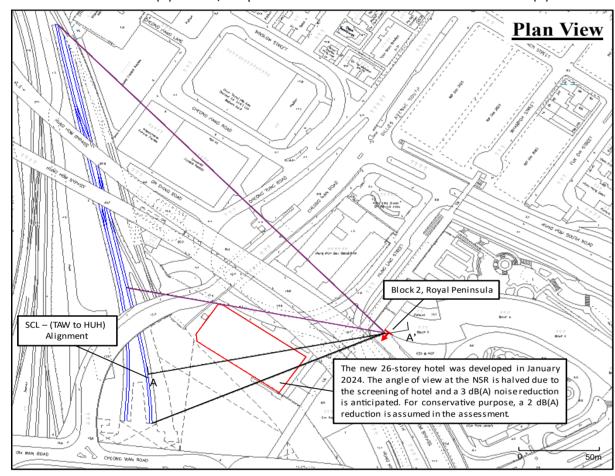
Predicted Cumulative Airborne Rail Noise Results of Representative NSRs in SCL - TAW to HUH EIA (Daytime/Evening)

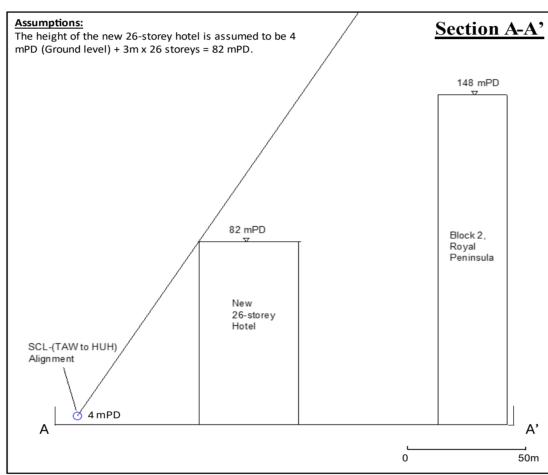
NSR ID	NSR	ASR	Daytime/Evening Headway in	Proposed Daytime/Evening	Predicted Daytime/Evening Noise Level in SCL - TAW to HUH EIA, L <sub>eq</sub>	Correction, dB(A)	Predicted Daytime/Evening Noise	Predicted Noise Leve Projects, o			Daytime/Evening Criterion,	Comply? (Y/N)
NSK ID	INSK	ASK	SCL - TAW to HUH EIA, tphpd	Headway, tphpd	(30min) dB(A)	Headway <sup>[1]</sup>		SCL - MKK to HUH <sup>[2]</sup>	SCL - HHS <sup>[2]</sup>	Noise Level, dB(A)	L <sub>eq (30min)</sub> dB(A)	Comply: (17N)
HUH-1-3	Wing Fung Building	С	24	28	42	1	43	36	47	49	60 <sup>[3]</sup>	Υ
HUH-3-1	Block 2, Royal Peninsula	С	24	28	49 <sup>[4]</sup>	1	50	-	37	50	60 <sup>[3]</sup>	Υ
HUH-4-1	Tower 2, The Metropolis Residence	В	24	28	45	1	46	-	<30	46	55 <sup>[3]</sup>	Υ
HUH-8-1	2 Gillies Avenue South	С	24	28	47	1	48	-	38	48	60 <sup>[3]</sup>	Υ
HUH-10-1	Harbourfront Horizon	В	24	28	50	1	51	-	38	51	65	Υ

#### Remarks:

- [1] Headway correction due to the increase of train frequency = +10log(Proposed No. of Headway/No. of Headway in the approved EIA report for SCL TAW to HUH).
- [2] The predicted noise levels are extracted from Table 8.17b in the approved EIA report for SCL HHS.
- [3] With reference to the approved EIA report for SCL TAW to HUH, ANL-10 dB(A) is adopted to the criterion to consider the cumulative operational rail noise impacts from existing East Rail and Intercity Train.

[4] The predicted daytime/evening noise level at Block 2, Royal Peninsula (HUH-3-1) in the approved EIA report for SCL - TAW to HUH is 51 dB(A). Nevertheless, consider a new 26-storey hotel at Cheong Tung Road was developed in January 2024, the new development with taller height could provide screening for the NSR and achieve noise reduction of at least 2 dB(A). Hence, the predicted noise level at the NSR would be 49 dB(A).





Title:

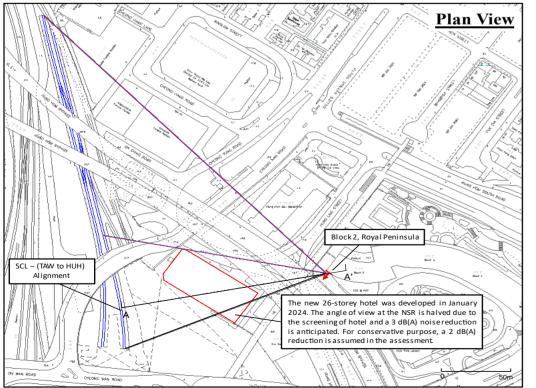
 $\textbf{Daytime Headway Review and Environmental Studies on Tuen Ma\ Line\ (TML)}$ 

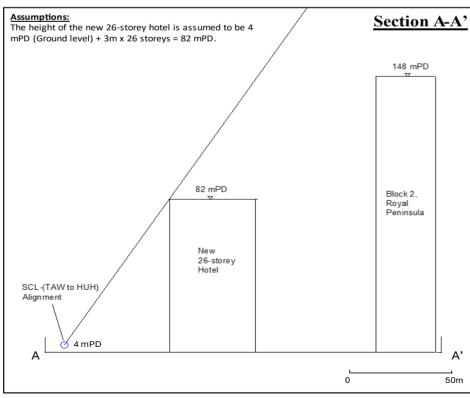
297592-00

Predicted Airborne Rail Noise Results of Representative NSRs in SCL - TAW to HUH EIA (Night-time)

NSR ID	NSR	ASR	Night-time Headway in SCL - TAW to HUH EIA, tphpd	Proposed Night-time Headway, tphpd	Predicted Night-time Noise Level in SCL - TAW to HUH EIA, L <sub>eq (30min)</sub> dB(A)	Correction, dB(A) Headway <sup>[1]</sup>	Predicted Night-time Noise Level, L <sub>eq (30min)</sub> dB(A)	Night-time Criterion, L <sub>eq</sub>	Comply? (Y/N)
TAW-1-1	Block 6, Carado Garden	В	12	24	39	3	42	45 <sup>[2]</sup>	Υ
TAW-2-1	Shatin Heights	С	12	24	43	3	46	50 <sup>[2]</sup>	Υ
TAW-3-1	K K Terrace	С	12	24	41	3	44	50 <sup>[2]</sup>	Υ
TAW-4-1	Block 2&3, Woodcrest Hill	С	12	24	38	3	41	50 <sup>[2]</sup>	Υ
TAW-5-1	Chan's Garden, The Blossom	С	12	24	41	3	44	50 <sup>[2]</sup>	Υ
TAW-5-2	L Louey, The Blossom	В	12	24	<30	3	<30	45 <sup>[2]</sup>	Υ
TAW-5-3	Joyville	С	12	24	41	3	44	50 <sup>[2]</sup>	Υ
TAW-6-1	Hin Yiu House, Hin Keng Estate	В	12	24	41	3	44	45 <sup>[2]</sup>	Υ
TAW-6-2	Carmel Alison Lam Primary School, Hin Keng Estate [3]	В	12	24	-	-	-	-	-
TAW-6-3	Hin Tak House, Hin Keng Estate	В	12	24	42	3	45	45 <sup>[2]</sup>	Υ
TAW-6-4	Hin Yeung House, Hin Keng Estate	В	12	24	42	3	45	45 <sup>[2]</sup>	Υ
TAW-7-1	Kam Cheong Building	В	12	24	39	3	42	45 <sup>[2]</sup>	Υ
TAW-8-1	Block 2, Grandway Garden	В	12	24	34	3	37	45 <sup>[2]</sup>	Υ
TAW-9-1	Christian Alliance Cheng Wing Gee College [3]	В	12	24	-	-	-	-	-
TAW-10-1	Holford Garden	В	12	24	32	3	35	45 <sup>[2]</sup>	Υ
TAW-P1-1	Tower 5, Festival City III	С	12	24	44	3	47	50 <sup>[2]</sup>	Υ
TAW-P1-2	Tower 1, Festival City II	С	12	24	45	3	48	50 <sup>[2]</sup>	Υ
TAW-P2-1	Tower 7, The Pavilia Farm	С	12	24	44	3	47	50 <sup>[2]</sup>	Υ
HUH-1-3	Wing Fung Building	С	12	24	39	3	42	50 <sup>[2]</sup>	Υ
HUH-3-1	Block 2, Royal Peninsula	С	12	24	46 <sup>[4]</sup>	3	49	50 <sup>[2]</sup>	Υ
HUH-4-1	Tower 2, The Metropolis Residence	В	12	24	42	3	45	45 <sup>[2]</sup>	Υ
HUH-4-2	Tower 1, The Metropolis Residence	В	12	24	41	3	44	45 <sup>[2]</sup>	Υ
HUH-8-1	2 Gillies Avenue South	С	12	24	44	3	47	50 <sup>[2]</sup>	Υ
HUH-10-1	Harbourfront Horizon	В	12	24	47	3	50	55	Υ

- [1] Headway correction due to the increase of train frequency = +10log(Proposed No. of Headway/No. of Headway in the approved EIA report for SCL TAW to HUH).
- [2] With reference to the approved EIA report for SCL TAW to HUH, ANL-10 dB(A) is adopted to the criterion to consider the cumulative operational rail noise impacts from existing East Rail and Intercity Train.
- [3] Night-time noise criterion is not applicable for the NSR.
- [4] The predicted daytime/evening noise level at Block 2, Royal Peninsula (HUH-3-1) in the approved EIA report for SCL TAW to HUH is 48 dB(A). Nevertheless, consider a new 26-storey hotel at Cheong Tung Road was developed in January 2024, the new development with taller height could provide screening for the NSR and achieve noise reduction of at least 2 dB(A). Hence, the predicted noise level at the NSR would be 46 dB(A).





Title:

Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML)

297592-00

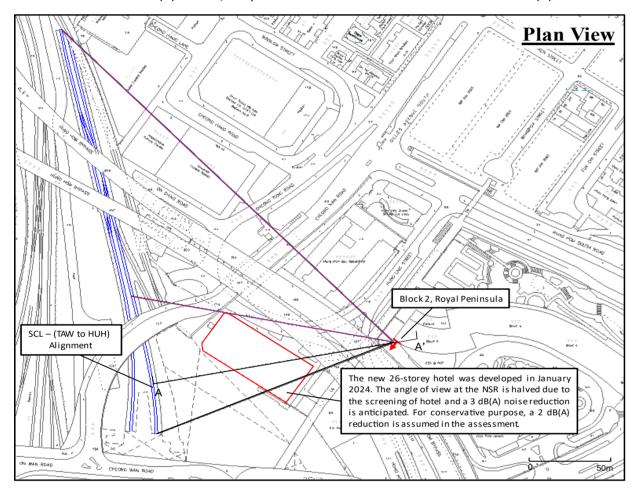
Predicted Cumulative Airborne Rail Noise Results of Representative NSRs in SCL - TAW to HUH EIA (Night-time)

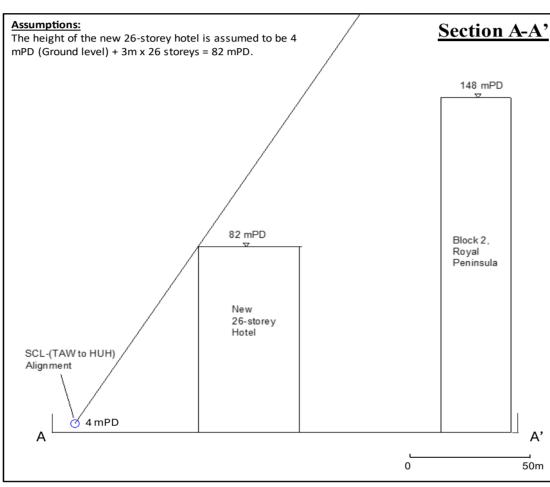
NSR ID	NSR	ASR	Night-time Headway in SCL -	Proposed Night-time	Predicted Night-time Noise Level	Correction, dB(A)	Predicted Night-time Noise Level,	Predicted Noise Leve Projects, o			Night-time Criterion, L <sub>eq</sub>	Comply? (Y/N)
טו אכאו	INSK	ASK	TAW to HUH EIA, tphpd	Headway, tphpd	in SCL - TAW to HUH EIA, L <sub>eq (30min)</sub> dB(A)	Headway <sup>[1]</sup>	I 4D/V/	SCL - MKK to HUH <sup>[2]</sup>	SCL - HHS <sup>[2]</sup>	Noise Level, dB(A)	<sub>(30min)</sub> dB(A)	Comply: (17N)
HUH-1-3	Wing Fung Building	С	12	24	39	3	42	35	47	48	50 <sup>[3]</sup>	Υ
HUH-3-1	Block 2, Royal Peninsula	С	12	24	46 <sup>[4]</sup>	3	49	-	37	49	50 <sup>[3]</sup>	Υ
HUH-4-1	Tower 2, The Metropolis Residence	В	12	24	42	3	45	-	<30	45	45 <sup>[3]</sup>	Υ
HUH-8-1	2 Gillies Avenue South	С	12	24	44	3	47	-	38	48	50 <sup>[3]</sup>	Υ
HUH-10-1	Harbourfront Horizon	В	12	24	47	3	50	-	38	50	55	Υ

#### Remarks:

- [1] Headway correction due to the increase of train frequency = +10log(Proposed No. of Headway/No. of Headway in the approved EIA report for SCL TAW to HUH).
- [2] The predicted noise levels are extracted from Table 8.17a in the approved EIA report for SCL HHS.
- [3] With reference to the approved EIA report for SCL TAW to HUH, ANL-10 dB(A) is adopted to the criterion to consider the cumulative operational rail noise impacts from existing East Rail and Intercity Train.

[4] The predicted daytime/evening noise level at Block 2, Royal Peninsula (HUH-3-1) in the approved EIA report for SCL - TAW to HUH is 48 dB(A). Nevertheless, consider a new 26-storey hotel at Cheong Tung Road was developed in January 2024, the new development with taller height could provide screening for the NSR and achieve noise reduction of at least 2 dB(A). Hence, the predicted noise level at the NSR would be 46 dB(A).





Title:

 $\textbf{Daytime Headway Review and Environmental Studies on Tuen Ma\ Line\ (TML)}$ 

297592-00

Predicted Groundborne Rail Noise Results of Representative NSRs in SCL - TAW to HUH EIA (Daytime/Evening)

Description	NSR ID	NSR	ASR	Daytime/Evening Headway in	Proposed Daytime/Evening	Predicted Daytime/Evening Noise Level in	Correction, dB(A)	Predicted Daytime/Evening	Daytime/Evening Criterion,	Comply? (Y/N)
Dec-21   Date Set Hater, Child New Enterl State   B	NSKID	NSI	ASIN	SCL - TAW to HUH EIA, tphpd	Headway, tphpd	OGNMMP, L <sub>eq (30min)</sub> dB(A)	Headway <sup>[4]</sup>	Noise Level, L <sub>eq (30min)</sub> dB(A)	L <sub>eq (30min)</sub> dB(A)	comply: (1/14)
DB-1-5    Val Tome Howe, Club Three Goals Need See   0	DIH-1-1	Tsui Chuk Garden Block 5	В	24	28	34	1	35	55	Υ
Display   September (No. Year South States   Display   September	DIH 2-1	Pak Yuen House, Chuk Yuen North Estate	В	24	28	<30	1	30	55	Υ
DB-15   Seal Year House, Char Part Duris, Char Part Part Duris, Char Part Part Duris, Char Part Part Duris, Char Part Part Part Part Part Part Part Pa	DIH-3-1	Wah Yuen House, Chuk Yuen South Estate	В	24	28	32	1	33	55	Υ
DBH-5    Particular Street Pour Found Figure   DBH-5    Particular Street Pour   DBH-5    Particular Stree	DIH-3-2	Nga Yuen House, Chuk Yuen South Estate	В	24	28	31	1	32	55	Υ
Din-8.1   Peng Chang Capter   0   24   28   30   1   31   33   35   Y	DIH-3-3	Kwai Yuen House, Chuk Yuen South Estate	В	24	28	35	1	36	55	Υ
Bind Color   Force compress (colors   0   24   22   36   1   37   55   7	DIH-3-4	Chui Yuen House, Chuk Yuen South Estate	В	24	28		1	34	55	Υ
Bill	DIH-4-1		В	24	28		1		55	Υ
2004.5.2   Recolaretal premises asong Fung Talk Road   8   24   28   36   1   37   55   Y	DIH-4-2		В	24			1		+	Υ
DB 1-5   Our Lay for Stockerprise   2   24   28   36   1   39   55   Y	DIH-5-1		В				1			Υ
DBB-12   Vergota Service Resident Service 2   8   74   78   78   78   79   79   79   79   79			В				1			Υ
DBH-72   Troutean Garderie Block 2   B   24   28   30   1   30   55   Y	DIH-5-5	·	В				1		+	Υ
DBH-51   Reference Sentence states   S   9   24   78   30   1   31   55   Y			В				1			Υ
DB-61   Select Plant P		·	В				1			Υ
DN-50    Sheft On Bulleng			В				1		+	Υ
Dist-12   Index Roog Extends Source from Formal Stand From Court		·	В				1			ĭ
DBH-131   Sung Wan House, Long From Court			В				1			Ť
Dit   Dit			В				1		-	ĭ
Delta-12   Calabria Tower E			В				1			Ť
Diti-131   Gamosa Primary School			+ -				1			ī
DBH141-1   Shythm Garden Block 2   8			В				1			ī
Dits     A   Pitcher Sarden Block   B   24   28   430   1   430   55   Y		· · · · · · · · · · · · · · · · · · ·	В				1			ĭ
DH-14-3    Bhythm Garden Block   8		·	+ -				1			ī
DH-14-4   Canosa Primary School (San Po Kong)   B   24   28   32   1   33   55   Y		·	В				1			ĭ
DH-14-6   Phythm Garden Block 1		,	В				1			ĭ
DH-4-6			+ -				1			Ť
DIH-51-1   Lam Wan House, Choi Hung Estate   8   24   28   32   1   33   55   Y		,	В	<del> </del>			1			ī
DH-15-12   Cam Pik House, Choir Hung State		·	В				1			Ť
DH-16-1			В	+			1			ĭ
DH-17-1   Chuk Yuer United Village			В				1			Y
DHI-19-1   Upper Wong Tal Sin Estate Te Sin House		·	В	+			1			Y
Dill-19-2   Upper Wong Tal Sin Estate Tal Sin House		-	B				1			Ť
DiH-19-1   Lung Cheung Government Secondary School   B   24   28   39   1   40   55   Y			B				1			ĭ
DiH-20-1   Baptist Rainbow Primary School   B   24   28   38   1   39   55   Y			+ -				1			Y
DiH-21-1   Tin Wang Court, Wang King House   B   24   28   36   1   37   55   Y		· ·	+-	+			1			·
DiH-22-1   Price Memorial Catholic Primary School   B   24   28   38   1   39   55   Y		·	+ -				1			Y
DiH-23-1			+				1			ĭ
DiH-24-1		·	+				1			ĭ
DIH-P1-1   Wing Sin House, Wong Tai Sin Estate		·	+ -	-			1			ı
DiH-P2-2 <sup>111</sup>   Kai Chuen Court   B   24   28   30   1   28   55   Y			B				1			ĭ
DIH-P2-3 2    Kai Cheung Court   B			<del> </del> В				1			I
DIH-P2-4 3    Confucian Academy (being constructed)   B   24   28   34   1   35   55   Y			В				1		<del>                                     </del>	Υ
KAT-P1-1   Kai Long Court   B   24   28   30   1   30   55   Y	DIH-P2-3 <sup>[2]</sup>	Kai Cheung Court	В	24	28	30	1	31	55	Υ
KAT-P1-2         One Kai Tak (II)         B         24         28         <30         1         <30         55         Y           KAT-P1-3         Upper Riverbank         B         24         28         <30	DIH-P2-4 <sup>[3]</sup>	Confucian Academy (being constructed)	В	24	28	34	1	35	55	Υ
KAT-P1-3         Upper Riverbank         B         24         28         <30         1         <30         55         Y           KAT-P1-4         Residential premises near Kai Tak Station         B         24         28         30         1         <30	KAT-P1-1	Kai Long Court	В	24	28	<30	1	<30	55	Υ
KAT-P1-4         Residential premises near Kai Tak Station         B         24         28         <30         1         <30         55         Y           KAT-P1-5         Mun Ching House, Kai Ching Estate         B         24         28         34         1         35         55         Y           KAT-P1-6         Tower H3, De Novo         B         24         28         <30         1         <30         55         Y           KAT-P1-7         Residential premises near Kai Tak Station         B         24         28         39         1         40         55         Y           TKW-1-1 Parc 22         B         24         28         39         1         40         55         Y           TKW-1-1 Support         Parc 22         B         24         28         <30         1         <30         55         Y           TKW-1-1 Support         Support         B         24         28         <30         1         <30         55         Y           TKW-2-1 Skytower Tower 1         B         24         28         <30         1         <30         55         Y           TKW-2-2 Skytower Tower 2         B         24         28         <30 </td <td>KAT-P1-2</td> <td>One Kai Tak (II)</td> <td>В</td> <td>24</td> <td>28</td> <td>&lt;30</td> <td>1</td> <td>&lt;30</td> <td>55</td> <td>Υ</td>	KAT-P1-2	One Kai Tak (II)	В	24	28	<30	1	<30	55	Υ
KAT-P1-5         Mun Ching House, Kai Ching Estate         B         24         28         34         1         35         55         Y           KAT-P1-6         Tower H3, De Novo         B         24         28         30         1         <30         55         Y           KAT-P1-7         Residential premises near Kai Tak Station         B         24         28         39         1         40         55         Y           TKW-1-1         Parc 22         B         24         28         <30         1         <30         55         Y           TKW-1-2         Sanford Mansion         B         24         28         <30         1         <30         55         Y           TKW-2-1         Skytower Tower 1         B         24         28         <30         1         <30         55         Y           TKW-2-2         Skytower Tower 2         B         24         28         <30         1         <30         55         Y           TKW-2-3         Skytower Tower 7         B         24         28         <30         1         <30         55         Y           TKW-3-1         Prince Ritz         B         24         28<	KAT-P1-3	Upper Riverbank	В	24	28	<30	1	<30	55	Υ
KAT-P1-6         Tower H3, De Novo         B         24         28         <30         1         <30         55         Y           KAT-P1-7         Residential premises near Kai Tak Station         B         24         28         39         1         40         55         Y           TKW-1-1         Parc 22         B         24         28         <30         1         <30         55         Y           TKW-1-2         Sanford Mansion         B         24         28         <30         1         <30         55         Y           TKW-2-1         Skytower Tower 1         B         24         28         <30         1         <30         55         Y           TKW-2-2         Skytower Tower 2         B         24         28         <30         1         <30         55         Y           TKW-2-3         Skytower Tower 7         B         24         28         <30         1         <30         55         Y           TKW-3-1         Prince Ritz         B         24         28         <30         1         <30         55         Y	KAT-P1-4	Residential premises near Kai Tak Station	В	24	28	<30	1	<30	55	Υ
KAT-P1-7       Residential premises near Kai Tak Station       B       24       28       39       1       40       55       Y         TKW-1-1       Parc 22       B       24       28       <30	KAT-P1-5	Mun Ching House, Kai Ching Estate	В	24	28	34	1	35	55	Υ
TKW-1-1         Parc 22         B         24         28         <30         1         <30         55         Y           TKW-1-2         Sanford Mansion         B         24         28         <30	KAT-P1-6		В	24	28	<30	1	<30	55	Υ
TKW-1-2         Sanford Mansion         B         24         28         <30         1         <30         55         Y           TKW-2-1         Skytower Tower 1         B         24         28         <30	KAT-P1-7	Residential premises near Kai Tak Station	В	24	28	39	1	40	55	Υ
TKW-2-1         Skytower Tower 1         B         24         28         <30         1         <30         55         Y           TKW-2-2         Skytower Tower 2         B         24         28         <30         1         <30         55         Y           TKW-2-3         Skytower Tower 7         B         24         28         <30         1         <30         55         Y           TKW-3-1         Prince Ritz         B         24         28         <30         1         <30         55         Y	TKW-1-1	Parc 22	В	24	28	<30	1	<30	55	Υ
TKW-2-2         Skytower Tower 2         B         24         28         <30         1         <30         55         Y           TKW-2-3         Skytower Tower 7         B         24         28         <30	TKW-1-2	Sanford Mansion	В	24	28	<30	1	<30	55	Υ
TKW-2-3         Skytower Tower 7         B         24         28         <30         1         <30         55         Y           TKW-3-1         Prince Ritz         B         24         28         <30         1         <30         55         Y	TKW-2-1	Skytower Tower 1	В	24	28	<30	1	<30	55	Y
TKW-3-1         Prince Ritz         B         24         28         <30         1         <30         55         Y	TKW-2-2	Skytower Tower 2	В	24	28	<30	1	<30	55	Υ
	TKW-2-3	Skytower Tower 7	В	24	28	<30	1	<30	55	Υ
TKW-3-2 Prosperity House B 24 28 <30 1 <30 55 V	TKW-3-1	Prince Ritz	В	24	28	<30	1	<30	55	Υ
	TKW-3-2	Prosperity House	В	24	28	<30	1	<30	55	Υ

NSR ID	NSR		Daytime/Evening Headway in	Proposed Daytime/Evening	Predicted Daytime/Evening Noise Level in	Correction, dB(A)	Predicted Daytime/Evening	Daytime/Evening Criterion,	Comply? (Y/N)	
NSK ID	NSN	ASR	SCL - TAW to HUH EIA, tphpd	Headway, tphpd	OGNMMP, L <sub>eq (30min)</sub> dB(A)	Headway <sup>[4]</sup>	Noise Level, L <sub>eq (30min)</sub> dB(A)	L <sub>eq (30min)</sub> dB(A)	Comply: (1/14)	
TKW-P1-1	Kai Yuet Court (being constructed)	В	24	28	<30	1	<30	55	Υ	
MTW-6-1	Fok On Building	В	24	28	34	1	35	55	Υ	
MTW-6-2	HK Society for the Protection of Children	В	24	28	41	1	42	55	Υ	
MTW-6-3	Chung Nam Mansion	В	24	28	33	1	34	55	Υ	
MTW-6-4	Pok Oi Lau	В	24	28	38	1	39	55	Υ	
MTW-7-1	Geranium House	В	24	28	37	1	38	55	Υ	
MTW-8-1	Horae Palace	В	24	28	35	1	36	55	Υ	
MTW-9-1	Majestic Park	В	24	28	32	1	33	55	Υ	
MTW-10-1	18 Farm Road	В	24	28	35	1	36	55	Υ	
MTW-11-1	Farm Road Government Primary School	В	24	28	38	1	39	55	Υ	
MTW-12-1	Yuet Fai Mansion	В	24	28	38	1	39	55	Υ	
MTW-12-2	Delight Court	В	24	28	32	1	33	55	Υ	
MTW-12-3	Lucky Mansion	В	24	28	<30	1	<30	55	Υ	
MTW-12-4	352-354 Ma Tau Wai Road	В	24	28	<30	1	<30	55	Υ	
MTW-12-5	Seng Cheong Building	В	24	28	32	1	33	55	Υ	
MTW-12-6	Great Wall Building	В	24	28	33	1	34	55	Υ	
MTW-12-7	197-199 Ma Tau Wai Road	В	24	28	37	1	38	55	Υ	
MTW-12-8	Pak Tai Mansion	В	24	28	39	1	40	55	Υ	
MTW-12-9	Residential premises along Hung Kwong Street	В	24	28	35	1	36	55	Υ	
	Lucky Building	В	24	28	<30	1	<30	55	Υ	
MTW-12-11	Jing Ming Building	В	24	28	<30	1	<30	55	Υ	
MTW-12-12	One Elegance	В	24	28	35	1	36	55	Υ	
MTW-13-1	PLK Madam Chan Wai Chow Memorial School	В	24	28	37	1	38	55	Υ	
MTW-14-1	PLK Lam Man Chan English Primary School	В	24	28	32	1	33	55	Υ	
MTW-15-1	Hung Hom Lutheran Primary School	В	24	28	36	1	37	55	Υ	
MTW-16-1	SKH Good Shepherd Primary School	В	24	28	34	1	35	55	Υ	
	Loyal Mansion	В	24	28	30	1	31	55	Υ	
MTW-18-1/2		В	24	28	<30	1	<30	55	Υ	
	Holy Trinity Church	В	24	28	30	1	31	55	Υ	
HOM-1-1	Ko Shan Theatre	В	24	28	35	1	36	55	Υ	
HOM-2-1	Faerie Court	В	24	28	34	1	35	55	Υ	
HOM-2-2	Lee Wing Building	В	24	28	35	1	36	55	Υ	
HOM-2-3	Wing Lam Mansion	В	24	28	36	1	37	55	Υ	
HOM-2-4	Tak Lee Court	В	24	28	34	1	35	55	Υ	
HOM-2-5	Chat Ma Mansion	В	24	28	34	1	35	55	Υ	
HOM-2-6	Chatham Mansion	В	24	28	37	1	38	55	Υ	
HOM-3-1	Fook Sing Mansion	В	24	28	31	1	32	55	Υ	
HOM-3-2	Marigold Mansion, Block A	В	24	28	31	1	32	55	Υ	
HOM-4-1	Yee Fu Building	В	24	28	<30	1	<30	55	Υ	
HOM-5-1	271 Chatham Road North	В	24	28	<30	1	<30	55	Υ	
HOM-P2	PolyU Student Halls of Residence (Ho Man Tin)	В	24	28	<30	1	<30	55	Υ	
HOM-P3-1	Residential Building, HOM Development	В	24	28	30	1	31	55	Υ	
HUH-1-1	Get Nice Centre	В	24	28	30	1	31	55	Υ	
HUH-1-2	Lok Ka House	В	24	28	30	1	31	55	Υ	
HUH-1-3	Wing Fung Building	В	24	28	<30	1	30	55	Υ	

- [1] DIH-P2-2 was known as DIH-P3-1A in the OGNMMP for SCL TAW to HUH & SCL HHS.
- [2] DIH-P2-3 was known as DIH-P3-2A in the OGNMMP for SCL TAW to HUH & SCL HHS.
- [3] DIH-P2-4 was known as DIH-P3-4 in the OGNMMP for SCL TAW to HUH & SCL HHS.
- [4] Headway correction due to the increase of train frequency = +10log(Proposed No. of Headway/No. of Headway in the approved EIA report for SCL TAW to HUH).

297592-00 Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML)

Project: Project number: Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML)

297592-00

Title: Predicted Cumulative Groundborne Rail Noise Results of Representative NSRs in SCL - TAW to HUH EIA (Daytime/Evening)

NSR ID	NSR				Predicted Daytime/Evening Noise Level in OGNMMP, L <sub>eq(30min)</sub> dB(A)			Predicted Noise Lev	vel of Concur dB(A)	rent Projects,	Predicted Cumulative Noise Level, dB(A)	Daytime/Evening Criterion, L <sub>eq (30min)</sub> dB(A)	Comply? (Y/N)
			SCL - TAW to HUH EIA, tphpd			Headway <sup>[1]</sup>	Level, L <sub>eq (30min)</sub> dB(A)	SCL - MKK to HUH <sup>[2]</sup>	KTE <sup>[2]</sup>	SCL - HHS <sup>[3]</sup>			
HOM-4-1	Yee Fu Building	В	24	28	<30	1	<30	<30	<30	-	30	55	Υ
HOM-5-1	271 Chatham Road North	В	24	28	<30	1	<30	<30	<30	-	<30	55	Υ
HOM-P2	PolyU Student Halls of Residence (Ho Man Tin)	В	24	28	<30	1	<30	<30	<30	-	30	55	Υ
HOM-P3-1	Residential Building, HOM Development	В	24	28	30	1	31	<30	36	-	37	55	Υ
HUH-1-1	Get Nice Centre	В	24	28	30	1	31	<30	<30	-	32	55	Υ
HUH-1-2	Lok Ka House	В	24	28	30	1	31	<30	<30	-	31	55	Υ
HUH-1-3	Wing Fung Building	В	24	28	<30	1	30	<30	<30	<30	31	55	Υ

<sup>[1]</sup> Headway correction due to the increase of train frequency = +10log(Proposed No. of Headway/No. of Headway in the approved EIA report for SCL - TAW to HUH).

<sup>[2]</sup> The predicted noise levels are extracted from Table 9.8 in the approved EIA report for SCL - TAW to HUH.

<sup>[3]</sup> The predicted noise levels are extracted from Table 9.8 in the approved EIA report for SCL - HHS.

Project:
Project number:
Title:

Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML) 297592-00

Predicted Groundborne Rail Noise Results of Representative NSRs in SCL - TAW to HUH EIA (Night-time)

No.	NSR ID	NSR		Night-time Headway in SCL -	Proposed Night-time Headway,	Predicted Night-time Noise Level in	Correction, dB(A)	Predicted Night-time Noise	Night-time Criterion, L <sub>eq</sub>	Comply? (Y/N)
1981-12   Marine trace (Carlo Percent Conference   0   0   0   0   0   0   0   0   0	INSK ID	INSK	ASR	TAW to HUH EIA, tphpd	tphpd	OGNMMP, L <sub>eq (30min)</sub> dB(A)	Headway <sup>[4]</sup>	Level, L <sub>eq (30min)</sub> dB(A)	(30min) dB(A)	Comply: (1/N)
Bill-12   September   Septem	DIH-1-1	Tsui Chuk Garden Block 5	В	12	24	31	3	34	45	Υ
BBH 2   Page Notes Note Count Processes Coun	DIH 2-1	Pak Yuen House, Chuk Yuen North Estate	В	12	24	<30	3	<30	45	Υ
1961-34   Contract Nations Contract State   1	DIH-3-1	Wah Yuen House, Chuk Yuen South Estate	В	12	24	<30	3	32	45	Υ
Social Continues Colin New South N	DIH-3-2	Nga Yuen House, Chuk Yuen South Estate	В	12	24	<30	3	31	45	Υ
2044   Sage Chiefer Court   2045   Sage Chiefer Court   2046   Sage Chiefer Court   2046   Sage Chiefer Court   2046   Sage Chiefer	DIH-3-3	Kwai Yuen House, Chuk Yuen South Estate	В	12	24	32	3	35	45	Υ
1984   10   10   10   12   12   13   13   13   13   15   15   17   17   18   18   18   18   17   18   18	DIH-3-4	Chui Yuen House, Chuk Yuen South Estate	В	12	24	30	3	33	45	Υ
Bill-52   Restricted leveles along Turp Ta Boad   0   12   24   31   3   27   45   V   V   V   V   V   V   V   V   V	DIH-4-1	Pang Ching Court	В	12	24	<30	3	30	45	Υ
Binst-10   Residential promises ageng fung field and   0   12   28   33   3   3   3   5   6   7   7   1   1   1   1   1   1   1   1	DIH-4-2	Tsui Chuk Peace Evangelical Centre	В	12	24	33 <sup>[5]</sup>	3	36	45	Υ
DIFF-15   DIFF-16   DIFF	DIH-5-1	Rainbow Home	В	12	24	34	3	37	45	Υ
1801-19   Wong Tai San First Station and Charles (Stat)   3   12   24   25   35   3   38   45   Y	DIH-5-2	Residential premises along Fung Tak Road	В	12	24	33	3	36	45	Υ
1801-19   Wong Tai San First Station and Charles (Stat)   3   12   24   25   35   3   38   45   Y	DIH-5-5	Our Lady's Kindergarten <sup>[6]</sup>	В	12	24	-	-	-	-	-
Dist-14   Respond Larberton Clusters   Dist-14   Respon	DIH 6-1		В	12	24	35	3	38	45	Υ
Diff-1-10   Redemption Librarian Chroch   R   12   24   30   3   53   43   7	DIH-7-1	Tropicana Gardens Block 2	В	12	24	<30	3	<30	45	Υ
District   District	DIH-7-2	Tropicana Gardens Block 3	В	12	24	<30	3	30	45	Υ
DBH-10	DIH-8-1	Redemption Lutheran Church	В	12	24		3	33	45	Υ
DRIFF   Long Wan House, Long Poon Court   B   12   24   30   3   430   45   Y	DIH-9-1	Shek On Building	В	12	24	33 <sup>[5]</sup>	3	36	45	Υ
Initial Company of the Company of	DIH-10-1	Hong Kong Sheung Keung Hui Nursing Home	В	12	24	<30	3	30	45	Υ
Diff-15   Cannot From State	DIH-11-1	Lung Wan House, Lung Poon Court	В	12	24	<30	3	<30	45	Υ
DiPH-14   DiPH	DIH-12-1	Galaxia Tower B	В	12	24	<30	3	<30	45	Υ
DiPI-1-12   Brythm Garden Blook 2   8   12   24   30   3   33   45   Y	DIH-12-2	Galaxia Tower E	В	12	24	<30	3	<30	45	Υ
DH14-12   Rhythm Garden Block 5	DIH-13-1	Canossa Primary School <sup>[6]</sup>	В	12	24	-	-	-	-	-
DIH-14-1	DIH-14-1		В	12	24	30	3	33	45	Υ
DPH-54-4    Canosia Primary School (San Po Kong)   B   12   24	DIH-14-2	Rhythm Garden Block 5	В	12	24	<30	3	<30	45	Υ
DIH-14-1   Mythm Garden Block 1   8   12   24   30   3   33   45   Y	DIH-14-3	Rhythm Garden Block 8	В	12	24	<30	3	<30	45	Υ
DIH-14-1   Mythm Garden Block 1   8   12   24   30   3   33   45   Y	DIH-14-4	Canossa Primary School (San Po Kong) <sup>[6]</sup>	В	12	24	-	-	-	-	-
DIH-13-6  Riythm Garden Block 3			В	12	24	30	3	33	45	Υ
DiH-15-12   Kam Wan House, Chol Hung State		,	В				3			Υ
Dil+15-12		,	В				3			Υ
DIH-19-1   Wong Tal Sin Temple			В				3	33		Υ
DIH-17-1   Cluk Yuen United Village			В				3			Υ
DIH-13-2   Ungr Cheung Government Secondary School <sup>61</sup>   B   12   24   32   3   35   45   Y			В	12	24	33	3	36	45	Υ
DIH-13-2   Unper Mong Tal Sin Estate Tat Sin House	DIH-18-1	Upper Wong Tai Sin Estate Po Sin House	В	12	24		3		45	Υ
DiH-21-1   Tin Wang Court, Wang King House	DIH-18-2		В	12	24		3	35	45	Υ
DiH-21-1   Tin Wang Court, Wang King House	DIH-19-1	Lung Cheung Government Secondary School [6]	В	12	24	-	_	-	-	_
DIH-21-1   Tin Wang Court, Wang King House   B   12   24   33   36   45   Y			R			_	_	_	_	_
DiH-22-1   Price Memorial Catholic Primary School   8   12   24			+							
DiH-23-1			+							
DIH-24-1   Shing Wong Temple			+ -							
DIH-P1-1			+							ı
DIH-P2-2 <sup>[1]</sup>   Kai Chuen Court   B   12   24   30   3   30   45   Y			_		-					1
DIH-P2-3 2   Kai Cheung Court   B   12   24   430   3   30   45   Y			+ -							I
DIH-P2-4 3    Confucian Academy (being constructed)   B   12   24   31 5    3   34   45   Y			+							Υ
KAT-P1-1         Kai Long Court         B         12         24         <30         3         <30         45         Y           KAT-P1-2         One Kai Tak (II)         B         12         24         <30         3         <30         45         Y           KAT-P1-3         Upper Riverbank         B         12         24         <30         3         <30         45         Y           KAT-P1-4         Residential premises near Kai Tak Station         B         12         24         <30         3         <30         45         Y           KAT-P1-5         Mun Ching House, Kai Ching Estate         B         12         24         31         3         34         45         Y           KAT-P1-6         Tower H3, De Novo         B         12         24         31         3         34         45         Y           KAT-P1-7         Residential premises near Kai Tak Station         B         12         24         36         3         39         45         Y           KAT-P1-7         Residential premises near Kai Tak Station         B         12         24         36         3         39         45         Y           KAT-P1-1         Parc 22 <td></td> <td></td> <td>В</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>· · · · · · · · · · · · · · · · · · ·</td>			В							· · · · · · · · · · · · · · · · · · ·
KAT-P1-2         One Kai Tak (II)         B         12         24         <30         3         <30         45         Y           KAT-P1-3         Upper Riverbank         B         12         24         <30			В				3			Υ
KAT-P1-3         Upper Riverbank         B         12         24         <30         3         <30         45         Y           KAT-P1-4         Residential premises near Kai Tak Station         B         12         24         <30         3         <30         45         Y           KAT-P1-5         Mun Ching House, Kai Ching Estate         B         12         24         31         3         34         45         Y           KAT-P1-6         Tower H3, De Novo         B         12         24         <30         3         <30         45         Y           KAT-P1-7         Residential premises near Kai Tak Station         B         12         24         36         3         39         45         Y           TKW-1-7         Perc 22         B         12         24         30         3         30         45         Y           TKW-1-1         Parc 22         B         12         24         <30         3         <30         45         Y           TKW-1-2         Sanford Mansion         B         12         24         <30         3         <30         45         Y           TKW-2-1         Skytower Tower 1         B         12			В							Υ
KAT-P1-4         Residential premises near Kai Tak Station         B         12         24         <30         3         <30         45         Y           KAT-P1-5         Mun Ching House, Kai Ching Estate         B         12         24         31         3         34         45         Y           KAT-P1-6         Tower H3, De Novo         B         12         24         <30         3         <30         45         Y           KAT-P1-7         Residential premises near Kai Tak Station         B         12         24         36         3         39         45         Y           KAT-P1-7         Residential premises near Kai Tak Station         B         12         24         36         3         39         45         Y           KAT-P1-7         Residential premises near Kai Tak Station         B         12         24         36         3         39         45         Y           TKW-1-1         Parc 22         B         12         24         <30         3         <30         45         Y           TKW-1-2         Sanford Mansion         B         12         24         <30         3         <30         45         Y           TKW-2-1		` '	_							ī
KAT-P1-5         Mun Ching House, Kai Ching Estate         B         12         24         31         3         34         45         Y           KAT-P1-6         Tower H3, De Novo         B         12         24         <30			+							<u>'</u>
KAT-P1-6       Tower H3, De Novo       B       12       24       <30       3       <30       45       Y         KAT-P1-7       Residential premises near Kai Tak Station       B       12       24       36       3       39       45       Y         TKW-1-1       Parc 22       B       12       24       <30			_		-					Ť
KAT-P1-7         Residential premises near Kai Tak Station         B         12         24         36         3         39         45         Y           TKW-1-1         Parc 22         B         12         24         <30         3         <30         45         Y           TKW-1-2         Sanford Mansion         B         12         24         <30         3         <30         45         Y           TKW-2-1         Skytower Tower 1         B         12         24         <30         3         <30         45         Y           TKW-2-2         Skytower Tower 2         B         12         24         <30         3         <30         45         Y           TKW-2-3         Skytower Tower 7         B         12         24         <30         3         <30         45         Y			+ -							
TKW-1-1         Parc 22         B         12         24         <30         3         <30         45         Y           TKW-1-2         Sanford Mansion         B         12         24         <30		·	В				3			Υ
TKW-1-2         Sanford Mansion         B         12         24         <30         3         <30         45         Y           TKW-2-1         Skytower Tower 1         B         12         24         <30			В				, and the second			Υ
TKW-2-1         Skytower Tower 1         B         12         24         <30         3         <30         45         Y           TKW-2-2         Skytower Tower 2         B         12         24         <30			В							ı
TKW-2-2         Skytower Tower 2         B         12         24         <30         3         <30         45         Y           TKW-2-3         Skytower Tower 7         B         12         24         <30			В							Υ
TKW-2-3         Skytower Tower 7         B         12         24         <30         3         <30         45         Y	-		+ -		-					
			В		-		3			Υ
TKW-3-1   Prince Ritz   B   12   24   <30   3   <30   45   Y	-	·								Υ
	TKW-3-1	Prince Ritz	В	12	24	<30	3	<30	45	Υ

NSR ID	ISR ID NSR		Night-time Headway in SCL - TAW to HUH EIA, tphpd	Proposed Night-time Headway, tphpd	Predicted Night-time Noise Level in	Correction, dB(A)	Predicted Night-time Noise	Night-time Criterion, L <sub>eq</sub>	Comply? (Y/N)
TK/M/ 2-2	Dragnavity Hausa				OGNMMP, L <sub>eq (30min)</sub> dB(A)	Headway <sup>[4]</sup>	Level, L <sub>eq (30min)</sub> dB(A)	(30min) dB(A)	V
TKW-3-2	Prosperity House	В	12	24	<30	3	<30 <30	45	Y V
TKW-P1-1	Kai Yuet Court (being constructed)	В	12	24	<30	3		45	Y V
MTW-6-1	Fok On Building	В	12	24	31	3	34	45	Y
MTW-6-2	HK Society for the Protection of Children <sup>[6]</sup>	B	12	24	-	-	-	-	<u>-</u>
MTW-6-3	Chung Nam Mansion	В	12	24	30	3	33	45	Y
MTW-6-4	Pok Oi Lau	В	12	24	35	3	38	45	Y
MTW-7-1	Geranium House	В	12	24	34	3	37	45	Y
MTW-8-1	Horae Palace	В	12	24	32	3	35	45	Y
MTW-9-1	Majestic Park	В	12	24	<30	3	32	45	Y
MTW-10-1	18 Farm Road	В	12	24	32	3	35	45	Y
	Farm Road Government Primary School <sup>[6]</sup>	В	12	24	-	-	-	-	-
MTW-12-1	Yuet Fai Mansion	В	12	24	35	3	38	45	Y
	Delight Court	В	12	24	<30	3	32	45	Y
MTW-12-3	Lucky Mansion	В	12	24	<30	3	<30	45	Υ
MTW-12-4	352-354 Ma Tau Wai Road	В	12	24	<30	3	<30	45	Υ
	Seng Cheong Building	В	12	24	<30	3	32	45	Υ
MTW-12-6	Great Wall Building	В	12	24	30	3	33	45	Υ
MTW-12-7	197-199 Ma Tau Wai Road	В	12	24	34	3	37	45	Υ
	Pak Tai Mansion	В	12	24	36	3	39	45	Υ
	Residential premises along Hung Kwong Street	В	12	24	32	3	35	45	Υ
	Lucky Building	В	12	24	<30	3	<30	45	Υ
	Jing Ming Building	В	12	24	<30	3	<30	45	Υ
MTW-12-12	One Elegance	В	12	24	32	3	35	45	Υ
MTW-13-1	PLK Madam Chan Wai Chow Memorial School <sup>[6]</sup>	В	12	24	-	-	-	-	-
MTW-14-1	PLK Lam Man Chan English Primary School [6]	В	12	24	-	-	-	-	-
MTW-15-1	Hung Hom Lutheran Primary School <sup>[6]</sup>	В	12	24	-	-	-	-	-
MTW-16-1	SKH Good Shepherd Primary School <sup>[6]</sup>	В	12	24	-	-	-	-	-
MTW-17-1	Loyal Mansion	В	12	24	<30	3	30	45	Υ
MTW-18-1/2	City Hub	В	12	24	<30	3	<30	45	Υ
MTW-19-1	Holy Trinity Church	В	12	24	<30	3	30	45	Υ
HOM-1-1	Ko Shan Theatre	В	12	24	32	3	35	45	Υ
HOM-2-1	Faerie Court	В	12	24	31	3	34	45	Υ
HOM-2-2	Lee Wing Building	В	12	24	32	3	35	45	Υ
HOM-2-3	Wing Lam Mansion	В	12	24	33	3	36	45	Υ
HOM-2-4	Tak Lee Court	В	12	24	31	3	34	45	Υ
HOM-2-5	Chat Ma Mansion	В	12	24	31	3	34	45	Υ
HOM-2-6	Chatham Mansion	В	12	24	34	3	37	45	Υ
HOM-3-1	Fook Sing Mansion	В	12	24	<30	3	31	45	Υ
HOM-3-2	Marigold Mansion, Block A	В	12	24	<30	3	31	45	Υ
HOM-4-1	Yee Fu Building	В	12	24	<30	3	<30	45	Υ
HOM-5-1	271 Chatham Road North	В	12	24	<30	3	<30	45	Υ
HOM-P2	PolyU Student Halls of Residence (Ho Man Tin)	В	12	24	<30	3	<30	45	Υ
HOM-P3-1	Residential Building, HOM Development	В	12	24	<30	3	30	45	Υ
HUH-1-1	Get Nice Centre <sup>[6]</sup>	В	12	24	-	-	-	-	-
HUH-1-2	Lok Ka House	В	12	24	<30	3	30	45	Υ
	Wing Fung Building	В	12	24	<30	3	<30	45	Υ

- [1] DIH-P2-2 was known as DIH-P3-1A in the OGNMMP for SCL TAW to HUH & SCL HHS.
- [2] DIH-P2-3 was known as DIH-P3-2A in the OGNMMP for SCL TAW to HUH & SCL HHS.
- [3] DIH-P2-4 was known as DIH-P3-4 in the OGNMMP for SCL TAW to HUH & SCL HHS.
- [4] Headway correction due to the increase of train frequency = +10log(Proposed No. of Headway/No. of Headway in the approved EIA report for SCL TAW to HUH).
- [5] Night-time noise level is not provided in the approved EIA report for SCL TAW to HUH. The predicted noise level here is corrected from the daytime and evening noise level in the EIA for this assessment.
- [6] Night-time noise criterion is not applicable for the NSR.

297592-00 Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML)

Project: Project number: Daytime Headway Review and Environmental Studies on Tuen Ma Line (TML)

297592-00

Title: Predicted Cumulative Groundborne Rail Noise Results of Representative NSRs in SCL - TAW to HUH EIA (Night-time)

NSR ID	NSR A	ASR	Night-time Headway in SCL -	Proposed Night-time Headway, tphpd	Predicted Night-time Noise Level in OGNMMP, L <sub>eq(30min)</sub> dB(A)	Correction, dB(A)	Predicted Night-time Noise Level, L <sub>eq (30min)</sub> dB(A)	Predicted Noise Le	vel of Concur dB(A)	rent Projects,	Predicted Cumulative Noise Level, dB(A)	Night-time Criterion, L <sub>eq</sub>	Comply? (Y/N)
			TAW to HUH EIA, tphpd			Headway <sup>[1]</sup>		SCL - MKK to HUH <sup>[2]</sup>	KTE <sup>[2]</sup>	SCL - HHS <sup>[3]</sup>			
HOM-4-1	Yee Fu Building	В	12	24	<30	3	<30	<30	<30	-	<30	55	Υ
HOM-5-1	271 Chatham Road North	В	12	24	<30	3	<30	<30	<30	-	<30	55	Υ
HOM-P2	PolyU Student Halls of Residence (Ho Man Tin)	В	12	24	<30	3	<30	<30	<30	-	<30	55	Υ
HOM-P3-1	Residential Building, HOM Development	В	12	24	<30	3	30	<30	36	-	37	55	Υ
HUH-1-1	Get Nice Centre <sup>[4]</sup>	В	12	24	-	-	-	-	-	-	-	-	-
HUH-1-2	Lok Ka House	В	12	24	<30	3	30	<30	<30	-	31	55	Υ
HUH-1-3	Wing Fung Building	В	12	24	<30	3	<30	<30	<30	<30	30	55	Υ

#### Remark

- [1] Headway correction due to the increase of train frequency = +10log(Proposed No. of Headway/No. of Headway in the approved EIA report for SCL TAW to HUH).
- [2] The predicted noise levels are extracted from Table 9.8 in the approved EIA report for SCL TAW to HUH.
- [3] The predicted noise levels are extracted from Table 9.8 in the approved EIA report for SCL HHS.
- [4] Night-time noise criterion is not applicable for the NSR.