# **Appendix 5**

# **Environmental Assessment**

P	re	na	rec	1 1	fo.	r

**Sime Darby Motor Services Limited** 

Prepared by

**Ramboll Hong Kong Limited** 

PROPOSED EV MOBILITY CITY WITH ANCILLARY STAFF QUARTERS AND TALENT ACCOMMODATION AT VARIOUS LOTS IN D.D. 51 AND ADJOINING GOVERNMENT LAND, FANLING

**ENVIRONMENTAL ASSESSMENT** 



Date August 2025

Prepared by Susan CHAN

**Environmental Consultant** 

Signed

Approved by Billy FAN

**Principal Consultant** 

Signed

Project Reference SDMFLD51EI00

Document No. R9793\_v1.0

No part of this document may be reproduced or transmitted, in any form or by any means electronic, mechanical, photographic, recording or otherwise, or stored in a retrieval system of any nature without the written permission of Ramboll Hong Kong Ltd, application for which shall be made to Ramboll Hong Kong Ltd, 21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong.

Disclaimer: This report is made on behalf of Ramboll Hong Kong Ltd. No individual is personally liable in connection with the preparation of this report. By receiving this report and acting on it, the client or any third party relying on it accepts that no individual is personally liable in contract, tort or breach of statutory duty (including negligence).

Ramboll Hong Kong Limited

21/F, BEA Harbour View Centre 56 Gloucester Road, Wan Chai, Hong Kong

Tel: (852) 3465 2888 Fax: (852) 3465 2899 Email: hkinfo@ramboll.com

Q:\Projects\SDMFLD51EI00\04 Deliverables\01 EA Report\R9793\_v1.0.docx



# **CHAPTERS**

		Page
1.	IN	TRODUCTION1-1
	1.1	Project Background1-1
	1.2	Application Site and its Environ
	1.3	Proposed Development
	1.4	Appraisal of Environmental Impact
	1.5	Organisations of the Report
2.		AFFIC NOISE IMPACT ASSESSMENT2-1
	2.1	Introduction
	2.1	Assessment Criteria
	2.2	Assessment Methodology
	2.3	Noise Sensitive Receivers
	2.4	Design Constraints 2-2
	2.6	Noise Mitigation Measures Incorporated under Base Case Scenario
	_	·
	2.7	Road Traffic Noise Impact Assessment Result (Base Case)
	2.8	Proposed Noise Mitigation Measures
	2.9 2.10	Road Traffic Noise Impact Assessment Result (Mitigated)
		Conclusion
3.	FI	XED NOISE IMPACT ASSESSMENT3-1
	3.1	Introduction
	3.2	Identification of Fixed Noise Sources
	3.3	Assessment Criteria 3-1
	3.4	Assessment Methodology 3-2
	3.5	Representative Noise Sensitive Receivers 3-2
	3.6	Fixed Noise Impact Assessment Result (Base Case) 3-3
	3.7	Fixed Noise from Podium of the Proposed Development
	3.8	Conclusion
4.	ΑI	R QUALITY IMPACT ASSESSMENT4-1
	4.1	Introduction
	4.2	Legislative Requirements and Evaluation Criteria 4-1
	4.3	Existing Air Quality
	4.4	Potential Air Quality Impact on Proposed Development
	4.5	Potential Odour Impact on Proposed Development
	4.6	Potential Air Quality Impact arising from Proposed Development 4-5
	4.7	Conclusion
5.	CC	ONSTRUCTION PHASE ENVIRONMETAL IMPACT5-1
	5.1	Introduction
	5.2	Construction Air Quality Impact
	5.3	Construction Noise Impact
	5.4	Water Quality Impact
	5.5	Construction Waste Disposal
	5.6	Conclusion
	5.0	J-10

6. LAND	CONTAMINATION REVIEW6-1
-	gislation and Guidelines 6-1
	sessment Methodology 6-1
	rent and Historical Land Uses
	ormation from Government Departments
	nclusion
	LUSION
TABLES	
Table 2.1	Design of Acoustic Window (Baffle Type) from ProPECC PN 5/23 2-3
Table 3.1	Area Sensitivity Rating of NSRs 3-2
Table 3.2	Acceptable Noise Level
Table 3.3	Maximum Predicted Fixed Noise Levels for the Representative NSRs (Base Case)
Table 4.1	Hong Kong Air Quality Objectives 4-1
Table 4.2	HKPSG's Recommended Minimum Buffer Distance from Roads 4-2
Table 4.3	HKPSG's Recommended Minimum Buffer Distance from Industrial Chimneys 4-3
Table 4.4	EPD Air Quality Monitoring Data in North AQMS and PATH-v3.0 (Grids (37, 51) and (38, 51), Year 2030)
Table 5.1	Summary of Representative Air and Noise Sensitive Receivers 5-2
Table 5.2	Noise Limit for Daytime Construction Activities 5-4
Table 5.3	Summary of Water Sensitive Receivers in the Surrounding 5-6
Table 5.4	Estimated Quantities of Waste during Construction Phase5-13
Table 6.1	Land Use Summary on the Application Site 6-2
Table 6.2	Enquires and Responses on Land Contamination Related Records in the Application Site 6-3
FIGURES	
Figure 1.1	Application Site and its Environs
Figure 2.1	Locations of Representative Noise Sensitive Receivers for Road Traffic Noise Impact Assessment
Figure 2.2	Road Traffic Noise Mitigation Measures
Figure 3.1	Locations of Identified Fixed Noise Sources for Fixed Noise Impact Assessment
Figure 3.2	Locations of Representative Noise Sensitive Receivers for Fixed Noise Impact Assessment
Figure 4.1	Assessment Area of 200m from the Application Site
Figure 4.2	HKPSG Vehicular Emission Buffer Distance for Nearby Road Network



Figure 4.3	Odour Sources Identified within 200m Assessment Area
Figure 5.1	Location of Representative Air and Noise Sensitive Receivers for Construction Phase and Concurrent Construction Works
Figure 5.2	Location of Water Sensitive Receivers

# **APPENDICES**

Appendix 1.1	Layouts and Section of the Proposed Development
Appendix 2.1	Year 2046 Traffic Forecast (15 Years from 2031)
Appendix 2.2	Low Noise Road Surfacing within 300m Assessment Area
Appendix 2.3	Results of Road Traffic Noise Impact Assessment (Base Case Scenario)
Appendix 2.4	Results of Road Traffic Noise Impact Assessment (Mitigated Scenario)
Appendix 3.1	Site Survey Photo Records
Appendix 3.2	Sound Power Levels of Identified Fixed Noise Sources
Appendix 3.3	Results of Fixed Noise Impact Assessment
Appendix 4.1	Correspondence with Environmental Protection Department
Appendix 6.1	Historic Aerial Photo
Appendix 6.2	Correspondence with Various Departments
Appendix 6.3	Screen Capture of BRAVO Record
Appendix 6.4	Site Walkover Checklist
Appendix 6.5	Site Survey Photo Records



## 1. INTRODUCTION

## 1.1 Project Background

- 1.1.1 The Application Site currently falls within the "Government, Institution or Community" ("G/IC") zone, according to the Approved Fanling / Sheung Shui Outline Zoning Plan ("Approved OZP") No. S/FSS/28. The Applicant proposed to rezone from "G/IC" to "Other Specified Uses (Innovation and Technology)" ("OU(I&T)") zone, given the unique nature of the EV and low-altitude aerial vehicles industries with R&D and business needs.
- 1.1.2 Ramboll Hong Kong Limited is commissioned by the applicant to prepare an Environmental Assessment (EA) in support of the planning application. The EA report will assess the major environmental issues (i.e. environmental noise, air quality, construction phase environmental impact and land contamination) of the Application Site and the surrounding area.

## 1.2 Application Site and its Environ

- 1.2.1 The Application is located in the south of Fanling Site, comprising various lots in D.D.51. The Application Site is bounded by roads on two sides. Tai Wo Service Road West is to the immediate north, and other existing and planned carriageways (Fanling Highways and Fanling Bypass Eastern Section) are further to the north. Wo Hing Road is located on the western side of the Application Site.
- 1.2.2 The area to the immediate southeastern to east is zoned "Residential (Group A) 3'' ("R(A)3'') and the area to the immediate southwestern to south is zoned "V" zone.
- 1.2.3 The location and its environs are shown in **Figure 1.1**.

## 1.3 Proposed Development

- 1.3.1 R&D and innovation & technology related uses on EV, staff ancillary and communal facilities, and staff guarters or offices uses are proposed at the Application Site.
- 1.3.2 There is an 7-storey podium building, comprising 6 storeys for R&D and innovations & technology related uses (including research laboratory, pre-delivery inspection, training space/testing centre, battery charging/swapping station, EV showrooms, workbay, main office, storage/warehouse, utility and workshop) and 1 storeys of ancillary and supporting business and training facilities (i.e. conference, seminars, training course, and administration & accounting office). There will be a vehicular ramp in the south providing car access to each floor level of the building. There will be one 12 storeys residential institution (talent accommodation) and one 6 storeys staff quarters atop of an 7-storey podium building.
- 1.3.3 The tentative completion year is 2031.
- 1.3.4 Layout and floor plans of the Proposed Development are given in **Appendix 1.1.**

## 1.4 Appraisal of Environmental Impact

**Noise** 

1.4.1 The Application Site is bounded by roads on two sides. Especially, the Fanling Highway and the proposed elevated Fanling Bypass (Eastern Section) to the north of the Application Site will generate significant impact. The potential road traffic noise impact has been assessed in this study. Direct noise mitigation measures have been recommended to minimise the potential road traffic noise impact.



- 1.4.2 Onsite survey has been conducted in June 2025 to identify any environmental nuisance. Noisy facilities have been identified within 300m assessment area, including a covered warehouse and a towing company. Quantitative fixed noise impact assessment has been conducted to evaluate the potential fixed noise impact.
- 1.4.3 The development is not environmentally polluting in nature. Should there be any fixed noisy facilities (e.g. fan system, HVAC for retail, GIC, office, showroom/exhibition related uses, clubhouse, hotel) provided in future, it will be designed to follow the HKPSG requirement (i.e. acceptable noise level minus 5 decibels) to ensure that there is no adverse impact on any noise sensitive use in the surrounding.
- 1.4.4 The nearest segment of existing MTR East Rail Line is located over 180m from the Application Site. Given that the buffer separation well exceeds the recommendation (150m) in the HKPSG and no NSR will be facing the existing MTR East Rail Line directly, no adverse railway noise impact on the proposed development is anticipated.

#### Air Quality

- 1.4.5 With respect to the potential vehicular emission impact, the Application Site is affected by open road emissions from nearby carriageways such as Tai Wo Service Road West, Fanling Highways, Fanling Bypass Eastern Section and Wo Hing Road.
- 1.4.6 The potential odour sources within the 200m assessment area are identified and assessed.
- 1.4.7 There is absence of chimney emission observed in the surrounding.
- 1.4.8 A qualitative air quality impact assessment is prepared to address the potential air quality impact that would be generated from the aforementioned emissions.

## Construction Phase Environmental Impact

- 1.4.9 The major air quality impact during construction should be fugitive dust impact in relation to dusty activity & emission from dusty materials and gaseous & particulate matter (PM) emissions form the construction vehicles and powered mechanical equipment (PME). Best management practice and practical mitigation measures will be adopted where appropriate.
- 1.4.10 Construction noise is usually generated by using powered mechanical equipment. It will be controlled with reference to relevant technical memorandum. Best Management practice will be adopted where appropriate to suppress the impact.
- 1.4.11 For water quality aspect, during construction of the Proposed Development, water pollution is likely due to sediments, construction runoff and drainage, sewage effluent and liquid spillage if not mitigated. Best management practice will be adopted. No sewage effluent discharge will be allowed. ProPECC PN 2/24 on construction site drainage will be observed and followed.
- 1.4.12 Waste generation during construction will be sorted and handled in compliance with the Waste Disposal Ordinance and regulations.
- 1.4.13 With adequate mitigation measures incorporated during construction of the project, no significant construction phase environmental impact is anticipated. Further discussion on construction phase environmental impact is also included in **Section 5**.

## 1.5 Organisations of the Report

- 1.5.1 This Environmental Assessment report contains the following chapters: -
  - Chapter 2 to evaluate and assess potential road traffic noise impact on the Proposed Development at the Application Site, and propose practicable noise mitigation measures to attenuate the impact;



- Chapter 3 to evaluate and assess potential fixed noise impact on the Proposed Development at the Application Site, and propose practicable noise mitigation measures to attenuate the impact;
- Chapter 4 to evaluate the potential air quality impact on the Proposed Development at the Application Site, and propose practicable mitigation measures to attenuate the impact;
- Chapter 5 to generally discuss potential environmental noise, fugitive dust, water, waste impact during construction of the project and propose effective and practicable mitigation measures to attenuate the impact; and
- Chapter 6 to discuss the likeliness of land contamination due to historical use of the Application Site and necessity of further investigation.



## 2. TRAFFIC NOISE IMPACT ASSESSMENT

#### 2.1 Introduction

2.1.1 This road traffic noise impact assessment is prepared to address potential road traffic noise impact on the noise sensitive uses of the Proposed Development and to recommend mitigation measures where practicable to attenuate the impact.

## 2.2 Assessment Criteria

- 2.2.1 Noise standards are recommended in the Hong Kong Planning Standards and Guidelines (HKPSG) for planning against noise impact from road traffic.
- 2.2.2 The Proposed Development comprises staff quarters and residential institution. Staff ancillary and supporting business and training facilities and innovation & technology facilities will be air-conditioned and will not rely on opened window for ventilation.
- 2.2.3 Under the HKPSG, the criterion for road traffic noise impact on domestic premises (habitable rooms) is  $L_{10(1-hour)}$  70dB(A). This criterion applies to uses which rely on opened windows for ventilation.

## 2.3 Assessment Methodology

- 2.3.1 In this assessment, the potential noise impact arising from nearby existing and future road carriageways on the Proposed Development has been assessed based on the proposed master layout plan (MLP).
- 2.3.2 It involved the prediction of future noise impacts on Noise Sensitive Receivers (NSRs) arising from traffic flows along existing and future road carriageways situated within or in the vicinity of the Application Site. Calculation of predicted road traffic noise were based on the worst case peak hour traffic flows projected within a 15-year period from the target completion year (Year 2031) of the proposed development.
- 2.3.3 For worst-case scenario evaluation, the assessment year was chosen to be year 2046, which has the maximum forecasted traffic flow within the 15-year period. The year 2046 traffic forecast data is prepared by Project Traffic Consultant and attached in **Appendix 2.1.**
- 2.3.4 The U.K. Department of Transport's procedure "Calculation of Road Traffic Noise" (CRTN) was used to predict the hourly  $L_{10(1\text{-hour})}$  noise levels generated from road traffic at selected representative NSRs. Practicable environmental mitigation measures have been recommended, where necessary. The predicted noise levels were compared with the relevant HKPSG noise standards.
- 2.3.5 In this assessment, all roads are assumed of impervious surface except for Fanling Bypass Eastern Section (Road ID: 48 and 49) and part of Tai Wo Service Road West, Pak Wo Road, Fanling Highway Slip Road and Fanling Highway (i.e. Road ID: 1 to 4, 16, 29 and 52) as indicated in **Appendix 2.2**, where pervious surface is assumed. Speed limit of 50 km/hr is assumed for most of the roads, 70km/hr is assumed for part of Jocky Club Road (i.e. Road ID: 24, 26, 28), 80km/hr is assumed Fanling Bypass Eastern Section and part of Fanling Highway (i.e. Road ID: 48, 49 and 53) and 100km/hr is assumed for part of Fanling Highway (i.e. Road ID: 21, 22, 29, 31, 32, 36 and 52).

## 2.4 Noise Sensitive Receivers

2.4.1 A number of Noise Sensitive Receivers (NSRs), which are likely to be subject to worst road traffic noise impact of the corresponding habitable rooms, were selected for the



- assessment. All assessment points were taken at 1.2 m above the floor and 1 m away from the façade of the staff quarters and residential institution.
- 2.4.2 **Figure 2.1** illustrates the locations of the selected representative NSRs for road traffic noise impact assessment.

## 2.5 Design Constraints

2.5.1 Due to the heavy traffic flows of Fanling Highway and Fanling Bypass (Eastern Section) (under construction), no noise sensitive uses would be located at the façade of the staff quarters and residential institution facing Fanling Highway and Fanling Bypass directly.

## 2.6 Noise Mitigation Measures Incorporated under Base Case Scenario

- 2.6.1 As mentioned in **Section 2.5.1**, it is identified that the major road traffic noise sources are Fanling Highway and Fanling Bypass (Eastern Section). To address the potential road traffic noise impact, building setback, podium building and orientation of dwellings have been duly considered in the buildings design and arrangement to reduce the road traffic noise impact as far as practicable.
- 2.6.2 The staff quarters and residential institution are erected atop a 7-storey podium, which is approximately 41m high. This would increase the separation distance between the carriageway and the noise sensitive receivers of the dwellings and screening of the nearby roads would be provided.

## 2.7 Road Traffic Noise Impact Assessment Result (Base Case)

2.7.1 The predicted road traffic noise impact on the selected representative noise sensitive receivers (NSRs) without direct noise mitigation measures have been assessed. The predicted results are shown in **Appendix 2.3**. According to the predicted results, there are exceedances of road traffic noise standard at various locations of the staff quarters and residential institution, which is up to 10 dB(A) and 9 dB(A) under AM peak scenario and PM peak scenario respectively.

## 2.8 Proposed Noise Mitigation Measures

#### Vertical Acoustic Fin

- 2.8.1 Full-height acoustic fins of 1.5m long are proposed at strategic locations to reduce the view angle to the traffic noise sources. The locations of the proposed vertical acoustic fins are shown in **Figure 2.2**. The noise reduction effect is determined by using CRTN methodology taking into account the view angle correction but would not be higher than 3 dB(A) for conservatism.
- 2.8.2 It is noted that erection of vertical acoustic fins near NSRs would possibly induce noise reflection and would particularly create a semi-enclosure area if two consecutive fins are near to each other and hence inducing possible multi-reflection effects. In order to minimise the potential multi-reflection effects at NSRs, repetitive fins close to each other is avoided and sound absorptive material (SAM) (with noise reduction coefficient (NRC) of not less than 0.9) is proposed at the surface of the vertical acoustic fins facing window opening where necessary and practicable.

## Acoustic Window (Baffle Type) [AW(BT)]

2.8.3 According to "Application of Innovative Noise Mitigation Designs in Planning Private Residential Developments against Road Traffic Noise Impact" (ProPECC PN 5/23), there are configurations of AW(BT) with opening of around 0.5 m² (600mm x 870mm) and 1.1 m² (750mm x 1500mm), inner sliding door with gap width of 100mm to 175mm and overlapping length of at least 100mm. Noise reduction of 6 dB(A) and 7 dB(A) are



achievable with the referenced room area of  $8m^2$  and  $18m^2$ . Further, addition of sound absorptive material (SAM) of Noise Reduction Coefficient (NRC)  $\geq 0.7$  at top and outer opening side of the mullion can offer an additional 1.5 dB(A). Moreover, additional 1 dB(A) reduction can offer for tilting the AW(BT) with not less than  $30^\circ$  horizontal incident angle to the dominant line source. Additional 2 dB(A) reduction can offer for adding 1.5m long full-height noise effective fin while tiling not less than  $60^\circ$ . Altogether, 8.5 dB(A) and 11.5 dB(A) are assumed as the noise reduction levels and adopted in this study for habitable room of staff quarters and residential institution using AW(BT) with tilting not less than  $30^\circ$  horizontal incident angle to the dominant line source and AW(BT) adding 1.5m long full-height noise effective fin while tiling not less than  $60^\circ$ , respectively by following the design and referenced room area of the AW(BT). The locations of the proposed AW(BT) are shown in **Figure 2.2**.

Table 2.1 Design of Acoustic Window (Baffle Type) from ProPECC PN 5/23

ID	With Acoustic Fin	Referenced Room Area	Noise Reduction Level
AW(BT)-1	Yes	18m²	11.5 dB(A)
AB(BT)-2	No	8m²	8.5 dB(A)

## 2.9 Road Traffic Noise Impact Assessment Result (Mitigated)

- 2.9.1 The predicted road traffic noise impact on the selected representative NSRs based on the proposed noise mitigation measures discussed above have been assessed. The predicted results are shown in **Appendix 2.4**.
- 2.9.2 With the implementation of the proposed noise mitigation measures, the predicted results at all representative NSRs could comply with the relevant standard. Therefore, no adverse road traffic noise impact on the Proposed Development would be anticipated.

## 2.10 Conclusion

2.10.1 Road traffic noise impact assessment has been carried out for the Proposed Development. The noise mitigation measures are tentative only and subject to future scheme refinement. With the implementation of the proposed noise mitigation measures, no adverse road traffic noise impact on the Proposed Development anticipated. The feasibility of meeting relevant road traffic noise standard is demonstrated.

## 3. FIXED NOISE IMPACT ASSESSMENT

#### 3.1 Introduction

3.1.1 This fixed noise impact assessment is prepared to address potential fixed noise impact on the Proposed Development arising from the existing and planned fixed noise sources. Practicable noise mitigation measures would be recommended where necessary.

#### 3.2 Identification of Fixed Noise Sources

3.2.1 Only two fixed noise sources have been identified through desktop review and site survey conducted in June 2025. Location of identified fixed noise sources are shown in **Figure 3.1** and the photo records of site survey of the identified fixed noise are shown in **Appendix 3.1**.

## **Brilliant Towing Company**

3.2.2 Brilliant Towing Company is located immediately to the southeast of the Application Site. Minor activities (e.g. tyre replacement) and parking of lorries were observed during site survey. By considering the minor activities observed, the noise Sound Power Level (SWL) of 97.0 dB(A) based on the findings in "Redevelopment of Lai Sun Yuen Long Centre at Nos.21-35 Wang Yip Street East, YLTL 362" (Approved Planning Application: A/YL/304) has been referenced and adopted in this assessment. No nighttime operation was observed.

#### K. Kee Engineering Company Limited

- 3.2.3 According to the Preliminary Environmental Review Report under the Approved Planning Application (Application No.: A/FSS/295) for a proposed public housing development, a covered warehouse was identified. According to the observation during site survey. 5 electric hoists were observed and only 1 of the electric hoisted was being operated during the site visit. The SWL of 95.0 dB(A) of the electric hoist in "Technical Memorandum on Noise from Construction Work Other Than Percussive Piling" has been referenced and adopted in this assessment. It is assumed that 5 electric hoists would be operated at the same time as a worst-case scenario. No nighttime operation was observed.
- 3.2.4 The SWLs of the identified fixed noise sources are shown in **Appendix 3.2**.

#### 3.3 Assessment Criteria

- 3.3.1 According to the "Technical Memorandum For The Assessment Of Noise From Places Other Than Domestic Premises, Public Places Or Construction Sites" (IND-TM) issued under the Noise Control Ordinance (NCO), the airborne noise shall comply with the Acceptable Noise Level (ANL), which depends on the Area Sensitive Rating (ASR).
- 3.3.2 According to the IND-TM, four (4) types of areas are defined and including: Rural Area, Low Density Residential Area, Urban Area and Area Other Than Those Above. The Application Site is located in Fanling area and considered not rural, low density residential nor urban.
- 3.3.3 According to the Annual Traffic Census 2023, the Annual Average Daily Traffic (AADT) for Fanling Highway was over 114,000 (i.e. Station 6084). The Fanling Highway therefore acts as an Influencing Factor (IF, with AADT over 30,000). ASR "B" is applicable to the facades, which do not have direct lines of sight and not affected by the IF (i.e. Fanling Highway). ASR "C" would be assigned to the facades directly affected by Fanling Highway. The ASR and ANLs according to IND-TM are tabulated below.



Turns of Auga Combaining NCD		Degree to which NSR is affected by Influencing Factors (IFs)			
Туре	of Area Containing NSR	Not Affected	Indirectly Affected	Directly Affected	
i.	Rural area, including country parks, or village type development	А	В	В	
ii.	Low density residential area consisting of low-rise or isolated high-rise developments	А	В	С	
iii.	Urban area	В	С	С	
iv.	Area other than those above	В	В	С	

Table 3.1 Area Sensitivity Rating of NSRs

Table 3.2 Acceptable Noise Level

Time Period	ASR "B", Leq (30 min), dB(A)	ASR "C", Leq (30 min), dB(A)
Day & Evening (0700 – 2300 hours)	65	70

## 3.4 Assessment Methodology

- 3.4.1 Standard acoustic principles were adopted for prediction of cumulative fixed noise impact. The shortest horizontal distances between noise sensitive receivers (NSRs) of the Proposed Development and identified fixed noise sources were assessed as a conservative assessment approach.
- 3.4.2 The assessment has taken into account the distance attenuation, screen effect, tonality and façade effect where appropriate. Prediction of the fixed source noise level can be represented by the formula below:

$$SPL_{NSR} = SWL_{source} + Corr_{dist} + Corr_{bar} + Corr_{ton} + Corr_{fac}$$

where

 $SPL_{NSR}$  = Predicted Noise level at the Representative NSR [Leq<sub>(30 min)</sub> dB(A)]

 $SWL_{source}$  = Sound Power Level of the Identified Fixed Noise Sources [dB(A)]

 $Corr_{dist}$  = Distance Correction [-20 x Log (Distance between NSR and Source) - 8]

 $Corr_{bar}$  = Barrier Correction [-10dB(A) where applicable]

 $Corr_{ton}$  = Tonality Correction [+3dB(A), where applicable]

 $Corr_{fac}$  = Façade Correction [+3dB(A)]

## 3.5 Representative Noise Sensitive Receivers

- 3.5.1 Representative NSRs of the staff quarters and residential institution nearest to the identified noise sources have been selected for the assessment. Assessment points are taken at 1.2m above floor and 1m away from façade.
- 3.5.2 The 7-storey podium would be served by central air-conditioning and not rely on openable windows for ventilation. Therefore, no NSR would be identified and adverse fixed noise source noise impact would not be anticipated.
- 3.5.3 **Figure 3.2** shows the location of the representative NSRs.



## 3.6 Fixed Noise Impact Assessment Result (Base Case)

- 3.6.1 The predicted cumulative noise level at the representative NSRs under base case scenario (i.e. no noise mitigation measures incorporated) has been calculated and summarized in **Table 3.3**. Detailed calculation is shown in **Appendix 3.3**.
- 3.6.2 According to the result, no exceedance of the relevant noise criteria during day & evening time found.

Table 3.3 Maximum Predicted Fixed Noise Levels for the Representative NSRs (Base Case)

		Noise Criteria, dB(A)	Predicted Noise Level, dB(A)
NSR	ASR	Day & Evening Time	Day & Evening Time
F01	С	70	68
F02	С	70	67
F03	С	70	61

## 3.7 Fixed Noise from Podium of the Proposed Development

3.7.1 In addition to the above noise sources, the Proposed Development includes a 7-storey podium accommodating innovation & technology (I&T) uses and staff ancillary and supporting business and training facilities, which would be served with central airconditioning. It is noted that the detailed design is subject to finetuning and after respective contractors engaged. In all circumstances, requirement to meet HKPSG standard with respect to fixed noise impact will be explicated in the tender document so that future contractors will strictly follow.

#### 3.8 Conclusion

- 3.8.1 A fixed noise impact assessment has been carried out. No adverse noise impact on the representative NSRs is envisaged without noise mitigation measure in place.
- 3.8.2 In order to avoid adverse noise impact of the future fixed noise sources onsite on the surrounding NSRs, the future contractor shall ensure that the equipment within the Proposed Development would be designed and installed to meet the HKPSG criteria.



# 4. AIR QUALITY IMPACT ASSESSMENT

#### 4.1 Introduction

4.1.1 This section evaluates the air quality impact during operation of the project. Table 3.1 in Chapter 9 of the HKPSG has been referenced for provision of buffer separation from identified air pollution sources in the surrounding.

## 4.2 Legislative Requirements and Evaluation Criteria

## Assessment Criteria

4.2.1 The principal legislation for the management of air quality in Hong Kong is the *Air Pollution Control Ordinance (APCO)* (Cap. 311). The Hong Kong AQOs enacted on 11 April 2025 are listed in **Table 4.1** below.

Table 4.1 Hong Kong Air Quality Objectives

Pollutants	Average Time	Standard <sup>[i]</sup> (µg/m³)	No. of exceedances allowed
SO <sub>2</sub>	10-min	500	3
302	24-Hour	40	3
RSP (PM <sub>10</sub> ) [ii]	24-Hour	75	9
RSP (PM <sub>10</sub> ) <sup>111</sup>	Annual	30	NA
ECD (DM ) [iii]	24-Hour	37.5	18
FSP (PM <sub>2.5</sub> ) [iii]	Annual	15	NA
	1-Hour	200	18
NO <sub>2</sub>	24-Hour	120	9
	Annual	40	NA
0(0)	8-Hour	160	9
Ozone (O <sub>3</sub> )	Peak Season	100	NA
	1-Hour	30,000	0
Carbon Monoxide (CO)	8-Hour	10,000	0
	24-Hour	4,000	0
Lead (Pb)	Annual	0.5	NA

#### Notes:

- [i] All measurements of the concentration of gaseous air pollutants, i.e. sulphur dioxide, nitrogen dioxide, ozone and carbon monoxide, are to be adjusted to a reference temperature of 293 Kelvin and a reference pressure of 101.325 kilopascal.
- [ii] Respirable suspended particulates ( $PM_{10}$ ) means suspended particles in air with a nominal aerodynamic diameter of 10  $\mu$ m or less.
- [iii] Fine suspended particulates (PM $_{2.5}$ ) means suspended particles in air with a nominal aerodynamic diameter of 2.5  $\mu m$  or less.

#### Air Pollution Control (Construction Dust) Regulation

4.2.2 Notifiable and regulatory works are under the control of Air Pollution Control (Construction Dust) Regulation. Notifiable works include site formation, reclamation, demolition, foundation and superstructure construction for buildings and road construction. Regulatory works include building renovation, road opening and resurfacing, slope stabilisation, and other activities including stockpiling, dusty material handling, excavation, concrete production, etc. The Project is expected to include notifiable works (site formation, demolition, foundation and superstructure construction for buildings) and regulatory works (dusty material handling and excavation). Contractors and site agents are required to inform EPD and adopt dust



reduction measures to minimize dust emissions, while carrying out construction works, to the acceptable level.

#### Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation

4.2.3 The Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation comes into operation on 1 June 2015. Under the Regulation, Non-road mobile machinery (NRMMs), except those exempted, are required to comply with the prescribed emission standards. From 1 September 2015, all regulated machines sold or leased for use in Hong Kong must be approved or exempted with a proper label in a prescribed format issued by EPD. Starting from 1 December 2015, only approved or exempted NRMMs with a proper label are allowed to be used in specified activities and locations including construction sites. The Contractor is required to ensure the adopted machines or non-road vehicle under the Project could meet the prescribed emission standards and requirement.

## Air Pollution Control (Fuel Restriction) Regulations

4.2.4 The Air Pollution Control (Fuel Restriction) Regulations were enacted in 1990 to impose legal control on the type of fuels allowed for use and their sulphur contents in commercial and industrial processes to reduce sulphur dioxide (SO<sub>2</sub>) emissions. In November 2024, the Regulations were amended to further tighten the control requirements of liquid fuels and remove the restrictions on the use of liquid and solid fuel in Sha Tin Fuel Restriction Area. The Regulations do not apply to any fuel-using equipment that is used or operated in premises used solely as a dwelling or is used or operated in or on a vessel, motor vehicle, railway locomotive or aircraft. Gaseous fuel, conventional solid fuel with a sulphur content not exceeding 1% by weight or liquid fuel with a sulphur content not exceeding 0.001% by weight and a viscosity not more than 6 centistokes at 40°C, such as Ultra Low Sulphur Diesel (ULSD) are permitted to be used in commercial and industrial processes.

## Recommended Pollution Control Clauses for Construction Contracts

4.2.5 The Recommended Pollution Control Clauses (RPCC) are generally good engineering practice to minimize inconvenience and environmental nuisance to nearby residents and other sensitive receivers. The Contractor shall undertake environmental protection measures to reduce the environmental impacts arising from the execution of the Works and to minimise the effects on the air, noise, water quality as well as nuisance of waste within and outside the Site, on transport routes and at the loading, dredging and dumping areas.

#### Hong Kong Planning Standards and Guidelines

4.2.6 Section 3 in Chapter 9 of the Hong Kong Planning Standards and Guidelines (the HKPSG) presents the principal framework for planning against air pollution and a summary of common pollution sources, which includes industrial processes, motor vehicles, construction and reclamation sites, odour sources, dusty uses, etc. The recommended buffer distances are reproduced in **Table 4.2** and **Table 4.3**.

Table 4.2 HKPSG's Recommended Minimum Buffer Distance from Roads

Type of Road	Buffer Distance	Permitted Uses
Trunk Road (including	> 20 m	Active and passive recreation uses
expressway) and	3 – 20 m	Passive recreational uses
Primary Distributor	< 3 m	Amenity areas
District Distributor	> 10 m	Active and passive recreational uses
	< 10 m	Passive recreational uses



Type of Road	Buffer Distance	Permitted Uses
Local Distributor	> 5 m	Active and passive recreational uses
	< 5 m	Passive recreational uses
Under Flyovers	-	Passive recreational uses

Table 4.3 HKPSG's Recommended Minimum Buffer Distance from Industrial Chimneys

Difference in Height between Industrial Chimney Exit and the Site	Buffer Distance	Permitted Uses	
< 20 m	> 200 m	Active and passive recreation uses	
	5 – 200 m	Passive recreational uses	
20 m – 30 m	> 100 m	Active and passive recreational uses	
	5 – 100 m	Passive recreational uses	
30 m – 40 m	> 50 m	Active and passive recreational uses	
	5 – 50 m	Passive recreational uses	
> 40 m	> 10 m	Active & Passive recreational uses	

## 4.3 Existing Air Quality

- 4.3.1 The nearest air quality monitoring station (AQMS) to the Application Site is the North AQMS. The five most recent years of air quality monitoring data, 2019 to 2023, from the North general Air Quality Monitoring Station (AQMS) are summarized in **Table 4.4**. According to the AQMS monitoring data presented in **Table 4.4**, exceedances in annual average FSP concentrations in Year 2023 and 8-hour average O<sub>3</sub> concentration were recorded between Year 2019 and 2023, while all other pollutants have compiled with the AQOs.
- 4.3.1.1 As the tentative year of completion of the Proposed Development is 2031, the year of 2030 hourly background concentrations from the PATH v3.0 model has been adopted for the purpose of this assessment, which is considered as a more conservative approach. The data for Year 2030 was extracted from the *Pollutants in the Atmosphere* and the *Transport over Hong Kong*-model version 3.0 (PATH v3.0) developed and released by EPD in January 2024 (Grids (37, 51) and (38, 51)). According to **Table 4.4** there would be no exceedance of AQOs for the future background air quality pollutants except O<sub>3</sub>.

Table 4.4 EPD Air Quality Monitoring Data in North AQMS and PATH-v3.0 (Grids (37, 51) and (38, 51), Year 2030)

				Concentration [1] (µg/m³)						
Pollutant	Averaging time	Parameter	AQO (μg/m³)	2019	2020	2021	2022	2023	PATH in Year 2030 (37, 51)	PATH in Year 2030 (38, 51)
RSP	24-hour	10 <sup>th</sup> highest	75	-	55	62	50	57	51	52
(PM <sub>10</sub> )	Annual	Maximum	30	-	-	25	23	27	20	20
FSP (PM <sub>2.5</sub> )	24-hour	19 <sup>th</sup> highest	37.5	-	29	29	28	28	30	32
	Annual	Maximum	15	-	-	15	14	<u>15</u>	12	13



				Concentration [1] (µg/m³)						
Pollutant	Averaging time	Parameter	AQO (μg/m³)	2019	2020	2021	2022	2023	PATH in Year 2030 (37, 51)	PATH in Year 2030 (38, 51)
	1-hour	19 <sup>th</sup> highest	200	-	112	135	115	116	51	57
NO <sub>2</sub>	24-hour	10 <sup>th</sup> highest	120	-	54	70	58	58	19	22
	Annual	Maximum	40	-	-	36	31	30	12	12
60	10-minute	4 <sup>th</sup> highest	500	-	19	18	27	27	28	28
SO <sub>2</sub>	24-hour	4 <sup>th</sup> highest	40	-	8	7	7	7	7	6
	8-hour	10 <sup>th</sup> highest	160	-	<u> 166</u>	<u>187</u>	<u>197</u>	<u>164</u>	<u>174</u>	<u>167</u>
O <sub>3</sub>	Peak Season	Maximum	100	N.A.	N.A.	97	98	95	<u>121</u>	<u>119</u>
СО	1-Hour	Maximum	30,000	-	1830	2150	1710	2390	534	537
	8-Hour	Maximum	10,000	-	1238	1550	1304	1231	494	503
	24-hour	Maximum	4,000	N.A.	1022	1213	994	1001	458	457

#### Notes:

- [1] Bolded and underlined values exceed the relevant AQO.
- [2] Since air pollutants measurement at North general AQMS commenced in July 2020, there is not sufficient data for the calculation of annual averages. All concentrations in 2019 and some concentrations in 2020 are not available at North AQMS.

## 4.4 Potential Air Quality Impact on Proposed Development

#### Identification of Industrial Emission Sources

4.4.1 Site surveys were conducted on 4 June 2025 to identify any environmental nuisance and focus on area within 200m from the Application Site (see **Figure 4.1**). There is no existing and planned industrial sources and chimneys identified within 200m from the Application Site. Therefore, no adverse air quality impact from the industrial / chimney emissions is anticipated.

## Identification of Vehicular Emission Sources

- 4.4.2 The Application Site is bounded by roads on two sides. Tai Wo Service Road West is to the immediate north, and other existing and planned carriageways (Fanling Highways and Fanling Bypass Eastern Section) are further to the north. Wo Hing Road is located on the western side of the Application Site.
- 4.4.3 **Figure 4.2** shows the separation distance from nearby road network provided and the buffer zone according to Table 3.1 in Chapter 9 of the HKPSG. According to the Annual Traffic Census, Fanling Highway is categorised as expressway, Tai Wo Service Road West is categorized as rural road and Wo Hing Road is categorized as local distributor. As advised by the Traffic Consultant, the proposed carriageway, Fanling Bypass Eastern Section, is considered as expressway. Although there is no definition of buffer distance requirement by HKSPG for rural road, the buffer distance requirement of rural road is assumed to be same as local distributor (i.e. 5m). For road and highways, buffer separations (measured from road kerb side to air sensitive use) of 20m and 5m are recommended respectively for expressway and local distributor.
- 4.4.4 To meet the recommended buffer separation and avoid adverse air quality impact, all air-sensitive uses of the proposed development including openable windows and fresh air intake would be outside the buffer zones.



## 4.5 Potential Odour Impact on Proposed Development

## Identification of Odour Sources

- 4.5.1 Site survey was conducted to identify any odour impact arising from odour sources within 200m assessment area. The identified potential odour source is the Wo Hop Shek Tsuen (Tai Po Road) Refuse Collection Point (RCP) (see **Figure 4.3**).
- 4.5.2 The survey was conducted on 4 June 2025. No adverse odour was observed at Wo Hop Shek Tsuen (Tai Po Road) Refuse Collection Point during the onsite survey.
- 4.5.3 The enquires on the odour-related complaints against the odour sources close to the Application Site have been made to Environmental Protection Department. According to the reply from EPD, in the past five years, there are only 3 records of odour complaints within 200m from the Application Site, all received in 2024. As the odour complaints were only received in 2024 and the no. of odour complaints received is low, together with the observation during the onsite survey, adverse odour impact on the Application Site would not be anticipated. The relevant correspondences with EPD are shown in **Appendix 4.1**.
- 4.5.4 Based on the observation during the site survey, the adverse odour impact is not anticipated at the Application Site.

## 4.6 Potential Air Quality Impact arising from Proposed Development

## Construction Phase

- 4.6.1 The potential air quality impacts during the construction phase and the mitigation measures where practicable for fugitive dust and gaseous emission during construction to be adopted would be further discussed in **Section 5**.
- 4.6.2 "Recommended Pollution Control Clauses for Construction Contracts" is available on the EPD website which set out the recommended air pollution control measures to be implemented by the contractor(s) during the construction stage of the Project.
- 4.6.3 With the implementation of control measures stipulated under the Air Pollution Control (Construction Dust) Regulation and the adoption of good practices, it is expected that construction fugitive dust and gaseous emission can be controlled.

## Operational Phase

4.6.4 The Proposed Development at the Application Site is not considered environmentally polluting in nature. The proposed R&D and innovation & technology related uses are primarily focused on EVs, which are not expected to result in gaseous emissions or adverse impacts on air quality. There will be no chimney stack planned within the site. No adverse air quality impact on surrounding air sensitive uses is anticipated during its operation.

## 4.7 Conclusion

- 4.7.1 As confirmed in site survey, there is no existing and planned industrial source / chimney identified within 200m from the Application Site. No adverse air quality impact from the industrial / chimney emissions is anticipated.
- 4.7.2 The Proposed Development will be designed so that there are no air-sensitive uses of the proposed development, including openable windows and fresh air intake, falling within the buffer zones as stipulated in the HKPSG.
- 4.7.3 According to the findings from the site visit, adverse odour impact on the Application Site would not be anticipated.



4.7.4 Control measures stipulated under the Air Pollution Control (Construction Dust) Regulation and good practices will be adopted during construction of the project. It is expected that construction fugitive dust and gaseous emission can be controlled.

## 5. CONSTRUCTION PHASE ENVIRONMETAL IMPACT

#### 5.1 Introduction

5.1.1 During the construction phase of the Proposed Development, there may be potential air quality, noise and water quality impacts upon the nearby sensitive receivers. Waste generation is another consideration. Practicable environmental mitigation measures are recommended to reduce these impacts to acceptable ranges.

## **5.2** Construction Air Quality Impact

#### Construction Fugitive Dust Impact

- 5.2.1 The major air quality impact of concern during the construction phase will be the potential fugitive dust emission. The major dust emission sources during the construction phase of the Proposed Development are expected to arise from construction activities such as:
  - · Demolition of existing building structures;
  - Earthworks (minor excavation and backfilling activities);
  - · Wind effect on material stockpiling; and
  - Vehicle movements on haul roads and over the construction site.
- 5.2.2 The Proposed Development is proposed to erect 2 towers atop an 7-storey high podium. There is 1 level of basement. However, as the size of the Application Site is limited, excavation work is limited for the Proposed Development. However, demolition of the existing building structures is required. It is estimated that about 14,500m³ of demolished and excavated material will be generated. Assuming a period of 1 year for demolition, site formation and excavation, about 1 truckload per hour will be generated.
- 5.2.3 On the other hand, there is a proposed public housing development (Approved Planning Application: A/FSS/295) situated to the immediate east of the Application Site. It is tentatively to be completed by year 2029. Given the tentative completion year for the Proposed Development is year 2031, overlapping of construction work is expected and cumulative fugitive dust mitigation measures should be implemented for the Proposed Development as well as the concurrent project. Further, it is recommended that the contractors of the concurrent projects should have close liaison to minimize dusty activities to be taken place at the same time as far as practicable.

#### Construction Gaseous Emission Impact

- 5.2.4 There will be potential impacts from the criteria pollutants (e.g. nitrogen oxides (NOx), sulphur dioxide (SO<sub>2</sub>), and carbon monoxide (CO)). Emission from diesel trucks for the haulage of materials and construction plants will contain high percentage of smoke particulate and unburned hydrocarbons in comparison with petrol driven vehicles. Ultra-low sulphur diesel (ULSD) with sulphur content not exceeding 0.001% by weight will be used as fuel to minimize SO<sub>2</sub> emission. In all circumstances, the contractor will be required to observe all relevant regulations and maintain all equipment in good condition to avoid any excessive emission. Under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, only approved or exempted non-road mobile machineries (including mobile generator, air compressor, excavator, crawler crane, bulldozer and etc.) with a proper label are allowed to be used in the construction site.
- 5.2.5 In addition, availability of electricity supply during construction of the project will be explored and such requirement will be specified in future contract. If available, contractor should maximise use of electricity and with least reliance of diesel fuelled



- equipment (e.g. for electricity powered stationary equipment such as pump instead of using generator).
- 5.2.6 There are existing and planned residential uses and a park situated in the vicinity from the Application Site, which are considered as both Air and Noise Sensitive Receivers. These representative ASRs are shown in **Figure 5.1** and tabulated below.

Table 5.1 Summary of Representative Air and Noise Sensitive Receivers

ID	Description	Land Uses	Approximate Horizontal Distance to the Application Site
SR01	Tong Hang Tsuen (Village House)	Residential	~260m to the north
SR02	Tong Hang Tung Tsuen (Village House)	Residential	~230m to the northeast
SR03	Proposed Public Housing Development in Fanling Area 48 – Block 7*	Residential	~8m to the southeast
SR04	Wo Hop Shek Village (Village House)	Residential	~2m to the southwest
SR05	Regalia Villa (Village House)	Residential	~44m to the southwest
SR06	Yat Ming Road Park	G/IC	~227m to the west

<sup>\*</sup>Tentative in operation by year 2029

#### Mitigation Measures for Fugitive Dust and Gaseous Emission

5.2.7 Fugitive dust and gaseous emission arising from construction activities can be effectively suppressed by incorporating proper mitigation measures into work procedures through contractual clauses, good site management, and close monitoring by the resident engineers. The contractor shall be required to follow the requirements of the Air Pollution Control (Construction Dust) Regulations. With the adoption of good practices, it is expected that emission of construction dust can be kept at an acceptable level. The recommended mitigation measures are described below. In addition, EPD's recommended pollution control clause for construction contracts will be incorporated and required in future tender document to ensure that all relevant environmental protection and pollution control ordinances are observed and complied with.

#### General Site Management

- 5.2.8 Appropriate working methods should be devised and arranged to minimise dust emissions and to ensure any installed control system and/or measures are operated and/or implemented in accordance with their design merits. No free falling of construction debris should be allowed, which should be let down by hoist or enclosed tunnel to the ground.
- 5.2.9 Frequent mist/ water spraying should be applied on dusty areas. The frequency of spraying will depend upon local conditions such as rainfall, temperature, wind speed and humidity. The amount of water spraying should be just enough to dampen the material without over-watering which could result in surface water runoff.
- 5.2.10 Hoarding of not less than 2.4m high from ground level along site boundary, which is next to a road or other public area should be provided.

#### Vehicles and Unpaved Site Roads

5.2.11 Dust emission from unpaved roads comes predominantly from travelling of vehicles. Areas within the site where there are regular vehicle movements should have an approved hard surface. Speed controls at an upper limit of 10km/hr should be imposed



and their movements should be confined to designed roadways within the site. All dusty vehicle loads should have side and tail boards covered by tarpaulin extending at least 300mm over the edges of the side and tail boards. Wheel-wash troughs and hoses should be provided at exit points of the site.

#### Material Stockpiling and Handling

5.2.12 The amount of stockpiling should be minimised where possible. Construction material or debris should be covered and stored inside enclosed areas. Other control measures such as enclosed or semi-enclosed windboard should be used, where applicable, to minimise dust emission. Regular watering is needed at areas such as storage piles, where there could be potential dust emission. Placing dusty material storage piles near ASRs should be prevented.

#### Maximising Use of Electric Power Supply

- 5.2.13 Only approved Non-road Mobile Machinery (NRMM) should be used for construction work with respect to the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation. Exempted NRMMs shall be avoided. Electrified NRMMs should be deployed as far as practicable. In addition, electric power supply shall be provided for onsite machinery as far as practicable to minimize PM and gaseous emissions.
- 5.2.14 The dust control measures detailed below shall also be incorporated into the Contract Specification where practicable as an integral part of good construction practices:
  - The area at which demolition work takes place shall be sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation so as to maintain the entire surface wet;
  - Impervious dust screens or sheeting shall be used to enclose the whole wall to a height of at least 1m higher than the highest level of the structure being demolished;
  - Any dusty materials remaining after a stockpile is removed shall be wetted with water and cleared from the surface of roads or streets.
  - Plan site layout so that machineries, dust causing activities and stockpiling are away from receptors as far as possible;
  - Higher site hoarding (not less than 2.4m) should be implemented where there
    are receptors at close proximity to the construction site and dusty activities;
  - Haul road shall be away from the project boundary as much as possible.

## 5.3 Construction Noise Impact

5.3.1 During the construction phase of the Proposed Development and associated works, major noise impacts would arise from demolition works, piling works, building works, etc. The use of Powered Mechanical Equipment (PME) would generate considerable noise in general. For example, use of breakers in demolition work, oiling machine during foundation work, excavator during excavation work, as well as other equipment like dump trucks, pumps/ generator sets, etc. would generate noise impact on the surrounding.

#### Construction Noise Criteria

5.3.2 Construction noise is controlled under the Noise Control Ordinance (NCO) which prohibits the use of PME during the restricted hours (7 p.m. to 7 a.m. on normal weekdays and any time on a public holiday, including Sunday) without a valid Construction Noise Permit (CNP) from the Authority. The criteria and procedures for issuing such a permit are specified in the "Technical Memorandum on Noise From



- Construction Works Other than Percussive Piling" (TM1). While there is no planned construction works to be carried out during the restricted hours, TM1 should be followed in case there is any need to carry out works in such time period in future.
- 5.3.3 With effect from 1 November 96, the use of specified powered mechanical equipment (SPME) for carrying out construction work other than percussive piling and/ or the carrying out of prescribed construction work (PCW) within a designated area are also brought under control. The relevant technical details are provided in the "Technical Memorandum on Noise from Construction Work in Designated Areas" (TM2).
- 5.3.4 Percussive pilling is controlled similarly by a construction noise permit system and described in the NCO and the "Technical Memorandum On Noise From Percussive Pilling" (TM3), which restricts the number of hours during which pilling can be conducted. Percussive pilling is prohibited between 7 p.m. to 7 a.m. and on holidays (including Sundays). Percussing pilling during the daytime (i.e. between (7 a.m. to 7 p.m. on any day not being a holiday) may be carried out in accordance with the permitted hours and other conditions under a valid construction noise permit.
- 5.3.5 For construction works other than percussive piling, although TM1 does not provide control over daytime construction activities, noise limits as shown in below table are set out in the Professional Persons Environmental Consultative Committee Practice Notes (ProPECC PN) 1/24 "Minimizing Noise from Construction Activities" issued by EPD.

**Table 5.2 Noise Limit for Daytime Construction Activities** 

NSR	0700 to 1900 Hours on Any Day Not Being a Sunday or General Holiday, Leq (30 min), dB(A)
All domestic premises	
Temporary housing accommodation	
Hostels	75
Convalescences homes	
Homes for the aged	
Places of public worship	
Courts of law	70
Hospitals and medical clinics	
Educational institutions	70
(including kindergartens and nurseries)	(65 during examinations)

5.3.6 In all circumstances, future contractor will be required to exercise adequate mitigation measures to minimise potential construction noise impact on the surrounding noise sensitive uses.

## Mitigation Measures

5.3.7 Sufficient noise mitigation measures should be introduced to alleviate potential noise impacts on nearby NSRs. The contractor(s) will be required under the contract to ensure regular maintenance of all plant and equipment, and that noise generation at source would be minimized and practicable noise mitigation measures would be in use. The Contractor(s) will be required to adopt onsite electricity (to avoid using genset or pneumatic equipment) and quiet type construction plants (e.g. EPD's quality powered mechanical equipment (QPME) inventory), wherever practicable. Movable noise barriers will also be erected around noisy plants in order to minimize noise generation at source. With these measures in place noise generation due to construction activities would be minimized.



- 5.3.8 The following general noise mitigation measures are recommended for implementation:
  - Use of quieter equipment and construction method where practicable (e.g. hand-held concrete crushers, non-explosive chemical expansion agent);
  - Application of properly designed silencers, mufflers, acoustically dampened panels and acoustic sheds or shields, etc.;
  - Making use of onsite electricity and electric-powered equipment where applicable instead of diesel-powered or pneumatic-powered equipment;
  - Erecting noise enclosures/ movable noise barriers around noisy plants;
  - Only well-maintained plants should be operated on-site;
  - Plants should be serviced regularly during the construction programme;
  - Noisy activities can be scheduled to minimize exposure of nearby NSRs to high levels of construction noise. For example, noisy activities can be scheduled for midday or at times coinciding with periods of high background noise;
  - Noisy equipment such as emergency generators shall always be sited as far away as possible from noise sensitive receivers;
  - Location of noise emitting plants at maximum possible distances from sensitive receivers;
  - Contractual clauses for construction works;
  - Schedule of noisy operations during non-restricted hours where possible; and
- 5.3.9 The above-mentioned noise mitigation measures, and all other relevant measures in "Recommended Pollution Control Clauses for Construction Contracts" from EPD website and ProPECC PN 1/24 will be included in the contractual clauses for the contractor(s) to follow and implement during the construction stage for construction of the Proposed Development. Furthermore, the Applicant will be recommended to specify the quieter construction equipment/methods in the construction contract to adopt through the preparation of a Construction Noise Management Plan (CNMP) by the successful tenderer with reference to ProPECC PN 1/24.
- 5.3.10 With these measures in place, construction noise due to the Proposed Development can be minimized as far as practicable, and no significant noise impact is anticipated.

## 5.4 Water Quality Impact

Relevant Legislation, Standards and Guidelines

- 5.4.1 Relevant legislations and standards include:
  - Water Pollution Control Ordinance (Cap. 358); and
  - Hong Kong Planning Standards and Guidelines.
- 5.4.2 Other relevant guidelines include:
  - Water Supplies Department (WSD) Water Quality Criteria;
  - Technical Memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS);
  - Professional Persons Environmental Consultative Committee Practice Note 2/24 "Construction Site Drainage" (ProPECC PN 2/24);



- Professional Persons Environmental Consultative Committee Practice Note 1/23
  "Drainage Plans subject to Comment by the Environmental Protection
  Department" (ProPECC PN 1/23); and
- Sewerage Manual (SM) and the Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning (GESF).
- Environmental, Transport and Works Bureau (ETWB) Technical Circular (Works) No. 5/2005 Protection of natural streams/rivers from adverse impacts arising from construction works
- Drainage Services Department (DSD) Technical Circular and Practice Notes
- EPD Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning (version 1.0) (Report No. EPD/TP 1/05)

#### Water Sensitive Receivers

5.4.3 Water sensitive receivers (WSRs) are identified in the surrounding of the Proposed Development (see **Figure 5.2**). There is no watercourse found within the Application Site. The nearest WSR is WSR 01 (Ma Wat River), which is located ~97m to the north of the Application Site.

Table 5.3 Summary of Water Sensitive Receivers in the Surrounding

WSR	Nature	Approximate Horizontal Separation from Nearest Site Boundary		
WSR 01	River	~97m to the north		
Ma Wat River	Rivei	~97III to the north		
WSR 02	Natural or Channelized	~192m to the north		
Watercourse	Watercourses	~192III to the north		
WSR 03	Dondo	407m to the east		
Pond	Ponds	~407m to the east		

#### Source of Construction Wastewater

- 5.4.4 Construction activities including site clearance and formation, foundation work (piling), excavation and superstructure construction, etc. would inevitably have the potential to generate wastewater and affect the nearby water quality. Works should be carried out in such a manner so as to minimise significant impacts on local water bodies. Activities that are likely to cause water pollution include:
  - Demolition and construction runoff and drainage;
  - Sewage effluent from the site; and
  - Liquid spillage, e.g. oil, diesel, solvents etc.
- 5.4.5 Demolition and construction runoff contain increased loads of sediments, other suspended solids and contaminants. Potential sources of pollution include runoff and erosion from the site surfaces, drainage channels, bentonite slurries and runoff from dust suppression sprays, fuel, oil and lubricants from vehicles and other equipment.
- 5.4.6 Sewage effluent could be potentially generated from eating areas, temporary site facilities (e.g. toilets) and waste disposal area for onsite construction workforce. The sewage effluent is characterized by high levels of biochemical oxygen demand (BOD), ammonia, E. coli and some oil/ grease.
- 5.4.7 Liquid spillage could be caused by general construction works to contaminate surface soils, e.g. oil, diesel, solvents etc. The contaminated soil may be washed away through



- runoff from construction site and enter nearby stormwater drains, thus leading to negative water quality impact.
- 5.4.8 The effects on water quality from these construction activities are likely to be minimal provided that site boundaries are well maintained a goods site practice is observed to ensure that litter and fuels are managed, stored, and handled properly. Below are some mitigation measures to avoid and minimize potential water quality impacts on the WSRs.

#### Mitigation Measures

5.4.9 The good practice given in the ProPECC PN 2/24 in controlling water pollution at construction site shall be implemented during the construction phase of the Proposed Development. Soil erosion from the construction site can be minimised through good onsite management practices by implementing viable erosion control measures, which should be incorporated in contract clauses. The main practices provided in ProPECC PN 2/24 are also summarized in the following paragraphs, which should be enforced to prevent adverse construction stage impacts and for compliance with the statutory criteria.

#### Construction Site Runoff

- Exposed soil surfaces should be protected from rainfall through, for example, by covering temporarily exposed slope surfaces or stockpiles with impervious tarpaulin and protect temporary access roads by crushed stone or gravel;
- Exposed soil areas should be minimized to reduce the potential for increased siltation and contamination of runoff;
- Minimise the time that soil surfaces are exposed;
- Slow down water run-off flowing across exposed soil surfaces;
- Channels, earth bunds or sandbag barriers should be provided on-site to properly direct surface runoff through drainage systems. The construction runoff will be controlled in such a way that there will be no spillage of site runoff into adjacent areas or into the nearby bay;
- Oil interceptors are also recommended to be provided for stormwater drains near plant maintenance/repair areas, where necessary;
- Manholes (including newly constructed ones) should be adequately covered or temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system;
- Construction works should be programmed to minimise soil excavation works where practical during rainy conditions; and

#### Ground Water

 Groundwater pumped out of wells, etc. for the lowing of ground water level in basement or foundation construction, and groundwater seepage pumped out of tunnels or caverns under construction should be discharged into storm water drains after the removal of silt in silt removal facilities.

#### Boring and Drilling Water

 Water used in ground boring and drilling for site investigation or rock/soil anchoring should as far as practicable be recirculated after sedimentation.
 When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities.

## Bentonite Slurries



- Bentonite slurries used in diaphragm wall and bore-pile construction should be reconditioned and reused wherever practicable. If the disposal of a certain residual quantity cannot be avoided, used bentonite slurry (if mixed with only inert fill materials) should be dewatered, and disposed of at a public fill reception facility/ area or the marine spoil ground (as a last resort) subject to obtaining a marine dumping licence from EPD on a case-by-case basis; and
- The water generated from the dewatering process should be treated to the respective effluent standards applicable to foul sewers, storm water drains or the receiving waters as set out in the Technical Memorandum on Effluent Standards under the WPCO.

#### Wastewater from Construction Sites

- Sewerage generated from the construction workforce should be contained by chemical toilets before connection to public foul sewer can be provided. Sufficient chemical toilets should be provided in the construction site. The facility should be serviced and cleaned by a licensed contractor at regular intervals;
- Foul water from canteens on-site, if any, should also be contained by chemical toilets before connection to public foul sewer can be provided;
- A vehicle wheel washing facility should be provided at every site exit such that earth, mud, debris, etc. deposited onto the vehicle wheels or body can be washed off before leaving the sites; and
- Section of the construction road between the wheel washing bay and the public road should be paved to reduce vehicle tracking of soil and to prevent site runoff from entering public road drains.

## Liquid Spillage

- Spillage of fuel oils or other polluting fluids should be prevented at source. It
  is recommended that all stocks should be stored inside proper containers and
  sited on sealed areas, preferably surrounded by berms;
- Regular site inspections to ensure the proper implementation of the above measures shall be carried out;
- A chemical waste producer must be registered by the Contractor if chemical waste would be produced from the construction site;
- Control of chemical waste shall observe and comply with the Waste Disposal Ordinance (Cap. 354) and its subsidiary regulations, particularly the Waste Disposal (Chemical Waste) (General) Regulation;
- Any maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided; and
- Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should be undertaken with the areas appropriately equipped to control these discharges.
- 5.4.10 Regular site inspections to ensure the proper implementation of the above measures shall be carried out.



## 5.5 Construction Waste Disposal

#### Legislations and Guidelines

- 5.5.1 The principal legislation controlling waste materials in Hong Kong is the Waste Disposal Ordinance (WDO) (Cap. 354) and its subsidiary regulations including Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C) and Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Other relevant ordinance includes Land (Miscellaneous Provisions) Ordinance (Cap 28) and Public Health and Municipal Services Ordinance (Cap 132) Public Cleansing and Prevention of Nuisances Regulation. Other relevant guidelines which cover how applicant and contractor should comply with the regulations are as follows:
  - Hong Kong Planning Standards and Guidelines (HKPSG), Chapter 9 Environment, Hong Kong SAR Government;
  - Work Branch Technical Circular (WBTC) No. 2/93, Public Dumps, Works Branch, Hong Kong Government;
  - WBTC No. 2/93B, Public Filling Facilities, Works Branch, Hong Kong Government;
  - WBTC No. 12/2000, Fill Management; Works Bureau, Hong Kong SAR Government;
  - WBTC No. 12/2002, Specification Facilitating the Use of Recycled Aggregates, Works Bureau, Hong Kong SAR Government;
  - Environmental, Transport and Works Bureau Technical Circular (Works) ("ETWB TC(W)") No. 19/2005, Environmental Management on Construction Sites, Hong Kong SAR Government;
  - Development Bureau Technical Circular (Works) ("DEVB TC(W)") No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials, Hong Kong SAR Government;
  - DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness, Hong Kong SAR Government;
  - DEVB TC(W) No. 9/2011, Enhanced Control Measures for Management of Public Fill, Hong Kong SAR Government;
  - Practice Note for Authorized Persons and Registered Structural Engineers Construction and Demolition Waste (PNAP ADV-19, also known as PN for AR&RSE No. 243);
  - Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes (2023), Hong Kong SAR Government;
  - A Guide to the Registration of Chemical Waste Producers (2023), Hong Kong SAR Government;
  - A Guide to the Chemical Waste Control Scheme (2023), Hong Kong SAR Government;
  - Monitoring of Solid Waste in Hong Kong (2023), Hong Kong SAR Government;
     and
  - Guidance Notes on Tree Preservation and Removal Proposal for Building Development in Private Projects – Compliance with Tree Preservation Clause under Lease, Lands Department, Hong Kong SAR Government.



#### Waste Generation

- 5.5.2 Construction activities for the Proposed Development will generate waste materials requiring appropriate management and disposal. Likely range of waste types includes based on major works below:
  - Construction & Demolition (C&D) materials due to excavation, demolition and site clearance;
  - Asbestos containing materials (ACM);
  - · General refuse generated by the workforce; and
  - Scrap, effluent, other chemicals and oily wastes from construction activities and equipment maintenance.

#### C&D Materials

- 5.5.3 C&D materials comprise mainly of unwanted materials, including surplus materials arising from excavations that are generated from the works (e.g. site clearance, demolition works of substructure, site formation works and excavation works). Inert soft C&D materials comprise of soil, sand, clay, slurry, etc., while hard C&D materials comprise of crushed concrete, asphalt, rock, etc. The amount of non-inert C&D materials generated during site clearance would be minor (as there is little vegetation at the Application Site). C&D materials may comprise different types of materials, including:
  - Non-inert C&D materials (e.g. bamboo, timber, paper, metal, glass, plastic, packaging wastes, etc.) decompose or are not suitable for land reclamation and should be reused or recycled as far as possible. Those non-inert C&D materials that cannot be reused or recycled should be disposed of at landfill as a last resort.
  - Inert C&D materials (e.g. soil, rock debris, rubble earth, concrete, etc.) do not decompose and are suitable for reuse as filling materials for land reclamation and site formation. Inert C&D materials could be reused on-site as filling materials. Those inert C&D materials that cannot be reused should be delivered to Public Fill Reception Facilities.
- 5.5.4 The general waste management strategy is to avoid waste generation in the first place. If that is unavoidable, source reduction and segregation should be exercised as far as practicable and at the same time, recycling and reuse should be adopted to salvage as much as possible all the recyclable and reusable materials.
- 5.5.5 Inert C&D materials should be re-used on-site for backfilling and/or delivered off-site to public filling area or other CEDD designated public fill reception facilities. Nevertheless, on-site sorting of all C&D materials should be provided prior to disposal. Non-inert C&D materials (i.e. C&D wastes) should be re-used or recycled. For those that cannot be reused or recycled should be disposed of at designated landfill sites as last resort. The details are shown in **Table 5.4**.
- 5.5.6 According to ETWB TC(W) 19/2005 on "Environmental Management on Construction Sites", waste management plan (WMP) becomes part of Environmental Management Plan (EMP) to be submitted to Architect/ Engineer for approval before construction works. The Project team will require the Contractor(s) to submit WMPs for approval. The WMPs will include appropriate mitigation measures to avoid, reduce, reuse and recycle C&D materials. It will ensure that the day-to-day operations on site comply with the approved WMPs. It will control the disposal of inert C&D materials and non-inert C&D materials to public fill reception facilities and landfills, respectively, through a trip-ticket system. It will require the Contractor(s) to separate public fill from C&D



- materials for disposal at appropriate facilities. It will record the disposal, reuse and recycling of C&D materials for monitoring purposes.
- 5.5.7 The Contractor(s) should be responsible for ensuring that waste is collected by approved licensed waste collectors and that appropriate measures are taken to minimise adverse impacts, such as dust generation. The Contractor(s) must also ensure that all necessary waste disposal permits are obtained.
- 5.5.8 Prior to disposal of non-inert C&D materials, it is recommended that steel, glass and other metals be separated for re-use and/or recycling and inert C&D materials utilized as fill materials to minimise the quantity of waste to be disposed of to landfill. The details are shown in **Table 5.4**.
- 5.5.9 All the soil generated from the underground work should be refill on site to form the site to the required level. Other C&D materials should be used on-site as far as practicable.

#### Chemical Waste

- 5.5.10 Construction plant and equipment will require regular maintenance and servicing, which would generate waste such as solvents, lubrication oil and fuel, etc. The amount of chemical waste generated will be small. Overall, some hundred litres of chemical waste is expected to be generated. It will be quantified in the Environmental Management Plan (EMP) to be prepared by the Contractor. Chemical wastes arising during the construction phase may pose serious environmental, health and safety hazards if not stored and disposed of in an appropriate manner.
- 5.5.11 The Contractor is required to register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.
- 5.5.12 Chemical wastes such as wasted solvents, lubrication oil and fuel, etc. will need special handling and storage arrangements and should be collected by licensed collectors for subsequent disposal and appropriate treatment at licensed waste disposal facilities, for example the Chemical Waste Treatment Centre (CWTC) in Tsing Yi. Mitigation and control requirements for chemical waste are provided in the "Recommended Pollution Control Clauses for Construction Contracts" available in EPD website mentioned the handling, storage and disposal of chemical wastes. With good management and site particles, adverse environmental impacts should not result.

#### General Refuse

- 5.5.13 The volume of general site wastes to be generated will depend on the Contractor's operating procedure and practices. In addition, during the construction phase, the construction workforce would generate general refuse, comprising food scraps, paper, empty containers etc. Rapid and effective collection of site wastes will be required to prevent waste materials being blown around by wind, flushed or leached into the environment, and odour nuisance. The amount of general refuse which is likely to arise will be largely dependent on the size of the workforce employed by the Contractor(s).
- 5.5.14 As no information regarding the number of workers onsite is available at this early project state, it has been assumed that about 30 workers in average will work on the Application Site during site formation at any one time. Based on a generation rate of 0.65kg per worker per day, the daily arising of general refuse would be approximately 19.5kg/day.



#### Asbestos Containing Materials (ACM)

- 5.5.15 Asbestos was widely used in the construction industry prior to the early 1980s for fireproofing, thermal and electrical insulation as well as in sound absorption materials. However, asbestos is currently recognized as hazardous materials, due to its etiological effects on human respiratory system.
- 5.5.16 ACM may be present in the buildings within the Application Site. Thus, ACM which may be disturbed during demolition activities, should be removed and disposed of in a proper manner prior to the demolition work, so as to avoid the release of harmful asbestos fibres to environment and minimise potential hazard.
- 5.5.17 All ACM if confirmed to be present within the existing premises must be removed and disposed of in accordance with the APCO and WDO prior to the demolition works. A Registered Asbestos Consultant and Registered Asbestos Laboratory shall be engaged to conduct investigation for the presence of ACM. An Asbestos Investigation Report, an Asbestos Abatement Plan (AAP) (if required) and a notification of commencement of asbestos abatement works commences. Also, the removal of ACMs should be carried out by a Registered Asbestos Contractor according to the approved AAP under the supervision of a Registered Asbestos Consultant. The asbestos waste generated shall be disposed of by a licensed collector in compliance with the WDO.

#### Yard Waste

- 5.5.18 It is understood that yard waste will be anticipated from construction activities, mainly from site clearance. They will be handled in accordance with the waste management hierarchy. Relevant guidelines from EPD¹ and Y Park² will be taken into account when handling yard waste, where applicable. To minimize the generation of yard waste, it is recommended to:
  - Avoid unnecessary removal or excessive pruning of trees. Preserve trees in their original locations and implement tree transplanting when on-site preservation is not feasible;
  - Segregate various types of yard waste and shred wood to facilitate reuse and recycling;
  - Reuse yard waste on-site for a variety of purposes (e.g., decomposition and composting, recreational and decorative uses, and mulching in planting areas, etc.); and
  - Identify recycling options (e.g. delivery to Y-park) for yard waste that cannot be directly reused on-site.
- 5.5.19 Where yard waste generation is unavoidable, sorting of yard waste for recycling and reuse on site will be the priority. Yard waste will be separated from C&D material to facilitate recycling, such as delivering them to Y-park so as to minimize the quantity of waste to be disposed at landfill site. Where appropriate, the Contractor should be responsible to cut and shred the yard waste in order to meet the collection requirement of the recycling outlet for processing. Disposal of yard waste directly at landfills will only be regarded as the last resort, when no alternatives are available.

https://www.ypark.hk/zh-hant/



<sup>&</sup>lt;sup>1</sup> EPD, "Yard Waste Recycling Centre"

https://www.epd.gov.hk/epd/english/environmentinhk/waste/manage\_facility/ypark.html

<sup>&</sup>lt;sup>2</sup> EPD, "Y PARK"

	<b>4</b>	5		
Type of Waste	Estimated Waste Generation	Proposed Handling Method and Destination		
Inert C&D Materials	~16,200m³	~5% (i.e. ~800m³) would be reused onsite and the remaining (i.e. 95% or ~15,400m³) would be delivered off-site to public fill reception facilities		
Non-inert C&D Materials	~1,700m³	Recyclables would be segregated before sending to recyclers; Non-recyclables to landfill; Yard waste that cannot be reused onsite will be delivered to Y-Park		
General Refuse	~19.5kg/day	Recyclables to recyclers; Non-recyclables to landfill		
Chemical Waste	Anticipated to be limited (around some hundred litres at most)	To be collected by licensed chemical waste collector and delivered to CWTC		
Asbestos Containing Materials	TBC (subject to further investigation by the asbestos specialist when access to the site becomes available)	Disposal to landfill		

Table 5.4 Estimated Quantities of Waste during Construction Phase

#### Mitigation Measures

5.5.20 The mitigation measures for construction phase are recommended based on the waste management hierarchy principles. Recommendations of good site practices, waste reduction measures as well as the waste transportation, storage and collection are described in following sub-sections.

#### Good Site Practices

- 5.5.21 Appropriate waste handling, transportation and disposal methods for all waste arisings generated during the construction phase should be implemented to ensure that construction waste do not enter the nearby water sensitive receivers.
- 5.5.22 It is expected that adverse impacts from waste management would not arise, provided that good site practices are strictly followed. Recommendations for good site practices during construction include:
  - Nomination of approved personnel, such as a site manager, to be responsible for good site practices, and making arrangements for collection of all wastes generated at the site and effective disposal to appropriate facilities;
  - Training of site personnel in proper waste management and chemical waste handling procedures;
  - Provision of sufficient waste disposal points and regular collection for disposal;
  - Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;
  - Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.
- 5.5.23 In order to monitor the disposal of C&D material at landfills and public fill reception facilities, as appropriate, and to control fly tipping, a trip-ticket system should be



included as one of the contractual requirements to be implemented by the Contractor. Reference shall be made to DEVB TCW No. 6/2010 for details.

#### Waste Reduction Measures

- 5.5.24 Avoidance of waste can be achieved through careful planning of works method and material consumption before ordering of materials. Material should be properly stored and protected to reduce damage and contamination to reduce waste generation as well. Non-timber formwork, or used timber, instead of virgin timber, should be adopted where possible.
- 5.5.25 If waste is unavoidable, source reduction and segregation should be exercised as far as practicable and at the same time, recycling and reuse should be adopted to salvage as much as possible all the recyclable and reusable materials.
- 5.5.26 Good management and control can prevent the generation of significant amounts of waste. Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include:
  - Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;
  - Separate labelled bins shall be provided to segregate aluminium cans from other general refuse generated by the work force, and to encourage collection of by individual collectors;
  - Any unused chemicals or those with remaining functional capacity shall be recycled;
  - Maximising the use of reusable steel formwork to reduce the amount of C&D material;
  - Prior to disposal of non-inert C&D material, it is recommended that wood, steel
    and other metals shall be separated for re-use and / or recycling to minimise
    the quantity of waste to be disposed of to landfill;
  - Proper storage and site practices to minimise the potential for damage or contamination of construction materials;
  - Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste; and
  - Minimize over ordering of concrete, mortars and cement grout by doing careful check before ordering.
- 5.5.27 In addition to the above good site practices and waste reduction measures, specific mitigation measures are recommended for the identified waste to minimise environmental impacts during handling, transportation and disposal of these wastes.

#### General Refuse

5.5.28 Recycle bins will be provided onsite to collect recyclable wastes such as paper, metal (e.g. cans), plastic and glass. Recyclable wastes will be segregated from non-recyclable waste to be stored in enclosed bins or compaction units. A reputable waste collector should be employed by the contractor to remove general refuse from the site on a daily basis. Recyclable waste will be collected in appropriate frequency to ensure no over stacking of recyclable wastes. An enclosed and covered area is preferred to reduce the occurrence of 'wind blown' light material.

Construction and Demolition Material



- 5.5.29 The C&D material generated from site formation should be sorted on-site into inert C&D material (that is, public fill) and non-inert C&D material. In order to minimise the impact resulting from collection and transportation of C&D materials for off-site disposal, the excavated material comprising fill material should be reused on-site as backfilling material as far as practicable. Non-inert C&D material, such as wood, plastic, steel and other metals should be reused or recycled and, as a last resort, disposed of to landfill.
- 5.5.30 Suitable areas should be designated within the site for temporary stockpiling of C&D material and to facilitate the sorting process. Within stockpile areas, the following measures should be taken to control potential environmental impacts or nuisance:
  - Covering material during heavy rainfall;
  - Locating stockpiles to minimise potential air quality, water quality and visual impacts; and
  - Minimising land intake of stockpile areas as far as possible.

#### Chemical Wastes

- 5.5.31 For those processes which would generate chemical waste, it may be possible to find alternatives to eliminate the use of chemicals, to reduce the generation quantities or to select a chemical type of less impact on environment, health and safety as far as possible.
- 5.5.32 If chemical wastes are produced at the construction site, the Contractor should register with EPD as a Chemical Waste Producer and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes should be used. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosives, flammable, oxidising, irritant, toxic, harmful, corrosive, etc. The Contractor shall use a licensed collector to transport and dispose of the chemical wastes generated at the Chemical Waste Treatment Centre at Tsing Yi, or other licenced facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.
- 5.5.33 Any unused chemicals and those with remaining functional capacity should be recycled as far as possible.
  - Asbestos Containing Materials
- 5.5.34 Due to the potential presence of ACM during the site clearance stage, asbestos investigation is required. An asbestos specialist shall be employed during the design and construction stage to investigate this issue.
- 5.5.35 Sufficient and reasonable lead time shall be allowed for the preparation, vetting and implementation of asbestos investigation report and asbestos abatement plan in accordance with APCO before commencement of any demolition or site clearance work.
- 5.5.36 Some key precautionary measures related to the handling and disposal of asbestos based on "Handling of Asbestos Containing Materials in Buildings" (ProPECC PN 2/97) are listed as following:
  - Adoption of protection, such as full containment, mini containment, or segregation of work area;
  - Provision of decontamination facilities for cleaning of workings, equipment and bagged waste before leaving the work area;
  - Adoption of engineering control techniques to prevent fibre release from work area, such as use of negative pressure equipment with high efficiency



- particulate air (HEPA) filters to control air flow between the work area and the outside environment;
- Wetting of asbestos containing materials before and during disturbance, minimising the breakage and dropping of asbestos containing materials, and packing of debris and waste immediately after it is produced;
- Cleaning of work area by wet wiping and vacuuming with HEPA filtered vacuum cleaner;
- Coating on any surfaces previously in contact with or contained by asbestos with a sealant;
- Proper bagging, safe storage and disposal of asbestos and asbestos contaminated waste;
- Pre-treatment of all effluent from the work area before discharged; and
- Air monitoring strategy to check the leakage and clearance of the work area during and after the asbestos work.

#### Yard Waste

- 5.5.37 The Applicant and its contractor should consider if any yard waste is appropriate to be sent to the Yard Waste Recycling Centre in Y-Park for recycling prior to disposal at the designated landfill site.
- 5.5.38 Used timber in good condition will be reused in other contract and construction site of the contractor to reduce the amount of timber wastes.
- 5.5.39 With the implementation of the recommended mitigation measures in the "Recommended Pollution Control Clauses for Construction Contracts" available in EPD website, the potential environmental impacts resulting from the storage, handling and transportation of inert C&D materials, non-inert C&D materials, chemical wastes, general site wastes, yard waste and potential asbestos containing materials would be minimal.

## 5.6 Conclusion

- 5.6.1 Potential environment impacts arising from construction activated of the Proposed Development, including air quality, construction wastewater, noise and waste impacts have been qualitatively assessed. Potential environmental impacts are anticipated to be acceptable with the implementation of effective environmental mitigation measures.
- 5.6.2 In conclusion, it is envisaged that construction phase environmental impacts arising from the Proposed Development would be acceptable.



# 6. LAND CONTAMINATION REVIEW

## 6.1 Legislation and Guidelines

- 6.1.1 The following guidelines published by EPD have been followed:
  - Guidance Manual for Use of Risk-Based Remediation Goals for Contaminated Land Management (RBRGs), revised in April 2023;
  - Guidance Note for Contaminated Land Assessment and Remediation, dated 15 August 2007; and
  - Practice Guide for Investigation and Remediation of Contaminated Land (EPD's Practice Guide), revised in April 2023.
- 6.1.2 The criteria and the requirements stated in the above guidelines will be adopted in this Land Contamination Review.

# 6.2 Assessment Methodology

- 6.2.1 Land contamination review was carried out according to the Guidance Manual, the Guidance Note and the Practice Guide. Site appraisals, including site survey and desktop review, were conducted to identify the potentially contaminating activities that may pose adverse impact to the Application Site. Site survey was conducted within the Application Site to review the general site conditions and to identify any sources of land contamination (or 'hot spots'). For the desktop review, the following information was reviewed:
  - Selected historical aerial photos and topographic maps held by the Lands Department (LD); and
  - Records on dangerous goods (DGs), chemical wastes, chemical spillage/leakage incidents and Chemical Waste Producers registry from Fire Services Department (FSD) and Environmental Protection Department (EPD).
- 6.2.2 Subject to the assessment outcome, the Contamination Assessment Plan (CAP) and, subsequently, the Contamination Assessment Report (CAR) and Remediation Action Plan (RAP) may be required in later stages to identify the potential land contamination issues in the Application Site. The land contamination assessment and/ or remediation works shall be completed according to EPD guidelines before the commencement of any construction works for the development.

# 6.3 Current and Historical Land Uses

- 6.3.1 The Application Site is located to the east of the J/O Tai Wo Service Road West and Wo Hing Road at Wo Hop Shek, Fanling. It is currently occupied by warehouses and open area.
- 6.3.2 Historical aerial photos taken in year 1945, 1964, 1984, 1994, 2004, 2014, 2019, 2022 and 2024 are shown in **Appendix 6.1** to present the land use status (**Table 6.1** also refers).
- 6.3.3 From year 1945 to year 1964, Application Site was a farmland, with a temporary structure located in the northwestern portion. In year 1964, the Application Site was generally paved with building structures erected. Open storage area was observed as well. From year 1977 to year 2015, the Application Site was occupied by Venton Manufacturing Company Limited and used as factory. Open storage area remained. Since year 2015, the factory was abandoned. The abandoned factory was converted to warehouse uses.



Table 6.1 Land Use Summary on the Application Site

Period	Land Use / Description	Owner /	Source of	Off-site Property
/ Year		Occupier	Information	Affected?
1945	The Application Site was a farmland, with a temporary structure at the northwestern portion.  Wo Hop Shek Village was formed to the southwest of the Application Site.	No information available	Aerial Photos from LD	No
1964	The Application Site was paved with building structures erected. Open storage area is also observed.	No information available	Aerial Photos from LD	No
1977 ~ 1984	A factory namely Venton Manufacturing Company Limited occupied the Application Site, while the open storage area remained.  Tai Wo Service Road West and Fanling Highway were constructed to the north of the Application Site.	No information available	Aerial Photos and Topographic Map from LD	
1994	No change in land use of the Application Site comparing to year 1984.  Wo Hing Road Car Park was formed to the west of the Application Site.	No information available	Aerial Photos from LD	Yes  K. Kee Engineering Company Limited is located to the immediate east of the Application
2004	No change in land use of the Application Site comparing to year 1994.	No information available	Aerial Photos from LD	Site, which is a covered warehouse and remains in operation since 1984.
2014	No change in land use of the Application Site comparing to year 2004.	<ul><li>Third parties</li><li>Government</li></ul>	Aerial Photos from LD	Brilliant Towing Company is located immediately to
2019	It is understood that factory owned by Venton Manufacturing Company Limited was abandoned since year 2015. Part of the abandoned factory was converted to warehouse use. The open storage area remained.	Applicant     Government	Aerial Photos from LD	the southeast of the Application Site since 2004. Minor activities (e.g. tyre replacement) and parking of lorries were observed during site survey. Although the site
2022	No change in land use of the Application Site comparing to year 2019.	<ul><li>Applicant</li><li>Government</li></ul>	Aerial Photos from LD	is well-paved by concrete, potential land contamination would be
2024	No change in land use of the Application Site comparing to year 2022.  Tai Wo Service Road West has been realigned. Fanling Bypass Eastern Section was under construction. The proposed public housing development at Fanling Area 48 is located to the	Applicant     Government	Aerial Photos from LD	anticipated.



Period / Year	Land Use / Description	Owner / Occupier	Source of Information	Off-site Property Affected?
	immediate southeast of the			
	Application Site and its construction			
	has been commenced.			

## 6.4 Information from Government Departments

- 6.4.1 Apart from the historic aerial photos, the following Hong Kong Special Administration Region (HKSAR) Government Departments have been enquired on the latest update on the availability of land use status and records of land contamination and/or spillage of the Application Site. The summary of correspondences is tabulated in **Table 6.2** below. Copy of letters which the Consultant sent to various Government Departments and relevant replies are shown in **Appendix 6.2**.
- 6.4.2 Building Records Access and Viewing On-line (BRAVO) of Building Departments (BD) was visited on 02 July 2025 to obtain records for completed private buildings. There are neither records of building, structure, drainage, alternation & additions, site formation, minor works nor any existing building available at the Application Site. The captured screen of BRAVO is provided in **Appendix 6.3**.
- 6.4.3 As advised by Planning Department, the Application Site falls within an area zoned as "Government, Institution or Community" ("G/IC") on the approved Fanling/Sheung Shui Outline Zoning Plan No. S/FSS/28.
- 6.4.4 As advised by EPD, there is no record of chemical spillage or leakage accident at the Application Site for the past 2 years. Nevertheless, the Consultant has visited the territory-wide register of chemical waste producers (CWPs) maintained at the Territory Control Office. The register record as of 17 June 2025 has confirmed that there is no CWP at the Application Site.
- 6.4.5 As advised by Fire Services Department, neither records of dangerous goods license, fire incidents nor incidents of spillage/ leakage of dangerous goods were at the Application Site.

Table 6.2 Enquires and Responses on Land Contamination Related Records in the Application Site

Consultant's Letter Ref.	Department	Response Letter Ref.	Response Date	Summary
SDMFLD51EI 00_0_0003L. 25	Planning Department	PLO/FSYLE /6-20/1	02/07/2025	The Application Site falls within an area zoned "Government, Institution or Community" ("G/IC") on the approved Fanling/ Sheung Shui Outline Zoning Plan No. S/FSS/28.  According to the RNTPC Paper No. 1/16 (dated 08 Jan 2016), TPB Paper No. 10170 (dated 23 Sep 2016) and the Council on 03 Jan 2017, the Application Site was rezoned from "Industrial" to "G/IC" for a reserved primary school.



Consultant's	Department	Response	Response	Summary
SDMFLD51EI 00_0_0004L. 25	Environmental Protection Department	Email	<b>Date</b> 26/06/2025	There is no record of chemical spillage accident and submission relating to land contamination assessment at the Application Site in the past 2 years.
				A visit to the Territorial Control Office for chemical waste producer registry inspection was performed. According to the register record as of 17 June 2025, no valid/ invalid CWP is found at the Application Site.
SDMFLD51EI 00_0_0005L. 25	Fire Services Department	(15) in FSD GR 6-5/4 R Pt. 59	07/07/2025	Neither records of dangerous goods license, fire incidents nor incidents of spillage/ leakage of dangerous goods were found at the Application Site.
SDMFLD51EI 00_0_0006L. 25	Lands Department	(3) in LANDSD DLOs-009- 004-N-PO- 149-25- 106-P001	12/08/2025	There is no relevant record on land contamination.  Topographic maps available from Lands Department were reviewed. The Application Site was occupied by Venton Manufacturing Company Limited as factory and open storage from year 1977 to 2015. From year 2015, the factory was abandoned and converted to be warehouses.
				Topographic map records generally tally with observations in aerial photos.

## 6.5 Discussion and Site Observation

- 6.5.1 Based on the above, the desktop review of historical information indicated that the Application Site was a farmland until year 1964. Major change of land use was observed in year 1964. The Application Site was paved and occupied by a factory (i.e. Venton Manufacturing Company Limited) with open storage area observed. In year 2015, the factory was abandoned and was used as warehouses. Since then, the Application Site is used as warehouses.
- 6.5.2 Site visit was conducted on 04 June 2025. The Application Site was occupied by warehouses and open space. It was observed that there were unlicenced vehicles stored at the Application Site. Damaged pallets were stacked at open area. Site walkover checklist and photo records were shown in **Appendix 6.4** and **Appendix 6.5** respectively.
- 6.5.3 Some ground areas were stained by paint but no crack was observed on the ground. There was no sign obvious/ suspected contamination such as abnormal odour, distress vegetation, dangerous goods storage and/ or chemical storage within the Application Site during the site inspection.
- 6.5.4 However, by considering the historic business nature of the Application Site (i.e. factory), further investigation of potential land contamination problem is considered necessary.



#### 6.6 Conclusion

- 6.6.1 Further site appraisal and soil sampling is recommended after the Application Site is cleared to determine whether it is contaminated, and if so, the extent of the potential contamination should be revised. CAP will be prepared for the Application Site in later stage. Subsequently, CAR and RAP will be prepared to identify the potential land contamination issued in the Application Site.
- 6.6.2 Further land contamination assessment and/ or remediation works (if necessary) shall be completed before commencement of any construction works for the Application Site, in accordance with relevant guidelines issued by government departments. RR shall be prepared and submitted to EPD for approval to demonstrate that the decontamination work is adequate and is carried out in accordance with the endorsed CAP, CAR and RAP after the completion of the remediation works. No development works shall be commenced before the endorsement of RR is sought from EPD.



## 7. CONCLUSION

7.1.1 An environmental assessment has been conducted for the Proposed Development to address the potential environmental noise, air quality, construction phase environmental impacts and risk of land contamination.

#### Noise

- 7.1.2 According to the result of road traffic noise impact assessment, no adverse road traffic noise impact due to surrounding roads on the Proposed Development is anticipated with the recommended noise mitigation measures in place. Noise mitigation measures include acoustic window (baffle type).
- 7.1.3 Fixed noise impact assessment has also been conducted. The predicted noise levels of representative NSRs would comply with the criteria as stipulated in NCO. The Proposed Development would not be subject to adverse fixed noise impact. On the other hand, any potentially noisy equipment of the Proposed Development will be designed and installed with adequate noise mitigation measures to comply with the HKPSG standard and NCO.

## Air Quality

7.1.4 As confirmed in site survey, there is no existing and planned industrial source / chimney identified within 200m from the Application Site. The Proposed Development will be designed so that there are no air-sensitive uses of the proposed development, including openable windows and fresh air intake, falling within the buffer zones as stipulated in the HKPSG. Therefore, no adverse air quality impact on the Proposed Development would be anticipated.

## Construction Phase Environmental Impact

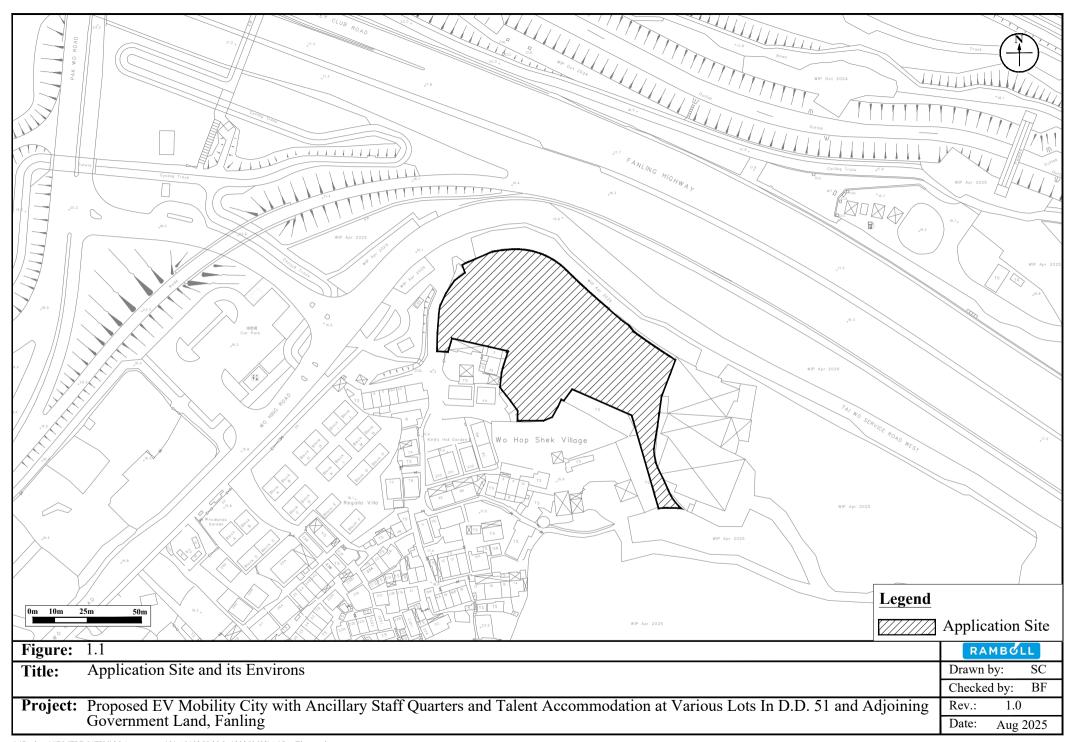
7.1.5 Potential environmental impacts arising from construction activities of the Proposed Development, including air quality, construction wastewater, noise and waste impacts have been qualitatively assessed. Potential environmental impacts are anticipated to be insignificant with the implementation of effective environmental mitigation measures.

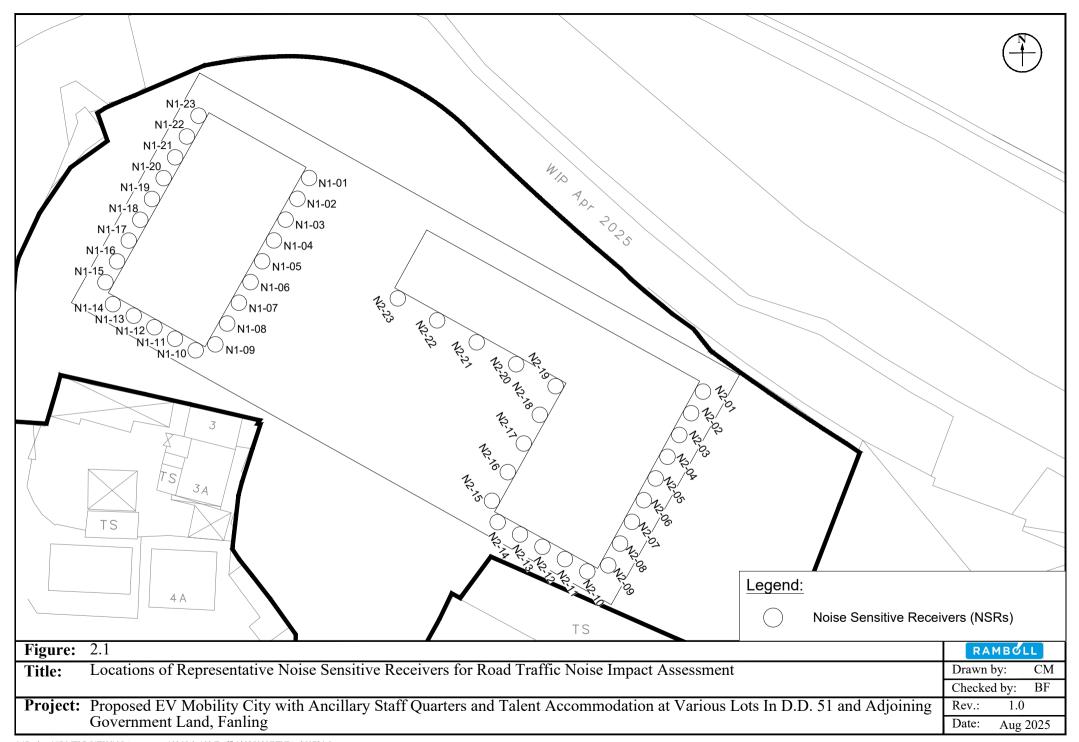
## **Land Contamination**

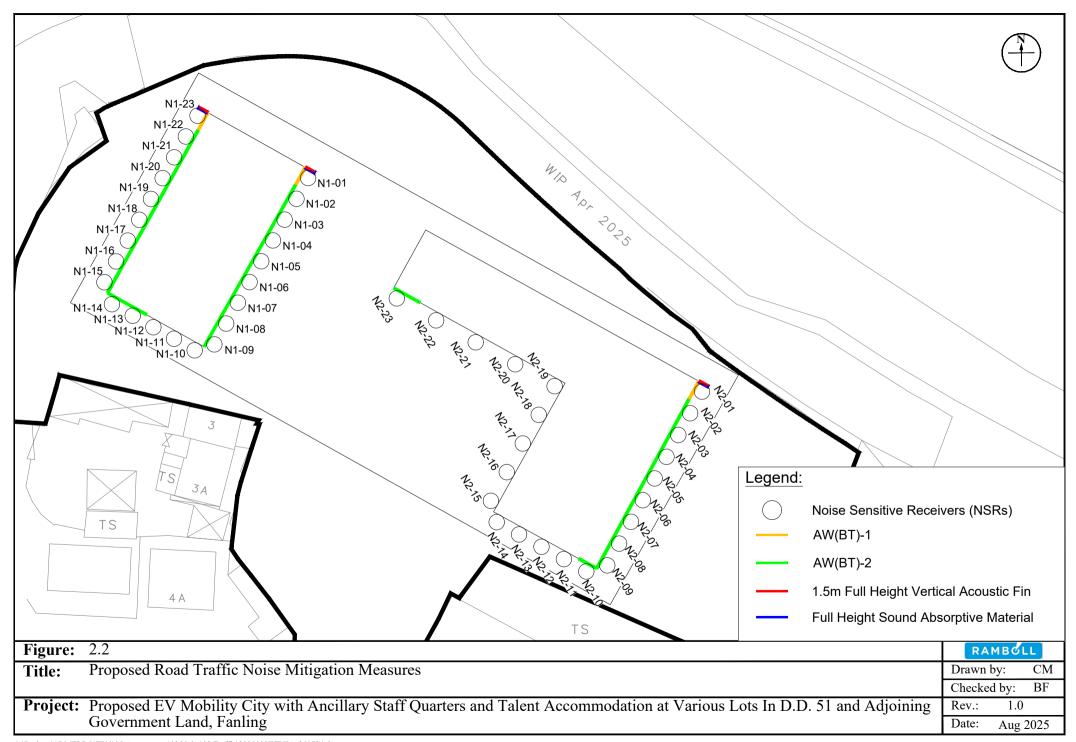
- 7.1.6 Based on the land contamination appraisal, further investigation of potential land contamination problem is considered necessary due to its historic business nature (i.e. factory). Potential land contamination issues need to be ascertained in later stage according to the findings. A Contamination Assessment Plan (CAP) and subsequently, Contamination Assessment Report (CAR) and Remediation Action Plan (RAP) will be prepared in later stages to identify the potential land contamination issues at the Application Site. Further land contamination assessment and/or remediation works (if necessary) shall be completed before commencement of any construction works for the Proposed Development, in accordance with relevant guidelines issues by government departments. A Remediation Report (RR) shall be prepared and submitted to EPD for approval to demonstrate that the decontamination work is adequate and is carried out in accordance with the endorsed CAP, CAR and RAP after the completion of the remediation works. No development works shall be commenced before the endorsement of RR is sought from EPD.
- 7.1.7 Based on the environmental assessment results, it is concluded that the Proposed Development is environmentally acceptable with the recommended measures in place and remediation work (if required) implemented.

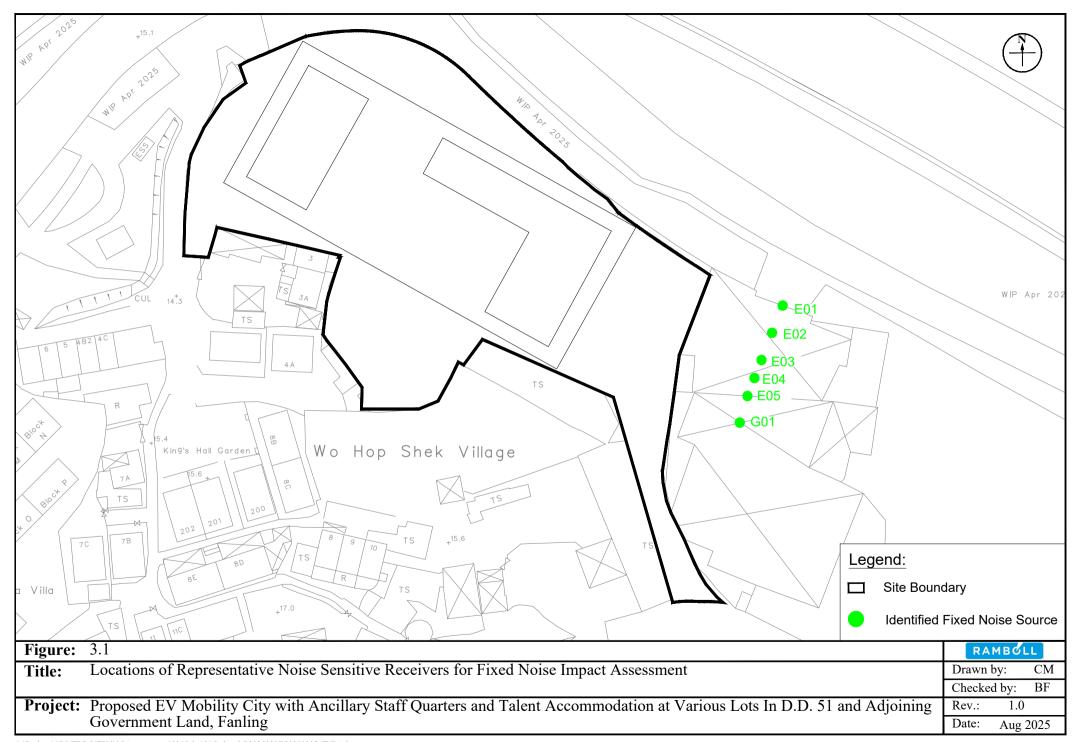


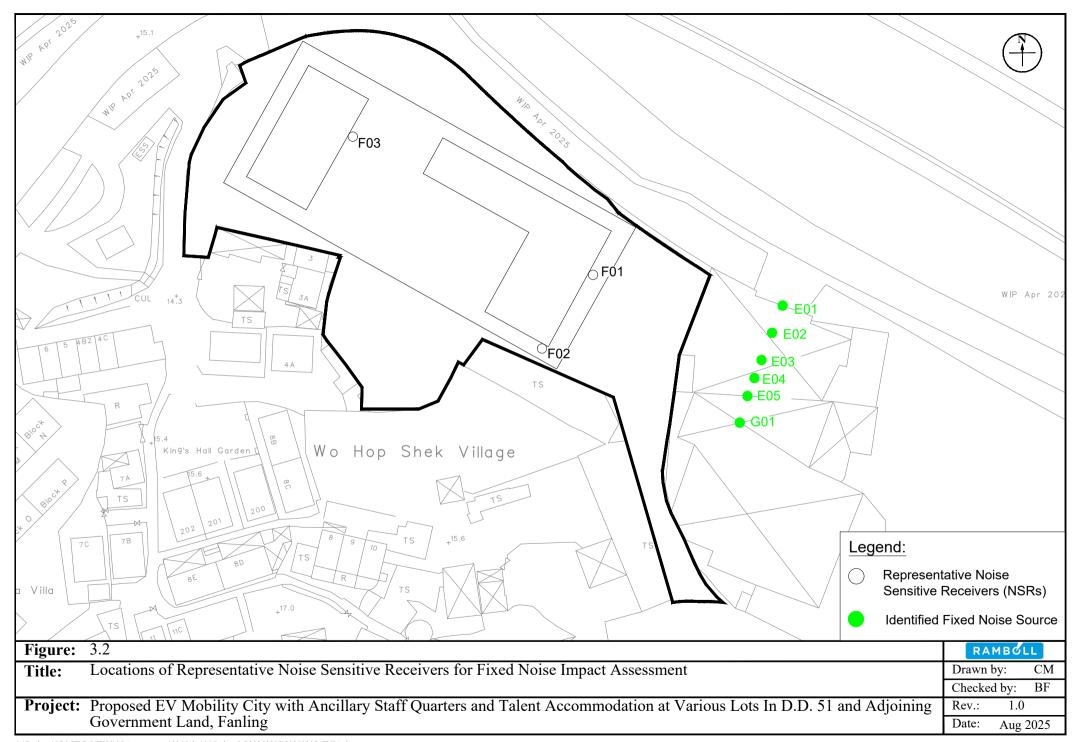
**Figures** 

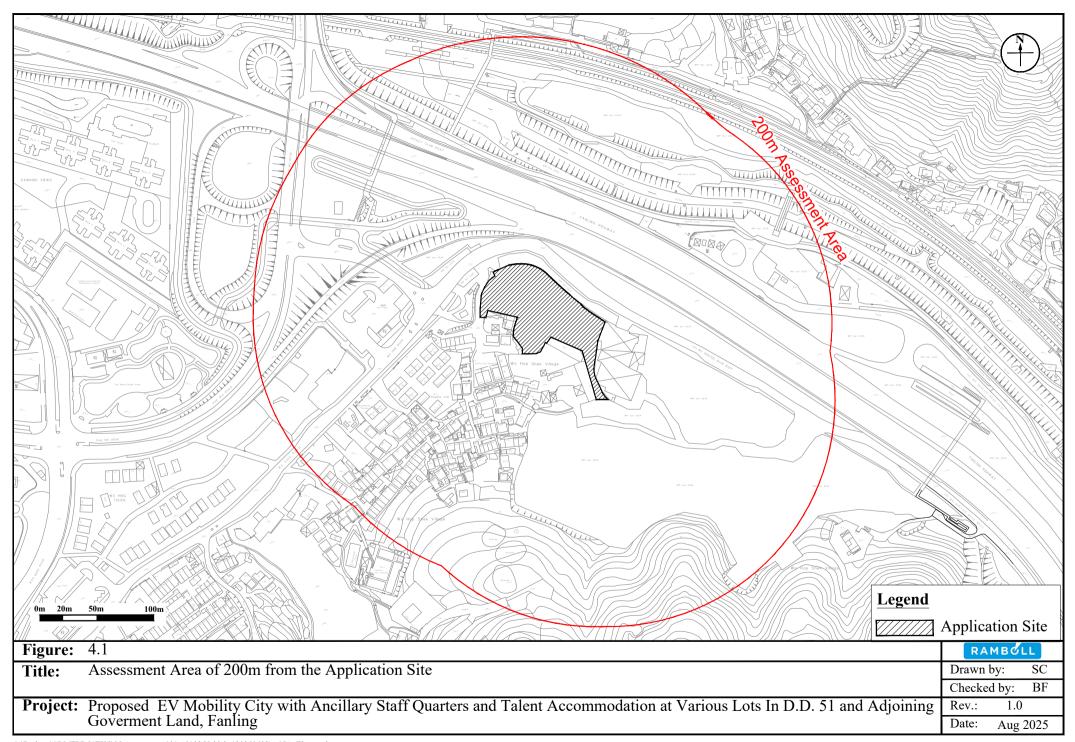


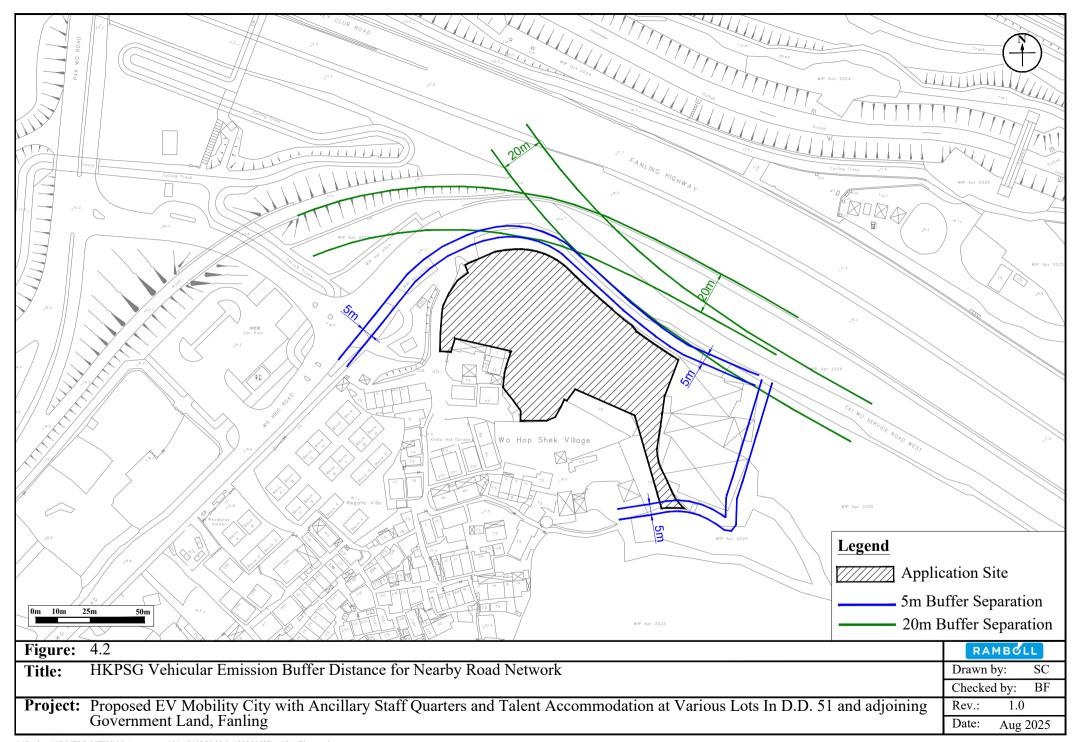


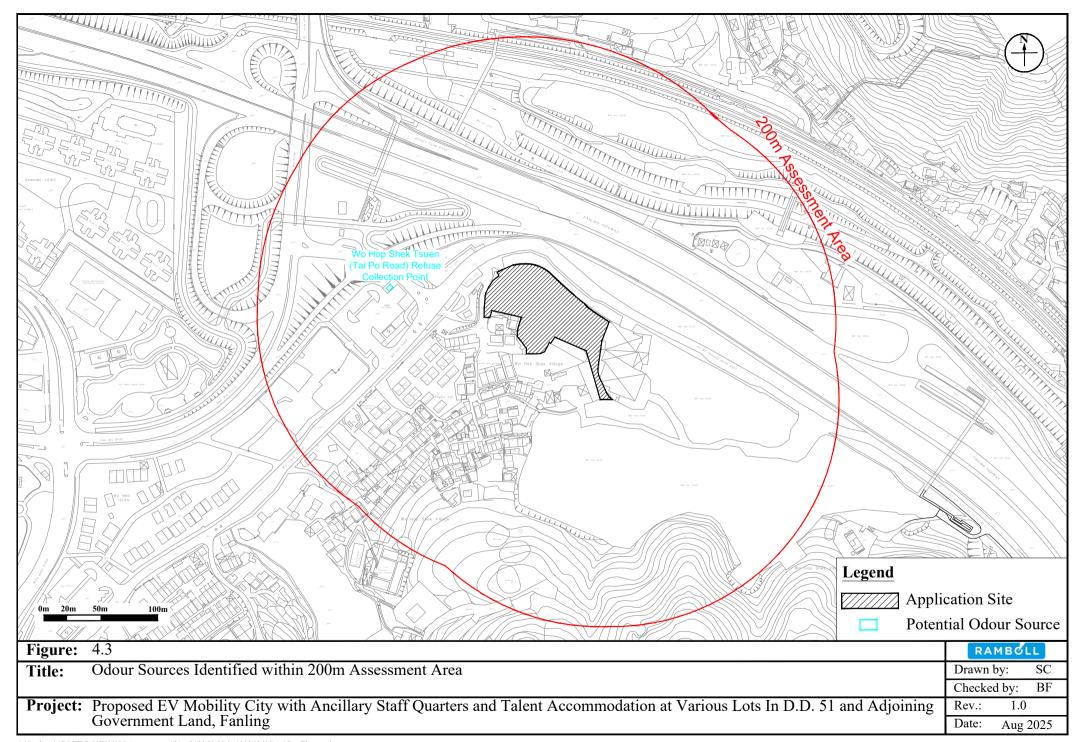


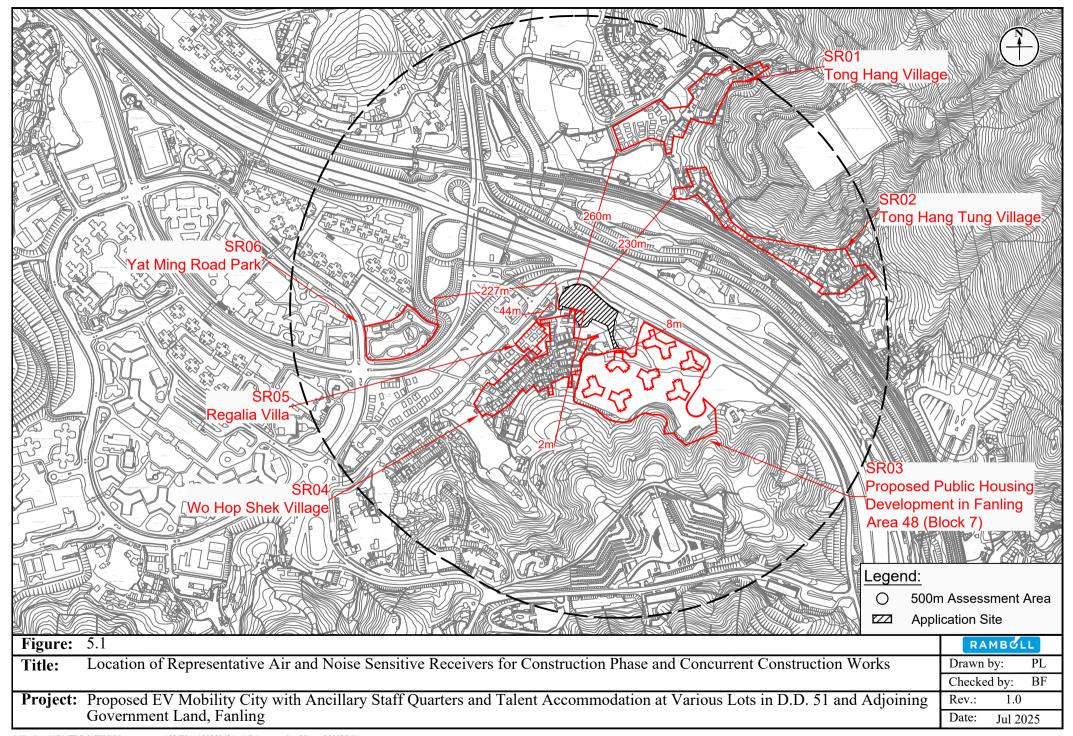


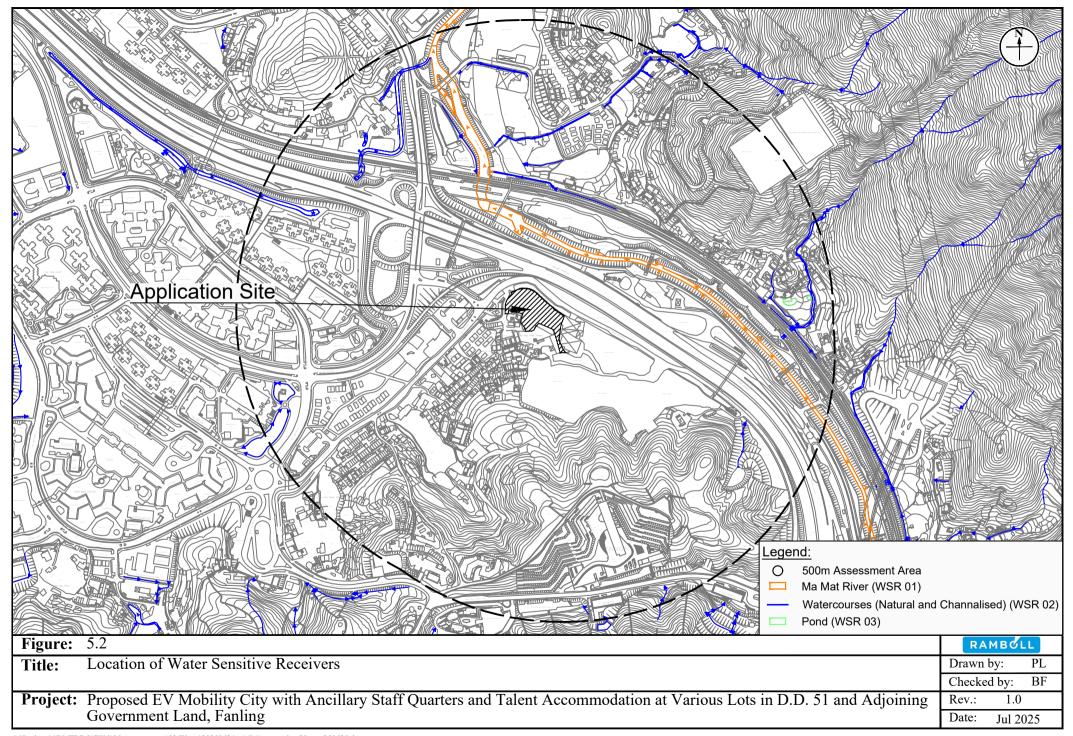






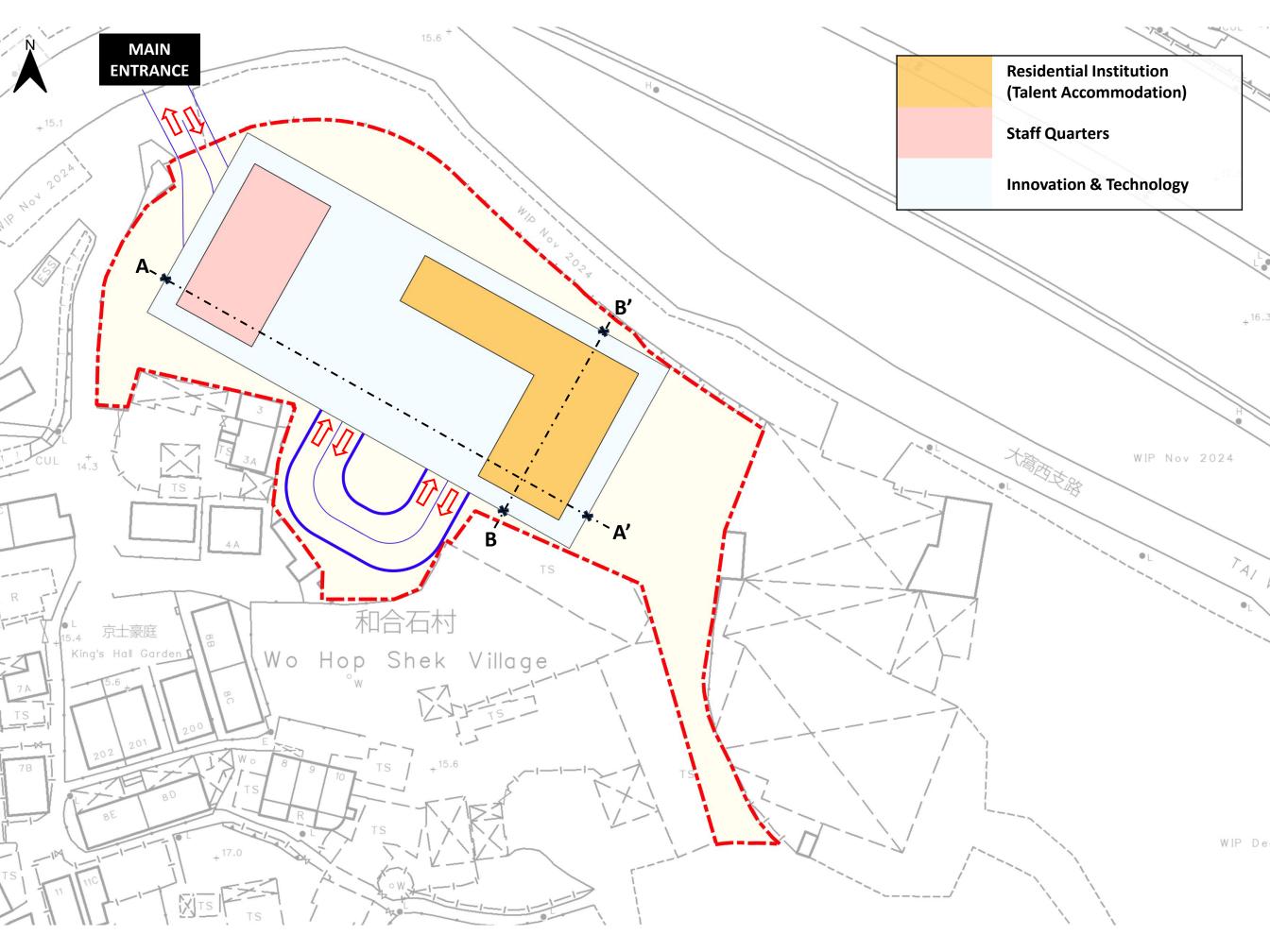


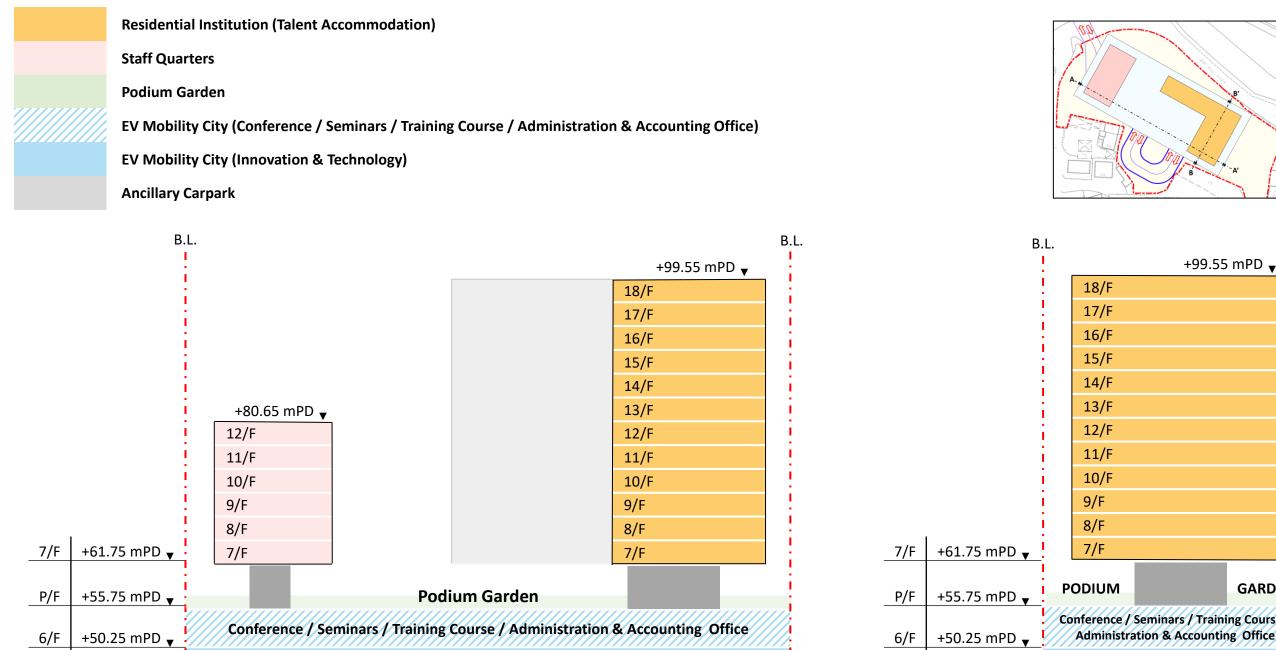




Appendix 1.1 Layouts and Section of the Proposed Development







			15/F	
		! : !	14/F	
		:	13/F	
		: I	12/F	
		i	11/F	
		i	10/F	
		!	9/F	
		I	8/F	
7/F	+61.75 mPD ▼	!	7/F	
P/F	+55.75 mPD <b>▼</b>	l P	ODIUM	GARDEN
6/F	+50.25 mPD <sub>▼</sub>	Co		Seminars / Training Course / ation & Accounting Office
5/F	+44.75 mPD ▼		Re	esearch Laboratory
4/F	+39.25 mPD <b>▼</b>	Pre	-delivery In	spection/ Research Laboratory
3/F	+33.75 mPD <b>▼</b>	Pre-	delivery Ins	spection / Research Laboratory
2/F	+28.25 mPD <b>▼</b>			ace/Testing Centre, Battery ing/ Swapping Station
1/F	+22.75 mPD ▼	  -		om, Workbay, Main Office, orage/Warehouse
G/F	+14.75 mPD ▼			ercial Vehicle) Showroom, Jtility, Workshop
B/F	+9.75 mPD ▼		А	ncillary Carpark

**SECTION A-A'** 

**Ancillary Carpark** 

**Research Laboratory** 

**Pre-delivery Inspection / Research Laboratory** 

**Pre-delivery Inspection / Research Laboratory** 

**Training Space/Testing Centre, Battery Charging/ Swapping Station** 

EV Showroom, Workbay, Main Office, Storage/Warehouse

EV (Commercial Vehicle) Showroom, Utility, Workshop

5/F

4/F

3/F

2/F

1/F

G/F

B/F

+44.75 mPD ▼

+39.25 mPD ▼

+33.75 mPD ▼

+28.25 mPD ▼

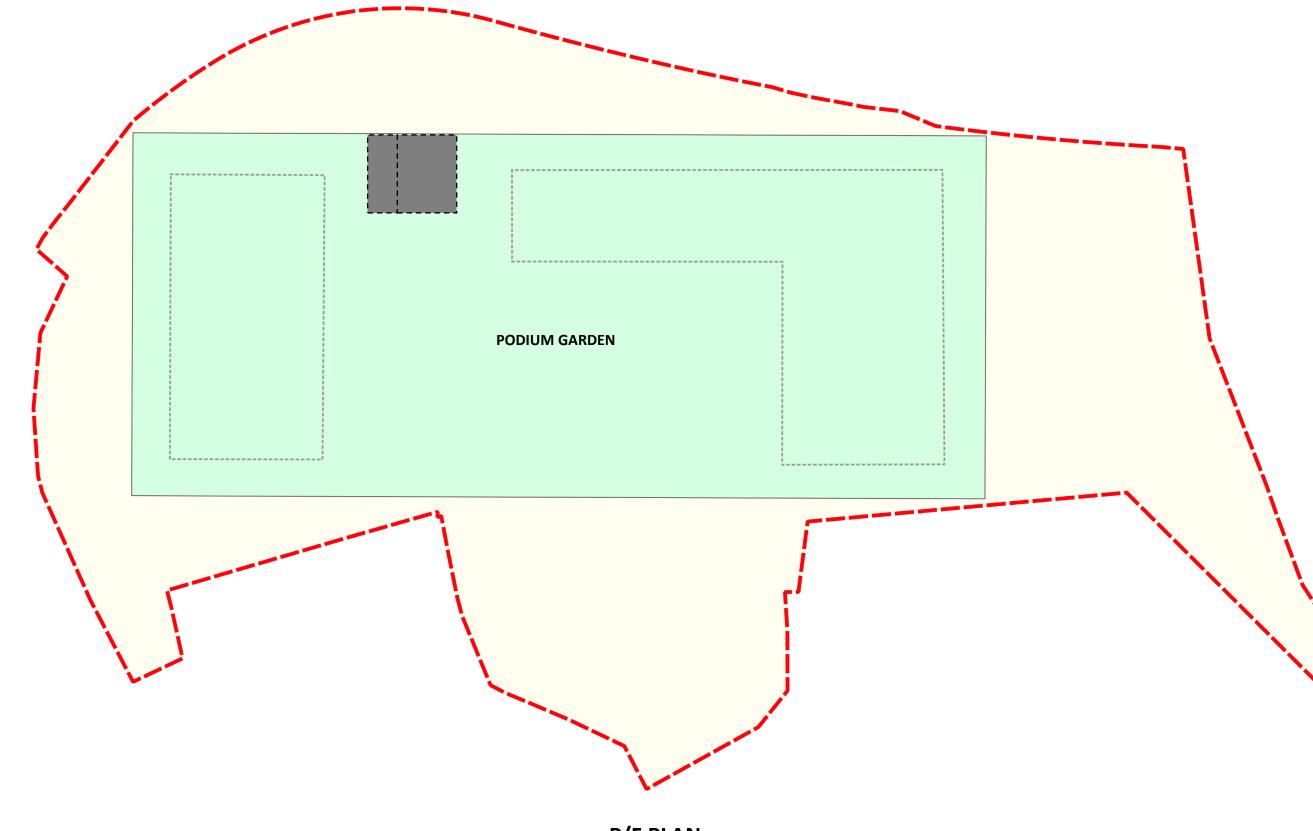
+22.75 mPD ▼

+14.75 mPD ▼

+9.75 mPD ▼

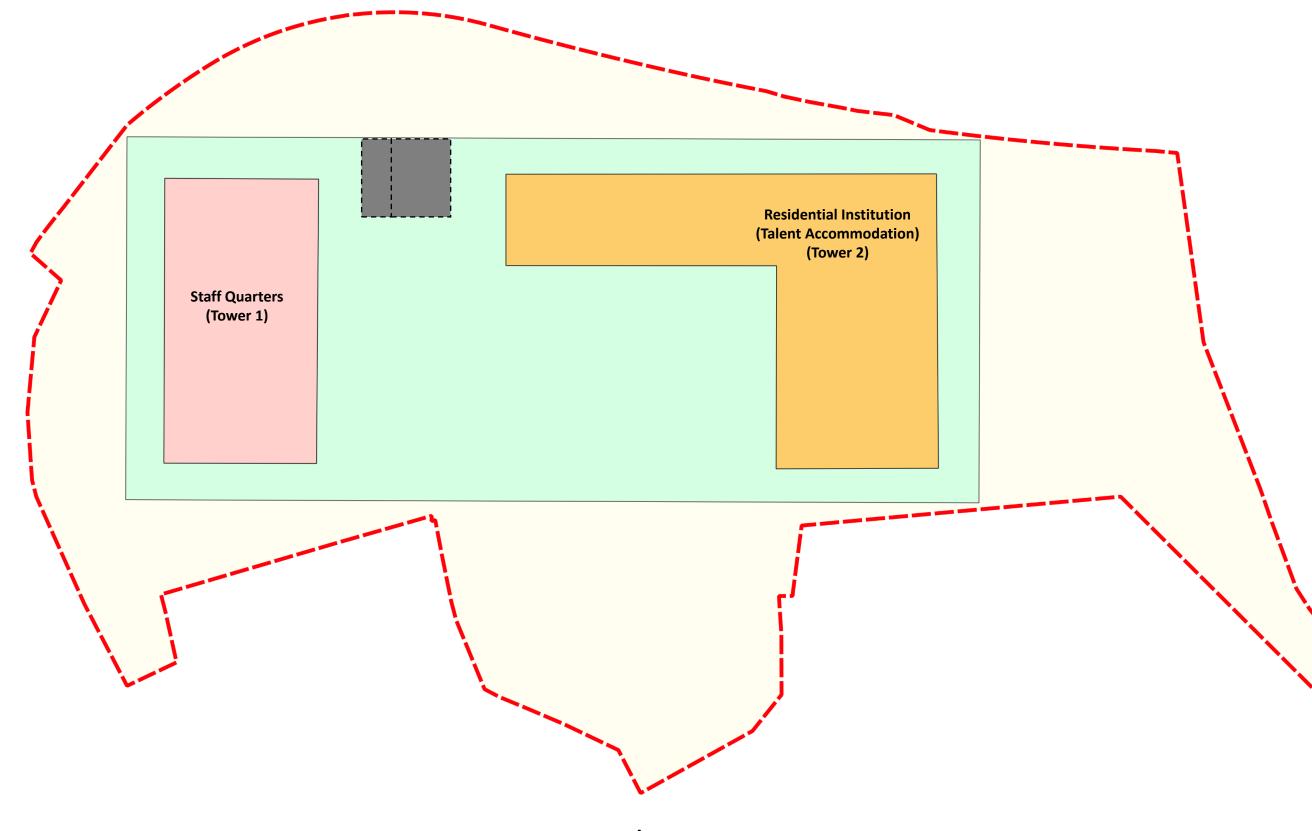
**SECTION B-B'** 





P/F PLAN





Appendix 2.1 Year 2046 Traffic Forecast (15 Years from 2031)



# TABLE – PEAK HOUR TRAFFIC FLOW AND VEHICLE COMPOSITION

YEAR 2046 TRAFFIC FORECAST Date: 25 July 2025 Job No.: J7411

	R 2046 TRAFFIC FOREC		Date: 25 July 2025		Job No.:		
Link			То	AM Peak Hour			
ID	Section	Road	Road	Traffic Veh		nicle	
				Flows	Compo		
				(veh/hr)	LV	HV	
L001	Tai Wo Service Road West (NB)	Unnamed Planned Road	Kiu Tau Road	150	50.4%	49.6%	
L002	Tai Wo Service Road West (SB)	Kiu Tau Road	Unnamed Planned Road	200	55.8%	44.2%	
L003	Wo Hing Road (SB)	Unnamed Planned Road	Pak Wo Road Slip Road	400	73.0%	27.0%	
L004	Wo Hing Road (NB)	Pak Wo Road Slip Road	Unnamed Planned Road	350	71.6%	28.4%	
L005	Unnamed Planned Road (NB)	Roundabout	Tai Wo Service Road West	250	85.6%	14.4%	
L006	Unnamed Planned Road (SB)	Tai Wo Service Road West	Roundabout	200	85.5%	14.5%	
	Wo Hing Road (SB)	Pak Wo Road Slip Road	Unnamed Road	350	72.5%	27.5%	
	Wo Hing Road (NB)	Pak Wo Road Slip Road	Pak Wo Road Slip Road	700	75.3%	24.7%	
L009	Unnamed Road (WB)	Wo Hing Road	Wo Hing Road Carpark	50	58.1%	41.9%	
	Unnamed Road (FB)	Wo Hing Road Carpark	Wo Hing Road	100	54.8%	45.2%	
	Wo Hing Road (SB)	Unnamed Road	Wo Ka Lau Road	350	71.3%	28.7%	
	Wo Hing Road (NB)	Wo Ka Lau Road	Unnamed Road	700	75.6%	24.4%	
	Pak Wo Road (SB)	Fanling Highway Slip Road	Wah Ming Road	1,250	80.1%	19.9%	
	Pak Wo Road (NB)	Yat Ming Road	Fanling Highway Slip Road	850	74.7%	25.3%	
	Fanling Highway Slip Road (NB)	Fanling Highway	Pak Wo Road	650	71.6%	28.4%	
	Fanling Highway Slip Road (SB)	Fanling Highway	Pak Wo Road	1,050	87.3%	12.7%	
	Pak Wo Road (SB)	Pak Wo Road Slip Road	Fanling Highway Slip Road	250	47.2%	52.8%	
	Pak Wo Road (NB)	Fanling Highway Slip Road	Pak Wo Road Slip Road	1,450	73.3%	26.7%	
	Pak Wo Road (SB)	Jockey Club Road	Pak Wo Road Slip Road	550	62.8%	37.2%	
	Pak Wo Road (NB)	Pak Wo Road Slip Road	Jockey Club Road	2,200	74.5%	25.5%	
L021	Fanling highway (NB)	Fanling Highway Slip Road	Fanling Highway Slip Road	4,450	73.3%	26.7%	
L022	Fanling highway (NB)	Fanling Highway Slip Road	So Kwun Po Road	3,850	73.9%	26.1%	
L023	Jockey Club Road (NB)	Jockey Club Road	San Wan Road	1,450	73.2%	26.8%	
L024	Jockey Club Road (SB)	Yuk Tong Path	Jockey Club Road	1,550	71.4%	28.6%	
L025	Jockey Club Road (SB)	Jockey Club Road	Jockey Club Road	550	62.8%	37.2%	
L026	Jockey Club Road (SB)	Jockey Club Road	Fanling Highway	1,000	75.6%	24.4%	
	Jockey Club Road (SB)	Jockey Club Road	Fanling Highway	750	77.2%	22.8%	
	Jockey Club Road (SB)	Jockey Club Road	Fanling Highway	1,750	76.4%	23.6%	
	Fanling Highway (SB)	So Kwun Po Road	Jockey Club Road	3,850	72.1%	27.9%	
L030	0 0 , (- )	>> Link ID No	,	-,			
	Fanling highway (NB)	Fanling Bypass	Fanling Highway Slip Road	5,450	75.9%	24.1%	
	Fanling Highway (SB)	Jockey Club Road	Fanling Highway Slip Road	5,550	73.1%	26.9%	
	Tai Wo Service Road East (WB)	Fanling Highway Slip Road	Tai Wo Service Road	50	78.4%	21.6%	
	Tai Wo Service Road East (FB)	Tai Wo Service Road East	Fanling Highway Slip Road	50	75.6%	24.4%	
	Fanling Highway Slip Road (SB)	Fanling Highway Slip Road	Tai Wo Service Road East Slip Road	700	59.6%	40.4%	
[033	anning ringhway onp Road (ob)	l anning ringhway 511p Road	Tai Wo Service Road East Stip Road	700	33.0 %	70.77	
1026	Facilia a Historia (CD)	Faulia a High Clia Dand	Fauling Highway Clip Dand	4.000	74.00/	25 10/	
	Fanling Highway (SB)	Fanling Highway Slip Road	Fanling Highway Slip Road	4,900	74.9%	25.1%	
LU3/	Fanling Highway Slip Road (SB)	Tai Wo Service Road East Slip Road	Fanling Highway	250	61.4%	38.6%	
1000	T:W C : 2 15 2': 2		T : W C : D !5	000	05.42	4	
L038	'	Fanling Highway Slip Road	Tai Wo Service Road East	200	85.4%	14.6%	
L	(NB)		- U 55 - 1				
L039	Tai Wo Service Road East Slip Road	Tai Wo Service Road East	Fanling Highway Slip Road	200	80.5%	19.5%	
	(SB)						
L040	Tai Wo Service Road East (WB)	Tai Wo Service Road East Slip Road	Unnamed Slip Road	200	83.5%	16.5%	
L041	Tai Wo Service Road East (EB)	Unnamed Slip Road	Tai Wo Service Road East Slip Road	150	88.8%	11.2%	
L042	Unnamed Slip Road (WB)	Tai Wo Service Road East	Unnamed Slip Road	50	50.0%	50.0%	
L043	Unnamed Slip Road (EB)	Unnamed Slip Road	Tai Wo Service Road East	50	76.9%	23.1%	
L044	Unnamed Road (NB)	Wo Ka Lau Road	Unnamed Road	50	72.7%	27.3%	
L045	Unnamed Road (SB)	Unnamed Road	Wo Ka Lau Road	50	64.3%	35.7%	
	Wo Hop Shek Road (NB)	Wo Ka Lau Road	Wo Hop Shek Road	50	75.0%	25.0%	
	Wo Hop Shek Road (SB)	Wo Hop Shek Road	Wo Ka Lau Road	50	66.7%	33.3%	
	Fanling Bypass (NB)	Fanling Highway	Fanling Bypass Roundabout	1,100	71.3%	28.7%	
	Fanling Bypass (NB)	Fanling Bypass Roundabout	Fanling Highway	1,850	70.9%	29.1%	
	Pak Wo Road Slip Road (EB)	Pak Wo Road	Wo Hing Road	300	74.6%	25.4%	
	Pak Wo Road Slip Road (WB)	Wo Hing Road	Pak Wo Road	750	76.5%	23.5%	
		-					
	0 0 1	Heung Yuen Wai Highway	Fanling Bypass	6,550	75.2%	24.8%	
1053	Fanling Highway (SB)	Tai Wo Service Road East Slip Road	Fanling Bypass	450	57.3%	42.7%	
	"17/" : 1 1						

Note: "LV" includes motorcycle, private car and taxi

<sup>&</sup>quot;HV" includes light / medium / heavy goods vehicle, public / private light bus, non-franchised bus and franchised bus

# TABLE – PEAK HOUR TRAFFIC FLOW AND VEHICLE COMPOSITION

YEAR 2046 TRAFFIC FORECAST Date: 25 July 2025 Job No.: 17411

YEA	R 2046 TRAFFIC FOREC		Date: 25 July 2025		Job No.:	
Link	Road From		То	PM Peak Hour		
ID	Section	Road	Road	Traffic	Veh	icle
				Flows	Compo	osition
				(veh/hr)	LV	HV
L001	Tai Wo Service Road West (NB)	Unnamed Planned Road	Kiu Tau Road	150	50.0%	50.0%
L002	Tai Wo Service Road West (SB)	Kiu Tau Road	Unnamed Planned Road	200	64.6%	35.4%
L003	Wo Hing Road (SB)	Unnamed Planned Road	Pak Wo Road Slip Road	350	75.9%	24.1%
L004	Wo Hing Road (NB)	Pak Wo Road Slip Road	Unnamed Planned Road	350	71.9%	28.1%
L005	Unnamed Planned Road (NB)	Roundabout	Tai Wo Service Road West	150	88.1%	11.9%
L006	Unnamed Planned Road (SB)	Tai Wo Service Road West	Roundabout	200	88.1%	11.9%
L007	Wo Hing Road (SB)	Pak Wo Road Slip Road	Unnamed Road	250	63.8%	36.2%
	Wo Hing Road (NB)	Pak Wo Road Slip Road	Pak Wo Road Slip Road	500	70.5%	29.5%
L009	Unnamed Road (WB)	Wo Hing Road	Wo Hing Road Carpark	100	73.7%	26.3%
L010	Unnamed Road (FB)	Wo Hing Road Carpark	Wo Hing Road	50	65.8%	34.2%
	Wo Hing Road (SB)	Unnamed Road	Wo Ka Lau Road	250	61.7%	38.3%
	Wo Hing Road (NB)	Wo Ka Lau Road	Unnamed Road	500	70.5%	29.5%
	Pak Wo Road (SB) Pak Wo Road (NB)	Fanling Highway Slip Road	Wah Ming Road	950	70.2%	29.8%
		Yat Ming Road	Fanling Highway Slip Road	750	76.1%	23.9%
	Fanling Highway Slip Road (NB)	Fanling Highway	Pak Wo Road	950	73.5%	26.5%
	Fanling Highway Slip Road (SB)	Fanling Highway	Pak Wo Road	650	71.1%	28.9%
	Pak Wo Road (SB)	Pak Wo Road Slip Road	Fanling Highway Slip Road	300	68.6%	31.4%
	Pak Wo Road (NB)	Fanling Highway Slip Road	Pak Wo Road Slip Road	1,650	74.7%	25.3%
	Pak Wo Road (SB)	Jockey Club Road	Pak Wo Road Slip Road	600	69.1%	30.9%
	Pak Wo Road (NB)	Pak Wo Road Slip Road	Jockey Club Road	2,150	75.2%	24.8%
L021	Fanling highway (NB)	Fanling Highway Slip Road	Fanling Highway Slip Road	4,800	65.6%	34.4%
L022	Fanling highway (NB)	Fanling Highway Slip Road	So Kwun Po Road	3,900	63.9%	36.1%
L023	Jockey Club Road (NB)	Jockey Club Road	San Wan Road	1,450	71.9%	28.1%
L024	Jockey Club Road (SB)	Yuk Tong Path	Jockey Club Road	1,500	77.4%	22.6%
L025	Jockey Club Road (SB)	Jockey Club Road	Jockey Club Road	600	69.1%	30.9%
L026	Jockey Club Road (SB)	Jockey Club Road	Fanling Highway	950	81.8%	18.2%
L027	Jockey Club Road (SB)	Jockey Club Road	Fanling Highway	700	82.4%	17.6%
L028	Jockey Club Road (SB)	Jockey Club Road	Fanling Highway	1,650	82.1%	17.9%
	Fanling Highway (SB)	So Kwun Po Road	Jockey Club Road	3,900	77.7%	22.3%
L030		>> Link ID No		0,000	, .	
	Fanling highway (NB)	Fanling Bypass	Fanling Highway Slip Road	5,450	66.3%	33.7%
	Fanling Highway (SB)	lockey Club Road	Fanling Highway Slip Road	5,500	78.9%	21.1%
	Tai Wo Service Road East (WB)	Fanling Highway Slip Road	Tai Wo Service Road	50	63.3%	36.7%
	Tai Wo Service Road East (WB)	Tai Wo Service Road East		100	64.3%	35.7%
			Fanling Highway Slip Road Tai Wo Service Road East Slip Road	500	56.5%	
1033	Fanling Highway Slip Road (SB)	Fanling Highway Slip Road	Tai wo service Road East Stip Road	300	36.3 %	43.5%
L036	Fanling Highway (SB)	Fanling Highway Slip Road	Fanling Highway Slip Road	5,000	81.1%	18.9%
	Fanling Highway Slip Road (SB)	Tai Wo Service Road East Slip Road		150	58.6%	41.4%
L038	Tai Wo Service Road East Slip Road (NB)	Fanling Highway Slip Road	Tai Wo Service Road East	150	71.8%	28.2%
L039	Tai Wo Service Road East Slip Road (SB)	Tai Wo Service Road East	Fanling Highway Slip Road	100	80.4%	19.6%
L040	Tai Wo Service Road East (WB)	Tai Wo Service Road East Slip Road	Unnamed Slip Road	100	92.3%	7.7%
L041	Tai Wo Service Road East (EB)	Unnamed Slip Road	Tai Wo Service Road East Slip Road	100	77.3%	22.7%
L042	Unnamed Slip Road (WB)	Tai Wo Service Road East	Unnamed Slip Road	50	81.8%	18.2%
L042	Unnamed Slip Road (VB)	Unnamed Slip Road	Tai Wo Service Road East	50	100.0%	0.0%
L043	Unnamed Road (NB)	Wo Ka Lau Road	Unnamed Road	50	71.4%	28.6%
L044	Unnamed Road (SB)	Unnamed Road	Wo Ka Lau Road	50	26.7%	73.3%
L045	Wo Hop Shek Road (NB)	Wo Ka Lau Road	Wo Hop Shek Road	50	0.0%	100.0%
		Wo Hop Shek Road	Wo Ka Lau Road	50	0.0%	100.0%
L047	Wo Hop Shek Road (SB)					
	Fanling Bypass (NB)	Fanling Highway	Fanling Bypass Roundabout	1,250	69.2%	30.8%
	Fanling Bypass (SB)	Fanling Bypass Roundabout	Fanling Highway	1,100	74.3%	25.7%
	Pak Wo Road Slip Road (EB)	Pak Wo Road	Wo Hing Road	250	68.0%	32.0%
L051	Pak Wo Road Slip Road (WB)	Wo Hing Road	Pak Wo Road	500	76.6%	23.4%
L052	Fanling Highway (NB)	Heung Yuen Wai Highway	Fanling Bypass	6,650	66.7%	33.3%
L053	Fanling Highway (SB)	Tai Wo Service Road East Slip Road	Fanling Bypass	300	57.0%	43.0%

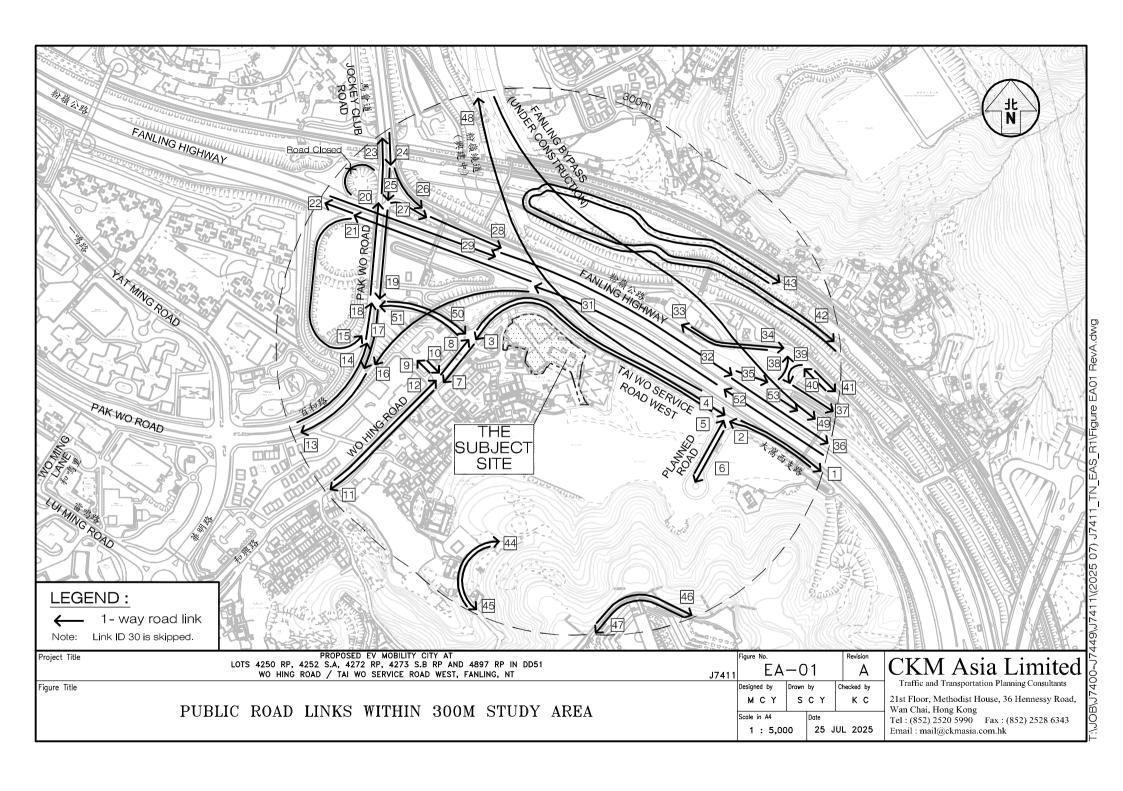
Note: "LV" includes motorcycle, private car and taxi

<sup>&</sup>quot;HV" includes light / medium / heavy goods vehicle, public / private light bus, non-franchised bus and franchised bus

Speed Limit Date: 25 July 2025

ID Section Road Road Limit		Speed Limit		Date: 25	July 2025
	Link	Road	From	То	Speed
1.001   Tal WO Service Road West (NB)   Unnamed Planned Road   50.   1.002   Tal WO Service Road West (SB)   Kui Tau Road   Unnamed Planned Road   50.   1.003   Wo Hing Road (SB)   Pak WO Road Slip Road   Unnamed Planned Road   50.   1.004   Wo Hing Road (SB)   Pak WO Road Slip Road   Unnamed Planned Road   50.   1.005   Unnamed Planned Road (NB)   Pak WO Road Slip Road   Tal WO Service Road West   Solution   Sol	ID	Section	Road	Road	Limit
1,002   Tail Wo Service Road West (SB)   Viu Tau Road   Unnamed Planned Road   50   1,003 Wo Hing Road (NB)   Pak Wo Road Slip Road   50   1,005 Unnamed Planned Road (NB)   Pak Wo Road Slip Road   Unnamed Planned Road   50   1,005 Unnamed Planned Road (SB)   Tail Wo Service Road West   Roundabout   Tail Wo Service Road West   50   1,006 Unnamed Planned Road (SB)   Pak Wo Road Slip Road   Unnamed Planned Road   50   1,007 Wo Hing Road (SB)   Pak Wo Road Slip Road   Wo Hing Road Carpark   Wo Hing Road (SB)   Unnamed Road   Wo Ka Lau Road   Wo Ka Lau Road   So Unla Pak Wo Road (SB)   Fanling Highway Slip Road   Fanling Highway Slip Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo					(km/h)
1,002   Tail Wo Service Road West (SB)   Viu Tau Road   Unnamed Planned Road   50   1,003 Wo Hing Road (NB)   Pak Wo Road Slip Road   50   1,005 Unnamed Planned Road (NB)   Pak Wo Road Slip Road   Unnamed Planned Road   50   1,005 Unnamed Planned Road (SB)   Tail Wo Service Road West   Roundabout   Tail Wo Service Road West   50   1,006 Unnamed Planned Road (SB)   Pak Wo Road Slip Road   Unnamed Planned Road   50   1,007 Wo Hing Road (SB)   Pak Wo Road Slip Road   Wo Hing Road Carpark   Wo Hing Road (SB)   Unnamed Road   Wo Ka Lau Road   Wo Ka Lau Road   So Unla Pak Wo Road (SB)   Fanling Highway Slip Road   Fanling Highway Slip Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo Road (SB)   Fanling Highway Pak Wo Road   So Unla Pak Wo	L001	Tai Wo Service Road West (NB)	Unnamed Planned Road	Kiu Tau Road	50
U.003 Wo Hing Road (SB)			Kiu Tau Road	Unnamed Planned Road	50
DOS   Unamed Planned Road (NB)					50
L005   Unnamed Planned Road (NB)					
1.006   Unnamed Planned Road (SB)					
1.007   Wo Hing Road (SB)					
Dog   Wo Hing Road (NB)					
1.009   Unnamed Road (WB)					
Unit   Wo Hing Road (EB)					
10.11   Wo Hing Road (\$B)		, ,	<u> </u>		
10.12   Wo Hing Road (NB)					
10/13   Pak Wo Road (SB)					
D44   D46   No Road (NB)					
L015   Fanling Highway Slip Road (NB)				·	
L016   Fanling Highway Slip Road (SB)		` '			
DATE   Pak Wo Road (SB)					
Date   Pak Wo Road (NB)					
L019   Pak Wo Road (SB)		\ /			50
DATE   Pak WO Road (NE)	L018	Pak Wo Road (NB)	Fanling Highway Slip Road	Pak Wo Road Slip Road	50
	L019	Pak Wo Road (SB)	Jockey Club Road	Pak Wo Road Slip Road	50
L022   Fanling Highway (NB)	L020	Pak Wo Road (NB)	Pak Wo Road Slip Road	Jockey Club Road	50
L022   Fanling Highway (NB)	L021	Fanling Highway (NB)	Fanling Highway Slip Road	Fanling Highway Slip Road	100
L023 Jockey Club Road (NB)         Jockey Club Road         50           L024 Jockey Club Road (SB)         Yuk Tong Path         Jockey Club Road         70           L025 Jockey Club Road (SB)         Jockey Club Road         50           L026 Jockey Club Road (SB)         Jockey Club Road         50           L027 Jockey Club Road (SB)         Jockey Club Road         Fanling Highway         70           L028 Jockey Club Road (SB)         Jockey Club Road         Fanling Highway         70           L028 Jockey Club Road (SB)         Jockey Club Road         Fanling Highway         70           L029 Jockey Club Road (SB)         Jockey Club Road         Fanling Highway         70           L029 Fanling Highway (SB)         So Kwun Po Road         Jockey Club Road         100           L030 Fanling Highway (SB)         Jockey Club Road         Fanling Highway Slip Road         100           L032 Fanling Highway (SB)         Jockey Club Road         Fanling Highway Slip Road         100           L033 Tai Wo Service Road East (WB)         Fanling Highway Slip Road         Tai Wo Service Road East Slip Road         50           L035 Fanling Highway Slip Road (SB)         Tai Wo Service Road East         Fanling Highway					
L024   Lockey Club Road (SB)					
L025   Jockey Club Road (SB)   Jockey Club Road   Jockey Club Road   50					
L026					
L027 Jockey Club Road (SB)         Jockey Club Road         Fanling Highway         50           L028 Jockey Club Road (SB)         Jockey Club Road         Fanling Highway         70           L029 Fanling Highway (SB)         So Kwun Po Road         Jockey Club Road         100           L030 Image: Link ID Not Used <					
L028 Jockey Club Road (SB)         Jockey Club Road         Fanling Highway         70           L029 Fanling Highway (SB)         So Kwun Po Road         Jockey Club Road         100           ∠300 Section (James Pill)         So Kwun Po Road         Jockey Club Road         100           L031 Fanling Highway (NB)         Fanling Bypass         Fanling Highway Slip Road         100           L032 Fanling Highway (SB)         Jockey Club Road         Fanling Highway Slip Road         100           L033 Tai Wo Service Road East (WB)         Fanling Highway Slip Road         Tai Wo Service Road East (EB)         50           L034 Tai Wo Service Road East (EB)         Tai Wo Service Road East         Fanling Highway Slip Road         50           L035 Fanling Highway (SB)         Fanling Highway Slip Road         Tai Wo Service Road East Slip Road         50           L036 Fanling Highway (SB)         Fanling Highway Slip Road         Fanling Highway Slip Road         100           L037 Fanling Highway (SB)         Fanling Highway Slip Road         Fanling Highway Slip Road         100           L038 Tai Wo Service Road East Slip Road (RB)         Tai Wo Service Road East         Fanling Highway Slip Road         100           L038 Tai Wo Service Road East (WB)         Tai Wo Service Road East         Fanling Highway Slip Road         50           L039 Tai Wo Service					
LO29   Fanling Highway (SB)   So Kwun Po Road   Jockey Club Road   100   Solution   Lo30   Solution   Lo30   Solution   Lo30   Solution   Lo31   Fanling Highway (SB)   Jockey Club Road   Fanling Highway Slip Road   100   Lo32   Fanling Highway (SB)   Jockey Club Road   Fanling Highway Slip Road   100   Lo33   Tai Wo Service Road East (WB)   Fanling Highway Slip Road   Tai Wo Service Road   50   Lo34   Tai Wo Service Road East (EB)   Tai Wo Service Road East   Fanling Highway Slip Road   50   Lo35   Fanling Highway Slip Road   Tai Wo Service Road East Slip Road   50   Fanling Highway Slip Road   Tai Wo Service Road East Slip Road   50   Fanling Highway Slip Road   Tai Wo Service Road East Slip Road   50   Fanling Highway Slip Road   Tai Wo Service Road East Slip Road   Tai Wo Service Road East Slip Road   Tai Wo Service Road East   Fanling Highway Slip Road   Tai Wo Service Road East   Fanling Highway Slip Road   Tai Wo Service Road East   Solution   Tai Wo Service Road East   Fanling Highway Slip Road   Tai Wo Service Road East   Solution   Tai Wo Service Road East   Fanling Highway Slip Road   Solution   Tai Wo Service Road East   Fanling Highway Slip Road   Solution   Tai Wo Service Road East   Fanling Highway Slip Road   Solution   Tai Wo Service Road East   Fanling Highway Slip Road   Solution   Tai Wo Service Road East   Solution   T					
LO30   Service Road East Slip Road   Tai Wo Service Road East   Sip Road					
Fanling Highway (NB)   Fanling Bypass   Fanling Highway Slip Road   100		Faniing Highway (SB)		Jockey Club Road	100
L032Fanling Highway (SB)Jockey Club RoadFanling Highway Slip Road100L033Tai Wo Service Road East (WB)Fanling Highway Slip Road50L034Tai Wo Service Road East (EB)Tai Wo Service Road EastFanling Highway Slip Road50L035Fanling Highway Slip Road (SB)Fanling Highway Slip RoadTai Wo Service Road East Slip Road50L036Fanling Highway (SB)Fanling Highway Slip RoadFanling Highway Slip Road100L037Fanling Highway Slip Road (SB)Fanling Highway Slip RoadFanling Highway Slip Road100L038Tai Wo Service Road East Slip Road (NB)Fanling Highway Slip RoadTai Wo Service Road East50L039Tai Wo Service Road East Slip Road (NB)Tai Wo Service Road East50L040Tai Wo Service Road East (WB)Tai Wo Service Road EastFanling Highway Slip Road50L041Tai Wo Service Road East (EB)Unnamed Slip Road50L042Unnamed Slip Road (WB)Tai Wo Service Road EastUnnamed Slip Road50L043Unnamed Slip Road (WB)Tai Wo Service Road EastUnnamed Slip Road50L044Unnamed Slip Road (EB)Unnamed Slip RoadTai Wo Service Road East50L045Unnamed Road (NB)Wo Ka Lau RoadUnnamed Road50L046Wo Hop Shek Road (SB)Wo Hop Shek RoadWo Ka Lau RoadWo Hop Shek Road50L049Fanling Bypass (NB)Fanling HighwayFanling Highway80L049Fanling Bypass (S		Farlia a Historia (ND)		Facilia e Historia Cita Dand	400
L033 Tai Wo Service Road East (WB) Fanling Highway Slip Road Tai Wo Service Road 50 L034 Tai Wo Service Road East (EB) Tai Wo Service Road East Fanling Highway Slip Road 50 L035 Fanling Highway Slip Road (SB) Fanling Highway Slip Road Tai Wo Service Road East Slip Road 50 L036 Fanling Highway (SB) Fanling Highway Slip Road Fanling Highway Slip Road 100 L037 Fanling Highway Slip Road (SB) Tai Wo Service Road East Slip Road Fanling Highway Slip Road Fanling Highway Slip Road Fanling Highway Slip Road 100 L038 Tai Wo Service Road East Slip Road Fanling Highway Slip Road (NB) L039 Tai Wo Service Road East Slip Road (SB) Tai Wo Service Road East Slip Road (SB) L040 Tai Wo Service Road East (WB) Tai Wo Service Road East Slip Road Slip Road (SB) L041 Tai Wo Service Road East (EB) Unnamed Slip Road Tai Wo Service Road East Slip Road 50 L042 Unnamed Slip Road (WB) Tai Wo Service Road East Unnamed Slip Road 50 L043 Unnamed Slip Road (EB) Unnamed Slip Road Tai Wo Service Road East 50 L044 Unnamed Road (NB) Wo Ka Lau Road Unnamed Road 50 L045 Unnamed Road (NB) Wo Ka Lau Road Unnamed Road 50 L046 Wo Hop Shek Road (NB) Wo Ka Lau Road Wo Hop Shek Road 50 L047 Wo Hop Shek Road (SB) Wo Hop Shek Road Wo Hop Shek Road 50 L048 Fanling Bypass (NB) Fanling Highway Fanling Bypass Roundabout 50 L049 Fanling Bypass (SB) Fanling Highway Fanling Bypass Roundabout 50 L050 Pak Wo Road Slip Road (WB) Wo Hing Road 50 L051 Pak Wo Road Slip Road (WB) Heung Yuen Wai Highway Fanling Bypass 80 L053 Fanling Highway (SB) Tai Wo Service Road East 50 L054 Fanling Highway (NB) Fanling Spass 80 L055 Fanling Highway (SB) Fanling Spass 80 L056 Fanling Highway (SB) Fanling Spass 80 L057 Fanling Highway (SB) Fanling Spass 80 L058 Fanling Highway (SB) Fanling Spass 80 L059 Fanling Highway (SB) Fanling Spass 80 L050 Fanling Highway (SB) Fanling Spass 80 L051 Fanling Highway (SB) Fanling Spass 80 L052 Fanling Highway (SB) Fanling Spass 80 L053 Fanling Highway (SB) Fanling Spass 80 L054 Fanling Highway (SB) Fanling Spass 80 L055 Fanling Highway (SB) Fanling Sp					
L034 Tai Wo Service Road East (EB) Tai Wo Service Road East Fanling Highway Slip Road 50 L035 Fanling Highway Slip Road (SB) Fanling Highway Slip Road 50 L036 Fanling Highway (SB) Fanling Highway Slip Road 50 L037 Fanling Highway Slip Road (SB) Tai Wo Service Road East Slip Road 50 L038 Tai Wo Service Road East Slip Road (SB) Tai Wo Service Road East Slip Road (NB) L039 Tai Wo Service Road East Slip Road (SB) Tai Wo Service Road East Slip Road (SB) L040 Tai Wo Service Road East (WB) Tai Wo Service Road East Slip Road (SB) L041 Tai Wo Service Road East (EB) Unnamed Slip Road Tai Wo Service Road East Unnamed Slip Road 50 L042 Unnamed Slip Road (WB) Tai Wo Service Road East Unnamed Slip Road 50 L043 Unnamed Slip Road (EB) Unnamed Slip Road Tai Wo Service Road East 50 L044 Unnamed Road (NB) Wo Ka Lau Road Unnamed Road 50 L045 Unnamed Road (SB) Unnamed Road Wo Ka Lau Road 50 L046 Wo Hop Shek Road (SB) Fanling Bypass (SB) Fanling Bypass (SB) Fanling Bypass Roundabout 50 L049 Fanling Bypass (SB) Fanling Bypass Roundabout 50 L050 Pak Wo Road Slip Road (WB) Heung Yuen Wai Highway Fanling Bypass (SB) Tai Wo Service Road East Fanling Bypass (SB) Fanling Highway Fanling Bypass (SB) Fanling Bypass (SB) Fanling Highway Fanling Bypass (SB) Fanling Bypass					
L035Fanling Highway Slip Road (SB)Fanling Highway Slip RoadTai Wo Service Road East Slip Road50L036Fanling Highway (SB)Fanling Highway Slip RoadFanling Highway Slip Road100L037Fanling Highway Slip Road (SB)Tai Wo Service Road East Slip Road (NB)Fanling Highway Slip RoadFanling HighwayL038Tai Wo Service Road East Slip Road (NB)Fanling Highway Slip Road (SB)Tai Wo Service Road East Slip Road (NB)Tai Wo Service Road East (NB)Tai Wo Service Road East (NB)L040Tai Wo Service Road East (WB)Tai Wo Service Road East (NB)Unnamed Slip RoadTai Wo Service Road East Slip RoadL041Tai Wo Service Road East (EB)Unnamed Slip RoadTai Wo Service Road East Slip Road50L042Unnamed Slip Road (WB)Tai Wo Service Road EastUnnamed Slip Road50L043Unnamed Slip Road (EB)Unnamed Slip RoadTai Wo Service Road East50L044Unnamed Road (NB)Wo Ka Lau RoadUnnamed Road50L045Unnamed Road (SB)Unnamed RoadWo Ka Lau Road50L046Wo Hop Shek Road (SB)Wo Hop Shek Road50L047Wo Hop Shek Road (SB)Wo Hop Shek Road50L048Fanling Bypass (NB)Fanling HighwayFanling Bypass RoundaboutFanling Bypass RoundaboutFanling HighwayL050Pak Wo Road Slip Road (WB)Heung Yuen Wai HighwayFanling Bypass100L051Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053					
L036 Fanling Highway (SB) Fanling Highway Slip Road Tai Wo Service Road East Slip Road (NB) Tai Wo Service Road East Slip Road (SB) Tai Wo Service Road East Slip Road (NB) Tai Wo Service Road East Slip Road (NB) Tai Wo Service Road East Slip Road (NB) Tai Wo Service Road East Slip Road (SB) Tai Wo Service Road East Slip Road (SB) Tai Wo Service Road East Slip Road (SB) Tai Wo Service Road East (WB) Tai Wo Service Road East (WB) Tai Wo Service Road East Unnamed Slip Road (SB) Unnamed Slip Road Tai Wo Service Road East Slip Road Tai Wo Service Road East Slip Road (SB) Unnamed Slip Road Tai Wo Service Road East Slip Road Tai Wo Service Road East Slip Road (SB) Unnamed Slip Road Tai Wo Service Road East Unnamed Slip Road (SB) Unnamed Road (SB) Wo Ka Lau Road Wo Ka Lau Road So (SA) Wo Hop Shek Road (SB) Fanling Highway Fanling Bypass (SB) Fanling Highway Fanling Bypass Roundabout Fanling Highway So (SC) Pak Wo Road Slip Road (WB) Wo Hop Shek Road (SD) Pak Wo Road Slip Road (WB) Wo Hing Road (SD) Pak Wo Road Slip Road (WB) Wo Hing Road (SD) Pak Wo Road Slip Road (WB) Heung Yuen Wai Highway Fanling Bypass (SD) Fanling Highway (SB) Fanling Highway Fanling Bypass (SD) Fanling Highway (SD) Fanling Highway Fanling Bypass (SD) Fanling Highway Fanling Bypass (SD) Fanling Highway (SD) Fanling Highway Fanling Bypass (SD) Fanling Highway (SD) Fanling Bypass (SD) Fanling Highway (SD) Fanli					
L037 Fanling Highway Slip Road (SB)  Tai Wo Service Road East Slip Road (NB)  L038 Tai Wo Service Road East Slip Road (NB)  L039 Tai Wo Service Road East Slip Road (SB)  L040 Tai Wo Service Road East (WB)  L041 Tai Wo Service Road East (EB)  L042 Unnamed Slip Road (WB)  L043 Unnamed Slip Road (BB)  L044 Unnamed Slip Road (BB)  L045 Unnamed Road (NB)  L046 Unnamed Road (NB)  L047 Wo Hop Shek Road (NB)  L048 Fanling Bypass (NB)  Fanling Highway Slip Road (BB)  Fanling Highway Slip Road (BB)  L048 Fanling Highway Slip Road (BB)  Fanling Highway Slip Road (BB)  L049 Fanling Bypass (SB)  Fanling Highway Slip Road (BB)  L045 Wo Hop Shek Road (BB)  Fanling Highway  Fanling Bypass Roundabout  Fanling Bypass Roundabout  Fanling Bypass Roundabout  Fanling Bypass  Fanling Highway  Fanling Bypass	L035	Fanling Highway Slip Road (SB)	Fanling Highway Slip Road	Tai Wo Service Road East Slip Road	50
L037 Fanling Highway Slip Road (SB)  Tai Wo Service Road East Slip Road (NB)  L038 Tai Wo Service Road East Slip Road (NB)  L039 Tai Wo Service Road East Slip Road (SB)  L040 Tai Wo Service Road East (WB)  L041 Tai Wo Service Road East (EB)  L042 Unnamed Slip Road (WB)  L043 Unnamed Slip Road (BB)  L044 Unnamed Slip Road (BB)  L045 Unnamed Road (NB)  L046 Unnamed Road (NB)  L047 Wo Hop Shek Road (NB)  L048 Fanling Bypass (NB)  Fanling Highway Slip Road (BB)  Fanling Highway Slip Road (BB)  L048 Fanling Highway Slip Road (BB)  Fanling Highway Slip Road (BB)  L049 Fanling Bypass (SB)  Fanling Highway Slip Road (BB)  L045 Wo Hop Shek Road (BB)  Fanling Highway  Fanling Bypass Roundabout  Fanling Bypass Roundabout  Fanling Bypass Roundabout  Fanling Bypass  Fanling Highway  Fanling Bypass					
L037 Fanling Highway Slip Road (SB)  Tai Wo Service Road East Slip Road (NB)  L038 Tai Wo Service Road East Slip Road (NB)  L039 Tai Wo Service Road East Slip Road (SB)  L040 Tai Wo Service Road East (WB)  L041 Tai Wo Service Road East (EB)  L042 Unnamed Slip Road (WB)  L043 Unnamed Slip Road (BB)  L044 Unnamed Slip Road (BB)  L045 Unnamed Road (NB)  L046 Unnamed Road (NB)  L047 Wo Hop Shek Road (NB)  L048 Fanling Bypass (NB)  Fanling Highway Slip Road (BB)  Fanling Highway Slip Road (BB)  L048 Fanling Highway Slip Road (BB)  Fanling Highway Slip Road (BB)  L049 Fanling Bypass (SB)  Fanling Highway Slip Road (BB)  L045 Wo Hop Shek Road (BB)  Fanling Highway  Fanling Bypass Roundabout  Fanling Bypass Roundabout  Fanling Bypass Roundabout  Fanling Bypass  Fanling Highway  Fanling Bypass	L036	Fanling Highway (SB)	Fanling Highway Slip Road	Fanling Highway Slip Road	100
Slip Road   Tai Wo Service Road East Slip Road (NB)   Tai Wo Service Road East Slip Road (SB)   Tai Wo Service Road East (WB)   Tai Wo Service Road East   Tai Wo Service Road East   Slip Road (SB)   Tai Wo Service Road East   Unnamed Slip Road   Slip Road   Slip Road   Tai Wo Service Road East   Unnamed Slip Road   Slip Road   Slip Road   Slip Road   Tai Wo Service Road East Slip Road					50
L038 Tai Wo Service Road East Slip Road (NB) L039 Tai Wo Service Road East Slip Road (SB) L040 Tai Wo Service Road East (WB) L041 Tai Wo Service Road East (EB) L042 Unnamed Slip Road (SB) L043 Unnamed Slip Road (EB) L044 Unnamed Slip Road (EB) L045 Unnamed Road (NB) L045 Unnamed Road (NB) L046 Wo Hop Shek Road (NB) L047 Wo Hop Shek Road (SB) L048 Fanling Bypass (NB) L049 Fanling Bypass (NB) L040 Fanling Bypass (NB) L041 Fai Wo Service Road East L042 Unnamed Slip Road L043 Unnamed Road (NB) L044 Unnamed Road (NB) L045 Unnamed Road (NB) L046 Wo Hop Shek Road (NB) L047 Wo Hop Shek Road (SB) L048 Fanling Bypass (NB) L049 Fanling Bypass (NB) L049 Fanling Bypass (SB) L050 Pak Wo Road Slip Road (WB) L051 Pak Wo Road Slip Road (WB) L053 Fanling Highway (SB) L050 Fanling			Slip Road		
(NB) L039 Tai Wo Service Road East Slip Road (SB) L040 Tai Wo Service Road East (WB) L041 Tai Wo Service Road East (WB) L042 Unnamed Slip Road (EB) L043 Unnamed Slip Road (EB) L044 Unnamed Slip Road (BB) L044 Unnamed Slip Road (BB) L045 Unnamed Road (NB) L046 Unnamed Road (NB) L047 Unnamed Road (NB) L048 Unnamed Road (NB) L049 Unnamed Road (NB) L049 Unnamed Road (NB) L040 Unnamed Road (NB) L044 Unnamed Road (NB) L045 Unnamed Road (NB) L046 Wo Hop Shek Road (NB) L047 Wo Hop Shek Road (SB) L048 Fanling Bypass (NB) L049 Fanling Bypass (NB) L040 Fanling Bypass (SB) L050 Pak Wo Road Slip Road (WB) L051 Pak Wo Road Slip Road (WB) L053 Fanling Highway (SB) Tai Wo Service Road East L040 Unnamed Road L040 Wo Hop Shek Road (BB) L050 Pak Wo Road Slip Road (WB) L051 Pak Wo Road Slip Road (WB) L053 Fanling Highway (SB) Tai Wo Service Road East L041 Unnamed Slip Road L051 Pak Wo Road Slip Road (WB) L053 Fanling Highway (SB) Tai Wo Service Road East Fanling Bypass L050 Fanling Highway (SB) Fanling Road Fanling Bypass Slip Road	L038	Tai Wo Service Road East Slip Road		Tai Wo Service Road East	50
Tai Wo Service Road East Slip Road (SB)  L040 Tai Wo Service Road East (WB)  L041 Tai Wo Service Road East (EB)  L042 Unnamed Slip Road (WB)  L043 Unnamed Slip Road (WB)  L044 Unnamed Slip Road (EB)  L044 Unnamed Slip Road (EB)  L045 Unnamed Road (NB)  L045 Unnamed Road (NB)  L046 Wo Hop Shek Road (NB)  L047 Wo Hop Shek Road (SB)  L048 Fanling Bypass (NB)  L049 Fanling Bypass (NB)  L049 Fanling Bypass (SB)  L049 Fanling Bypass Roundabout  L049 Fanling Highway (NB)  L050 Fak Wo Road Slip Road (WB)  L051 Fanling Highway (NB)  Heung Yuen Wai Highway  Fanling Bypass  Slip Road  Fanling Bypass  Fanling Bypass  Fanling Bypass  Fanling Bypass  Fanling Bypass  Fanling Bypass  Slip Road  Fanling Bypass  Slip Road  Fanling Bypass			· ····································		
(SB) L040 Tai Wo Service Road East (WB) Tai Wo Service Road East Unnamed Slip Road 50 Slip Road Tai Wo Service Road East (EB) Unnamed Slip Road Tai Wo Service Road East Slip Road 50 L042 Unnamed Slip Road (WB) Tai Wo Service Road East Unnamed Slip Road 50 L043 Unnamed Slip Road (EB) Unnamed Slip Road Tai Wo Service Road East 50 L044 Unnamed Road (NB) Wo Ka Lau Road Unnamed Road 50 L045 Unnamed Road (SB) Unnamed Road Wo Ka Lau Road 50 L046 Wo Hop Shek Road (NB) Wo Ka Lau Road Wo Hop Shek Road 50 L047 Wo Hop Shek Road (SB) Wo Hop Shek Road Wo Ka Lau Road 50 L048 Fanling Bypass (NB) Fanling Highway Fanling Bypass Roundabout 50 L049 Fanling Bypass (SB) Fanling Bypass Roundabout Fanling Highway 80 L050 Pak Wo Road Slip Road (WB) Wo Hing Road 50 L051 Pak Wo Road Slip Road (WB) Wo Hing Road 50 L053 Fanling Highway (NB) Heung Yuen Wai Highway Fanling Bypass 80 Slip Road 50 Slip Road 50 Fanling Bypass 50 Fan	1 039		Tai Wo Service Road Fast	Fanling Highway Slip Road	50
Tai Wo Service Road East (WB)  Tai Wo Service Road East  Slip Road  L041  Tai Wo Service Road East (EB)  Unnamed Slip Road  Tai Wo Service Road East Slip Road  Tai Wo Service Road East Slip Road  L042  Unnamed Slip Road (WB)  Tai Wo Service Road East  Unnamed Slip Road  Tai Wo Service Road East Slip Road  S0  L043  Unnamed Slip Road (EB)  Unnamed Slip Road  Tai Wo Service Road East  Unnamed Slip Road  Tai Wo Service Road East  S0  L044  Unnamed Road (NB)  Wo Ka Lau Road  Unnamed Road  Unnamed Road  Unnamed Road  S0  L045  Unnamed Road  Wo Ka Lau Road  S0  L046  Wo Hop Shek Road (NB)  Wo Ka Lau Road  Wo Hop Shek Road  S0  L047  Wo Hop Shek Road (SB)  Wo Hop Shek Road  Wo Ka Lau Road  S0  L048  Fanling Bypass (NB)  Fanling Highway  Fanling Bypass Roundabout  Fanling Bypass Roundabout  Bo  L050  Pak Wo Road Slip Road (EB)  Pak Wo Road  Wo Hing Road  S0  L051  Pak Wo Road Slip Road (WB)  Wo Hing Road  Fanling Bypass  S0  L053  Fanling Highway (NB)  Heung Yuen Wai Highway  Fanling Bypass  S0  Slip Road	_555		.a. 110 Co. 1100 Road Last	Saming ringing ay One road	- 55
Slip Road  L041 Tai Wo Service Road East (EB)  Unnamed Slip Road  Tai Wo Service Road East Slip Road  50  L042 Unnamed Slip Road (WB)  L043 Unnamed Slip Road (EB)  L044 Unnamed Slip Road (EB)  L044 Unnamed Road (NB)  L045 Unnamed Road (NB)  L045 Unnamed Road (SB)  L046 Wo Hop Shek Road (NB)  L047 Wo Hop Shek Road (SB)  L048 Fanling Bypass (NB)  L048 Fanling Bypass (SB)  L049 Fanling Bypass (SB)  L050 Pak Wo Road Slip Road (WB)  L051 Pak Wo Road Slip Road (WB)  L053 Fanling Highway (SB)  Slip Road  Silp Road  Solunnamed Slip Road (EB)  L050 Pak Wo Road Slip Road (WB)  L051 Pak Wo Road Slip Road (WB)  L053 Fanling Highway (SB)  Slip Road  Solunnamed Slip Road  L050 Pak Wo Road Slip Road (WB)  L050 Pak Wo Road Slip Road (WB)  L051 Pak Wo Road Slip Road (WB)  L053 Fanling Highway (SB)  Tai Wo Service Road East  Fanling Bypass  Slip Road  Solunnamed Slip Road  L050 Pak Wo Road Slip Road (WB)  L050 Pak Wo Road Slip Road (WB)  L050 Fanling Highway (NB)  Tai Wo Service Road East  Fanling Bypass  Solunnamed Slip Road  Solunnamed Slip Road East  Fanling Bypass  Solunnamed Slip Road East  Slip Road  Solunnamed Slip Road East  Slip Road  Solunnamed Slip Road East  Tai Wo Service Road East  Fanling Bypass  Solunnamed Slip Road East  Solunnamed Road	1.040		Toi Wa Canina Bood Foot	Linnamad Clin Daad	ΕO
L041 Tai Wo Service Road East (EB)  Unnamed Slip Road  Unnamed Road East  Unnamed Road  So  Haling Bypass Roundabout  Fanling Bypass Roundabout  Fanling Highway  Eanling Road  Unnamed Road  Unnamed Road  Unnamed Road  So  Unnamed Road  Unnamed Road  Unnamed Road  So  Wo Hop Shek Road  Fanling Bypass Roundabout  Fanling Highway  Fanling Bypass  Unnamed Road  So  Unnamed Road  So  Unnamed Road  Wo Ka Lau Road  So  Unnamed Road  Wo Ka Lau Road  So  Unnamed Road  So  Unnamed Road  Wo Ka Lau Road  So  Unnamed Road  So  Unnamed Road  Wo Ka Lau Road  Wo Ka Lau Road  So  Unnamed Road  Wo Ka Lau Road  Wo Ka Lau Road  So  Unnamed Road  Wo Ka Lau Road  Wo Ka Lau Road  So  Unnamed Road  Wo Ka Lau Road  Wo Ka Lau Road  So  Unnamed Road  Wo Ka Lau Road  Wo Ka Lau Road  So  Unnamed Road  Wo Ka Lau Road  Wo Ka Lau Road  Wo Hop Shek Road  So  Unnamed Road  Wo Hop Shek Road  Wo Hop Shek Road  Wo Hop Shek Road  So  Unnamed Road  Wo Hop Shek Road  Wo Hop Shek Road  W	LU4U	rai WO Service Road East (WB)		Tormanieu Siip Koau	50
L042 Unnamed Slip Road (WB) L043 Unnamed Slip Road (EB) L044 Unnamed Road (NB) L044 Unnamed Road (NB) L045 Unnamed Road (NB) L046 Unnamed Road (SB) L047 Unnamed Road (SB) L048 Unnamed Road (NB) L049 Wo Hop Shek Road (NB) L049 Wo Hop Shek Road (SB) L049 Fanling Bypass (NB) L049 Fanling Bypass (SB) L050 Pak Wo Road Slip Road (EB) L050 Pak Wo Road Slip Road (WB) L050 Fanling Highway (NB) L051 Fanling Highway (NB) L053 Fanling Highway (SB) Tai Wo Service Road East Slip Road Southnamed Road Southnamed Road Unnamed Road Unnamed Road Unnamed Road Wo Ka Lau Road Southnamed Road Wo Hop Shek Road Southnamed Road Wo Hop Shek Road Southnamed Road East Southnamed Road Southn	1044	T:W 0 : D   E   (/ED)		T:W 0 : B 15 (0) B 1	
L043Unnamed Slip Road (EB)Unnamed Slip RoadTai Wo Service Road East50L044Unnamed Road (NB)Wo Ka Lau RoadUnnamed Road50L045Unnamed Road (SB)Unnamed RoadWo Ka Lau Road50L046Wo Hop Shek Road (NB)Wo Ka Lau RoadWo Hop Shek Road50L047Wo Hop Shek Road (SB)Wo Hop Shek RoadWo Ka Lau Road50L048Fanling Bypass (NB)Fanling HighwayFanling Bypass Roundabout80L049Fanling Bypass (SB)Fanling Bypass RoundaboutFanling Highway80L050Pak Wo Road Slip Road (EB)Pak Wo RoadWo Hing Road50L051Pak Wo Road Slip Road (WB)Wo Hing RoadPak Wo Road50L052Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053Fanling Highway (SB)Tai Wo Service Road EastFanling Bypass80	L041	Tal Wo Service Road East (EB)	Unnamed Slip Road	Tai Wo Service Road East Slip Road	50
L043Unnamed Slip Road (EB)Unnamed Slip RoadTai Wo Service Road East50L044Unnamed Road (NB)Wo Ka Lau RoadUnnamed Road50L045Unnamed Road (SB)Unnamed RoadWo Ka Lau Road50L046Wo Hop Shek Road (NB)Wo Ka Lau RoadWo Hop Shek Road50L047Wo Hop Shek Road (SB)Wo Hop Shek RoadWo Ka Lau Road50L048Fanling Bypass (NB)Fanling HighwayFanling Bypass Roundabout80L049Fanling Bypass (SB)Fanling Bypass RoundaboutFanling Highway80L050Pak Wo Road Slip Road (EB)Pak Wo RoadWo Hing Road50L051Pak Wo Road Slip Road (WB)Wo Hing RoadPak Wo Road50L052Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053Fanling Highway (SB)Tai Wo Service Road EastFanling Bypass80	1015	1011 5 1011		L LOI D	
L044Unnamed Road (NB)Wo Ka Lau RoadUnnamed Road50L045Unnamed Road (SB)Unnamed RoadWo Ka Lau Road50L046Wo Hop Shek Road (NB)Wo Ka Lau RoadWo Hop Shek Road50L047Wo Hop Shek Road (SB)Wo Hop Shek RoadWo Ka Lau Road50L048Fanling Bypass (NB)Fanling HighwayFanling Bypass Roundabout80L049Fanling Bypass (SB)Fanling Bypass RoundaboutFanling Highway80L050Pak Wo Road Slip Road (EB)Pak Wo RoadWo Hing Road50L051Pak Wo Road Slip Road (WB)Wo Hing RoadPak Wo Road50L052Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053Fanling Highway (SB)Tai Wo Service Road East Slip RoadFanling Bypass80				· · · · · · · · · · · · · · · · · · ·	
L045Unnamed Road (SB)Unnamed RoadWo Ka Lau Road50L046Wo Hop Shek Road (NB)Wo Ka Lau RoadWo Hop Shek Road50L047Wo Hop Shek Road (SB)Wo Hop Shek RoadWo Ka Lau Road50L048Fanling Bypass (NB)Fanling HighwayFanling Bypass Roundabout80L049Fanling Bypass (SB)Fanling Bypass RoundaboutFanling Highway80L050Pak Wo Road Slip Road (EB)Pak Wo RoadWo Hing Road50L051Pak Wo Road Slip Road (WB)Wo Hing RoadPak Wo Road50L052Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053Fanling Highway (SB)Tai Wo Service Road East Slip RoadFanling Bypass80				<del>i</del>	
L046Wo Hop Shek Road (NB)Wo Ka Lau RoadWo Hop Shek Road50L047Wo Hop Shek Road (SB)Wo Hop Shek RoadWo Ka Lau Road50L048Fanling Bypass (NB)Fanling HighwayFanling Bypass Roundabout80L049Fanling Bypass (SB)Fanling Bypass RoundaboutFanling Highway80L050Pak Wo Road Slip Road (EB)Pak Wo RoadWo Hing Road50L051Pak Wo Road Slip Road (WB)Wo Hing RoadPak Wo Road50L052Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053Fanling Highway (SB)Tai Wo Service Road East Slip RoadFanling Bypass80					50
L047Wo Hop Shek Road (SB)Wo Hop Shek RoadWo Ka Lau Road50L048Fanling Bypass (NB)Fanling HighwayFanling Bypass Roundabout80L049Fanling Bypass (SB)Fanling Bypass RoundaboutFanling Highway80L050Pak Wo Road Slip Road (EB)Pak Wo RoadWo Hing Road50L051Pak Wo Road Slip Road (WB)Wo Hing RoadPak Wo Road50L052Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053Fanling Highway (SB)Tai Wo Service Road East Slip RoadFanling Bypass80	L045	Unnamed Road (SB)	Unnamed Road	Wo Ka Lau Road	50
L047Wo Hop Shek Road (SB)Wo Hop Shek RoadWo Ka Lau Road50L048Fanling Bypass (NB)Fanling HighwayFanling Bypass Roundabout80L049Fanling Bypass (SB)Fanling Bypass RoundaboutFanling Highway80L050Pak Wo Road Slip Road (EB)Pak Wo RoadWo Hing Road50L051Pak Wo Road Slip Road (WB)Wo Hing RoadPak Wo Road50L052Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053Fanling Highway (SB)Tai Wo Service Road East Slip RoadFanling Bypass80	L046	Wo Hop Shek Road (NB)		Wo Hop Shek Road	50
L048 Fanling Bypass (NB)Fanling HighwayFanling Bypass Roundabout80L049 Fanling Bypass (SB)Fanling Bypass RoundaboutFanling Highway80L050 Pak Wo Road Slip Road (EB)Pak Wo RoadWo Hing Road50L051 Pak Wo Road Slip Road (WB)Wo Hing RoadPak Wo Road50L052 Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053 Fanling Highway (SB)Tai Wo Service Road East Slip RoadFanling Bypass80					50
L049 Fanling Bypass (SB)Fanling Bypass RoundaboutFanling Highway80L050 Pak Wo Road Slip Road (EB)Pak Wo RoadWo Hing Road50L051 Pak Wo Road Slip Road (WB)Wo Hing RoadPak Wo Road50L052 Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053 Fanling Highway (SB)Tai Wo Service Road East Slip RoadFanling Bypass80			•		
L050Pak Wo RoadWo Hing Road50L051Pak Wo Road Slip Road (WB)Wo Hing RoadPak Wo Road50L052Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053Fanling Highway (SB)Tai Wo Service Road East Slip RoadFanling Bypass80					
L051 Pak Wo Road Slip Road (WB)Wo Hing RoadPak Wo Road50L052 Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053 Fanling Highway (SB)Tai Wo Service Road East Slip RoadFanling Bypass80					
L052 Fanling Highway (NB)Heung Yuen Wai HighwayFanling Bypass100L053 Fanling Highway (SB)Tai Wo Service Road East Slip RoadFanling Bypass80				-	
L053 Fanling Highway (SB)  Tai Wo Service Road East Fanling Bypass 80 Slip Road					
Slip Road					
	LUDJ	ranning nignway (SB)		ranning bypass	δU
nioto, binaggi umit tar 1 (140 - 1 (140 and 1 (160 are accumed to be 000 ch in reterence with the TODIA	N	0 11: 16 1040 1040		1	

Note: Speed limit for L048, L049 and L053 are assumed to be 80kph in reference with the TPDM.



A Report	Proposed EV Mobility City with Ancillary Staff Quarters and Talent Accommodation at Various Lots in D.D. 51 and Adjoining Government Land, Fanling
	Aujoining Government Land, Failing
Appendix 2.2	Low Noise Road Surfacing within 300m Assessment Area

#### Coco Ma

From: Chen Ka Ho, Adrian <adrian.chen@fln-aecom.com>

**Sent:** 15 July 2025 17:43

To: Coco Ma

Cc:Jojo Leung; Billy Fan; Simon Lai; saihanglee@cedd.gov.hk; Pak Chau Kin, PatrickSubject:RE: Various Lots in DD 51, Fanling - Enquiry for Latest Layout Plans for Fanling

Bypass Eastern Section, Tai Wo Service Road West & Tai Wo Service Road East and Design Drawing/ As-built Drawing of Roadside Noise Barrier and Low Noise Road

Surfacing for...

**Attachments:** ND\_2019\_05\_R10\_130\_0772 (SK0772).pdf

Some people who received this message don't often get email from adrian.chen@fln-aecom.com. Learn why this is important

Dear Coco,

As per your request, please find the attached pavement drawing for your reference.

Best Regards,

#### **Adrian Chen**

Resident Engineer

Contract No. ND/2019/05

Fanling North New Development Area Phase 1

**AECOM** 

M +852 5292 9136

From: Chen Ka Ho, Adrian

Sent: Wednesday, 9 July 2025 11:33 AM

To: 'COCOMA@ramboll.com' <COCOMA@ramboll.com>

**Cc:** Jojo Leung <myleung1@cedd.gov.hk>; 'bfan@ramboll.com' <bfan@ramboll.com>; 'slai@ramboll.com' <slai@ramboll.com>; 'saihanglee@cedd.gov.hk' <saihanglee@cedd.gov.hk>; Pak Chau Kin, Patrick <patrick.pak@flnaecom.com>

**Subject:** RE: Various Lots in DD 51, Fanling - Enquiry for Latest Layout Plans for Fanling Bypass Eastern Section, Tai Wo Service Road West & Tai Wo Service Road East and Design Drawing/ As-built Drawing of Roadside Noise Barrier and Low Noise Road Surfacing for...

Dear Coco,

Please find our response to your enquires of the following items for Fanling Bypass Eastern Section, Tai Wo Service Road West (re-aligned) and Tai Wo Service Road East (re-aligned) within the 300m assessment area in red below:

1. Tentative completion date.

The tentative completion date for the concerned roads are in Q1 2026.

Latest layout of alignment.

Please refer to attached "1. ND201905 – Road Alignment and Pavement Drawings" for your reference.

- 3. Design drawing/ As-built Drawing of the latest extent and type of material of LNRS (setting out). Please refer to attached "1. ND201905 Road Alignment and Pavement Drawings" for your reference.
- 4. Design drawing/ As-built Drawing of the latest extent and types of proposed roadside noise barriers within the 300m assessment area.

Please refer to attached "2. ND201905 – Noise Barrier General Layout Drawings" for your reference.

Best Regards,

#### **Adrian Chen**

**Resident Engineer** 

Contract No. ND/2019/05

Fanling North New Development Area Phase 1

**AECOM** 

M +852 5292 9136

From: Coco Ma < COCOMA@ramboll.com>

Sent: Tuesday, 8 July 2025 9:19 AM

To: Chen Ka Ho, Adrian <adrian.chen@fln-aecom.com>

**Subject:** RE: Various Lots in DD 51, Fanling - Enquiry for Latest Layout Plans for Fanling Bypass Eastern Section, Tai Wo Service Road West & Tai Wo Service Road East and Design Drawing/ As-built Drawing of Roadside Noise Barrier and Low Noise Road Surfacing for...

Dear Adrian,

Please find the attached location plan of the Subject Site with 300m assessment area for your reference. Thank you.

Kind regards

Coco Ma

**Environmental Consultant** 

D +852 3465 2807

cocoma@ramboll.com

Ramboll Hong Kong Limited

From: Chen Ka Ho, Adrian <a drian.chen@fln-aecom.com>

Sent: 07 July 2025 10:32

To: Coco Ma < COCOMA@ramboll.com>

**Subject:** RE: Various Lots in DD 51, Fanling - Enquiry for Latest Layout Plans for Fanling Bypass Eastern Section, Tai Wo Service Road West & Tai Wo Service Road East and Design Drawing/ As-built Drawing of Roadside Noise Barrier and Low Noise Road Surfacing for...

You don't often get email from adrian.chen@fln-aecom.com. Learn why this is important

Dear Coco,

Can you send me the location plan of the Subject Site with 300m assessment area for my reference. Thanks.

Best Regards,

#### **Adrian Chen**

Resident Engineer

Contract No. ND/2019/05

Fanling North New Development Area Phase 1

**AECOM** 

M +852 5292 9136

From: "Coco Ma" < COCOMA@ramboll.com >

To: "myleung1@cedd.gov.hk" <myleung1@cedd.gov.hk>

Cc: "Billy Fan" < bfan@ramboll.com >, "Simon Lai" < slai@ramboll.com >, "saihanglee@cedd.gov.hk"

<<u>saihanglee@cedd.gov.hk</u>>

Subject: RE: Various Lots in DD 51, Fanling - Enquiry for Latest Layout Plans for Fanling Bypass Eastern Section, Tai Wo Service Road West & Tai Wo Service Road East and Design Drawing/ As-built Drawing of Roadside Noise Barrier and Low Noise Road Surfacing for...

Dear Jojo,

Could you please advise when the requested information will be ready? Thank you.

Kind regards Coco Ma

**Environmental Consultant** 

D +852 3465 2807

cocoma@ramboll.com

Ramboll Hong Kong Limited

From: <a href="mailto:saihanglee@cedd.gov.hk">saihanglee@cedd.gov.hk</a>>

Sent: 18 June 2025 18:21
To: myleung1@cedd.gov.hk

Cc: Billy Fan < bfan@ramboll.com >; Simon Lai < slai@ramboll.com >; Coco Ma < COCOMA@ramboll.com >

Subject: 轉寄: Various Lots in DD 51, Fanling - Enquiry for Latest Layout Plans for Fanling Bypass Eastern Section, Tai Wo Service Road West & Tai Wo Service Road East and Design Drawing/ As-built Drawing of Roadside Noise Barrier and Low Noise Road Surfacing for...

Dear Jojo,

Please follow. Thanks.

Regards, Kenneth Lee Tel 3547 1620 E/25(N), NDO CEDD

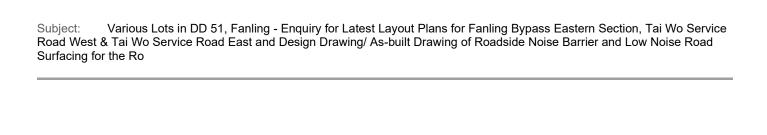
----- Forwarded by KENNETH SAI HANG LEE/CEDD/HKSARG on 18/06/2025 18:20 -----

From: "Coco Ma" < < COCOMA@ramboll.com >

To: "saihanglee@cedd.gov.hk" <saihanglee@cedd.gov.hk>

Cc: "Billy Fan" < bfan@ramboll.com >, "Simon Lai" < slai@ramboll.com >

Date: 16/06/2025 11:20



Dear Kenneth,

We (Ramboll Hong Kong Limited, an environmental consultancy company) are commissioned by the owner of the captioned Subject Site to carry out the Road Traffic Noise Impact Assessment (RTNIA) for a Proposed Development. The location plan of the Subject Site with 300m assessment area is attached for your reference.

In order to prepare for the RTNIA, we would be grateful if you can provide the information for Fanling Bypass Eastern Section, Tai Wo Service Road West (re-aligned), Tai Wo Service Road East (re-aligned) and any other proposed road within the 300m assessment area listed as below:

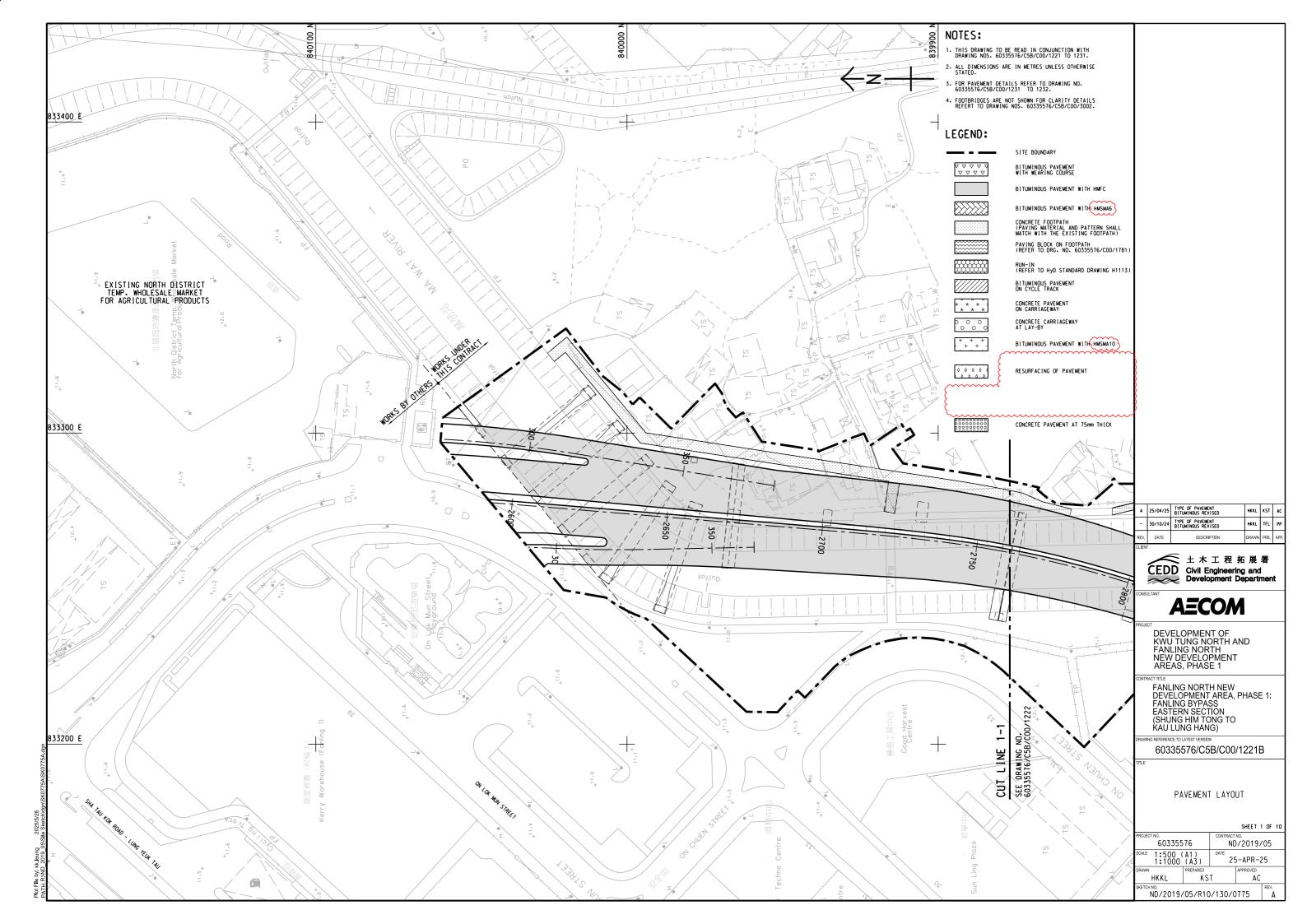
- 1. Tentative completion date.
- 2. Latest layout of alignment.
- 3. Design drawing/ As-built Drawing of the latest extent and type of material of LNRS (setting out).
- 4. Design drawing/ As-built Drawing of the latest extent and types of proposed roadside noise barriers within the 300m assessment area.

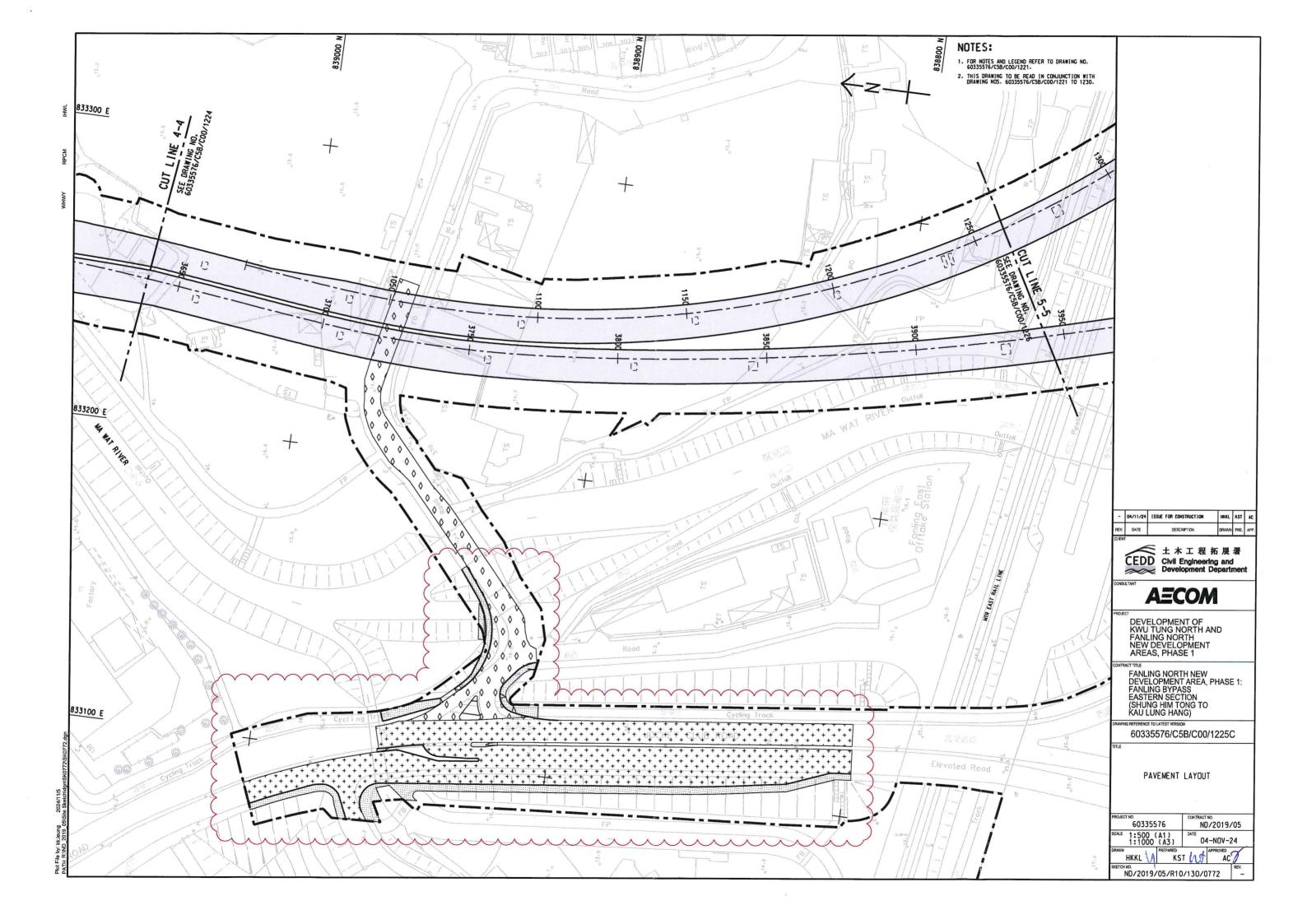
If appropriate, could we have a visit of your office for the inspection of such information, please?

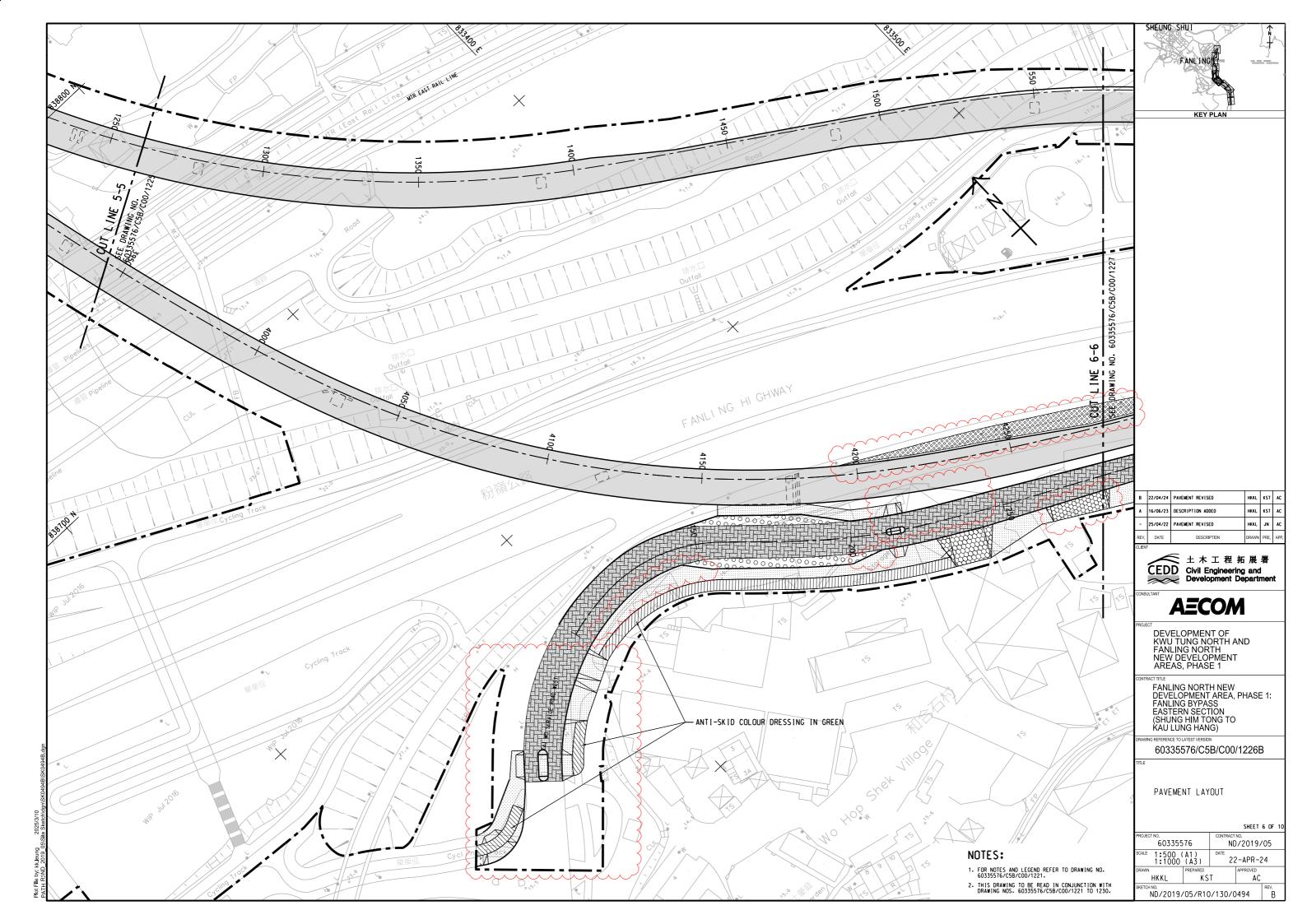
Should you have any questions on this enquiry, please do not hesitate to contact me, or our Mr. Billy FAN at 3465 2828.

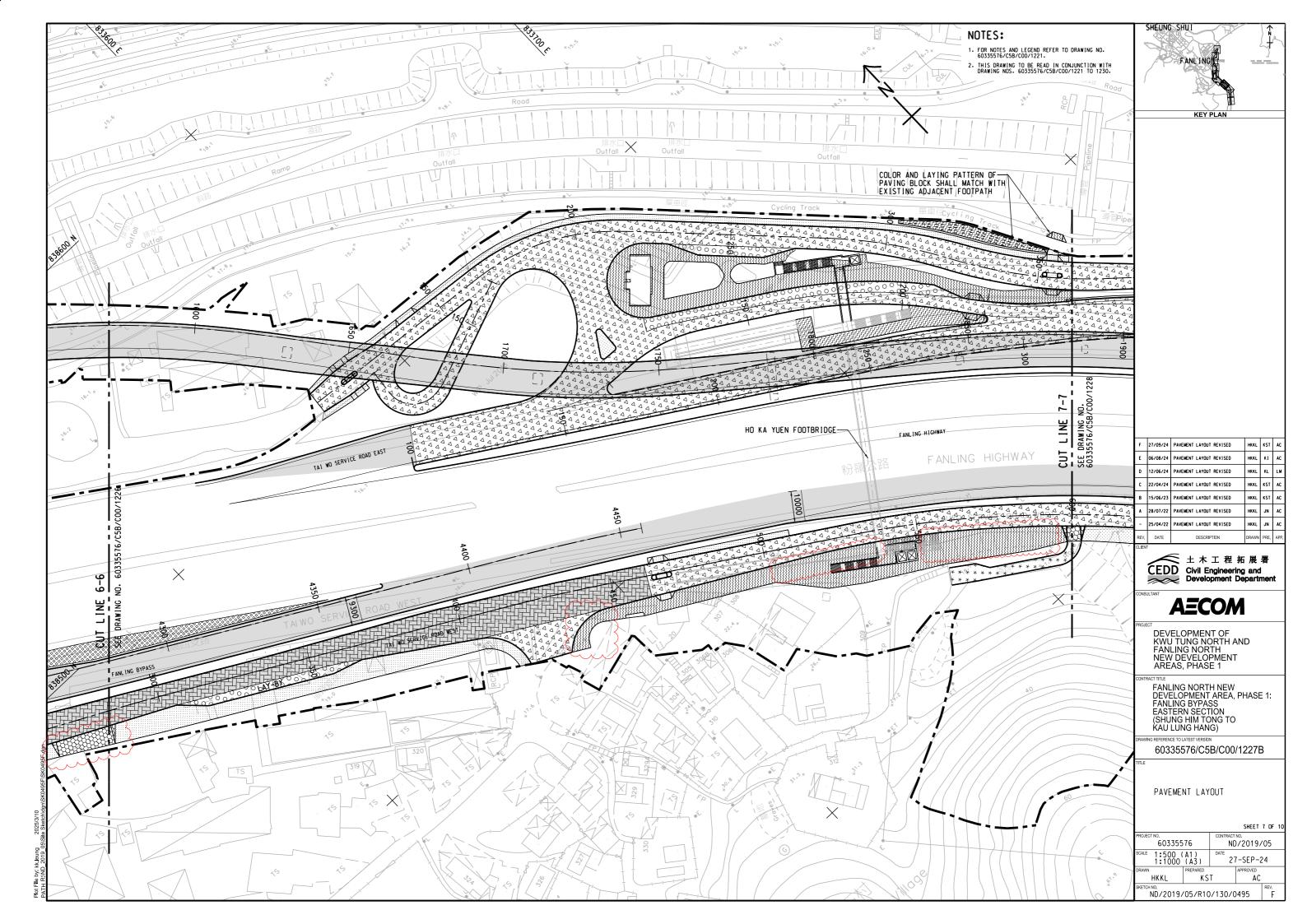
Kind regards

Coco Ma









### Coco Ma

 From:
 to3b.nt@hyd.gov.hk

 Sent:
 08 July 2025 15:40

To: Coco Ma

**Cc:** defl.nt@hyd.gov.hk; sto3.nt@hyd.gov.hk; ptoc.nt@hyd.gov.hk; to3a.nt@hyd.gov.hk;

to3c.nt@hyd.gov.hk; mens1.nt@hyd.gov.hk; msiowhsre.nt@hyd.gov.hk

**Subject:** Re: Fw: Enquiry for As-built Drawing of Roadside Noise Barrier and Low Noise Road

Surfacing for Various Lots in DD 51, Fanling

**Attachments:** Low Noise Surfacing in DD51.pdf

You don't often get email from to3b.nt@hyd.gov.hk. Learn why this is important

Dear Ms. Ma,

The sketch of Low Noise Surfacing and Noise Barrier for concerned location is prepared and attached for your information.

(File-Checksum-00000001)

Regards, Kam Yu Hang, TO(3)B 27624172



www.hyd.gov.hk

\*\*\* 此電郵訊息(連同任何附件)只發送給指定收件人。訊息可能包含享有特權資料。謹此通知,如你並非預定收件人,嚴禁使用、保留、披露、複製、 列印、轉發或發布此訊息。如收到誤發的訊息,請把訊息的所有副本(包括附件)從系統內清除,並立即通知發件人。\*\*\*

From: Cho Kwan WONG/HYD/HKSARG
To: Yu Hang KAM/HYD/HKSARG@HYD

Cc: Kwok Wai NG/HYD/HKSARG@HYD, Mok Wai YAN/HYD/HKSARG@HYD, Ho Yuen PANG/HYD/HKSARG@HYD, Sheung Kwan IP/HYD/HKSARG@HYD, Peter CK WONG/HYD/HKSARG@HYD, Chung Kee YIP/HYD/HKSARG@HYD

Date: 07/07/2025 15:58

Subject: Fw: Enquiry for As-built Drawing of Roadside Noise Barrier and Low Noise Road Surfacing for Various Lots in DD 51,

Fanling

Dear Mr KAM,

Many thanks!

Please assist to contact the consultant to provide her the drawing for their reference as per usual practice.

Best Regards, Kimmy WONG DE/FL NT Region, HyD

Tel: 2762 3966

<sup>\*\*\*</sup> This e-mail message (together with any attachments) is for the designated recipient only. It may contain information that is privileged. If you are not the intended recipient, you are hereby notified that any use, retention, disclosure, copying, printing, forwarding or dissemination of the message is strictly prohibited. If you have received the message in error, please erase all copies of the message (including attachments) from your system and notify the sender immediately. \*\*\*

---- Forwarded by Cho Kwan WONG/HYD/HKSARG on 07/07/2025 15:47 ----

From: Yu Hang KAM/HYD/HKSARG

To: Cho Kwan WONG/HYD/HKSARG@HYD

Cc: Kwok Wai NG/HYD/HKSARG@HYD, Mok Wai YAN/HYD/HKSARG@HYD, Ho Yuen PANG/HYD/HKSARG@HYD,

Sheung Kwan IP/HYD/HKSARG@HYD

Date: 07/07/2025 15:45

Subject: Re: Fw: Enquiry for As-built Drawing of Roadside Noise Barrier and Low Noise Road Surfacing for Various Lots in DD

51, Fanling

#### Dear Ms. Wong,

The sketch is prepared and attached for your information.
[attachment "Low Noise Surfacing in DD51.pdf" deleted by Yu Hang KAM/HYD/HKSARG]

Regards, Kam Yu Hang, TO(3)B 27624172



\*\*\* This e-mail message (together with any attachments) is for the designated recipient only. It may contain information that is privileged. If you are not the intended recipient, you are hereby notified that any use, retention, disclosure, copying, printing, forwarding or dissemination of the message is strictly prohibited. If you have received the message in error, please erase all copies of the message (including attachments) from your system and notify the sender immediately. \*\*\*

\*\*\* 此電郵訊息(連同任何附件)只發送給指定收件人。訊息可能包含享有特權資料。謹此通知,如你並非預定收件人,嚴禁使用、保留、披露、複製、 列印、轉發或發布此訊息。如收到誤發的訊息,請把訊息的所有副本(包括附件)從系統內清除,並立即通知發件人。\*\*\*

From: Kwok Wai NG/HYD/HKSARG
To: Yu Hang KAM/HYD/HKSARG@HYD
Cc: Mok Wai YAN/HYD/HKSARG@HYD

Date: 24/06/2025 17:07

Subject: Fw: Enquiry for As-built Drawing of Roadside Noise Barrier and Low Noise Road Surfacing for Various Lots in DD 51,

Fanling

Dear Frankie,

Please assist in investigating the enquiry the regarding caption subject and contract Ms. CoCo Ma.

Many thanks.

Billy Ng STO(3)/NT Tel. 2762 3925



<sup>\*\*\*</sup> This e-mail message (together with any attachments) is for the designated recipient only. It may contain information that is privileged. If you are not the intended recipient, you are hereby notified that any use, retention, disclosure, copying, printing, forwarding or dissemination of the message is strictly prohibited. If you have received the message in error, please erase all copies of the message (including attachments) from your system

and notify the sender immediately. \*\*\*

\*\*\* 此電郵訊息(連同任何附件)只發送給指定收件人。訊息可能包含享有特權資料。謹此通知,如你並非預定收件人,嚴禁使用、保留、披露、複製、列印、轉發或發布此訊息。如收到誤發的訊息,請把訊息的所有副本(包括附件)從系統內清除,並立即通知發件人。\*\*\*

----- Forwarded by Kwok Wai NG/HYD/HKSARG on 24/06/2025 17:02 -----

From: Mok Wai YAN/HYD/HKSARG
To: Kwok Wai NG/HYD/HKSARG@HYD

Date: 24/06/2025 10:09

Subject: Fw: Enquiry for As-built Drawing of Roadside Noise Barrier and Low Noise Road Surfacing for Various Lots in DD 51,

Fanling

Dear Billy,

Please contact Ms. CoCo Ma from Ramboll at 3465 2807 and follow up the request of the consultant stated below. Thanks.

Regards, George Yan PTO(C)/NT Tel. 2762 3927



\*\*\* This e-mail message (together with any attachments) is for the designated recipient only. It may contain information that is privileged. If you are not the intended recipient, you are hereby notified that any use, retention, disclosure, copying, printing, forwarding or dissemination of the message is strictly prohibited. If you have received the message in error, please erase all copies of the message (including attachments) from your system and notify the sender immediately. \*\*\* 此電郵訊息(運同任何附件)只發送給指定收件人。訊息可能包含享有特權資料。讓此通知,如你並非預定收件人、嚴禁使用、保留、披露、複製、列印、轉發或發布此訊息。如收到誤發的訊息,請把訊息的所有副本(包括附件)從系統內清除,並立即通知發件人。\*\*\*\*

----- Forwarded by Mok Wai YAN/HYD/HKSARG on 24/06/2025 10:07 -----

From: Cho Kwan WONG/HYD/HKSARG
To: "Coco Ma" < COCOMA@ramboll.com>

Cc: "Billy Fan" <bfan@ramboll.com>, "Simon Lai" <slai@ramboll.com>, ptoc.nt@hyd.gov.hk, ptocb.nt@hyd.gov.hk

Date: 24/06/2025 09:51

Subject: Fw: Enquiry for As-built Drawing of Roadside Noise Barrier and Low Noise Road Surfacing for Various Lots in DD 51,

Fanling

Dear Coco,

Please kindly contact the following officers for inspection of the as-built drawings:

Road pavement: PTO(C), Mr. YAN Mok-wai at 2762 3927

Existing structures (noise barriers) maintained by HyD: PTO/CB, Mr. CHAN King-man at 3526 0072

Thank you.

Best Regards, Kimmy WONG DE/FL NT Region, HyD Tel: 2762 3966

---- Forwarded by Cho Kwan WONG/HYD/HKSARG on 24/06/2025 09:45 ----

From: "Coco Ma" <COCOMA@ramboll.com>
To: "defl.nt@hyd.gov.hk" <defl.nt@hyd.gov.hk>

Cc: "Billy Fan" <bfan@ramboll.com>, "Simon Lai" <slai@ramboll.com>

Date: 06/06/2025 17:33

Subject: Enquiry for As-built Drawing of Roadside Noise Barrier and Low Noise Road Surfacing for Various Lots in DD 51,

Fanling

#### Dear Kimmy,

We (Ramboll, an environmental consultancy company) are commissioned by the owner of the captioned Subject Site to carry out the Road Traffic Noise Impact Assessment (RTNIA) for a Proposed Development. The location plan of the Subject Site with 300m assessment area is attached for your reference.

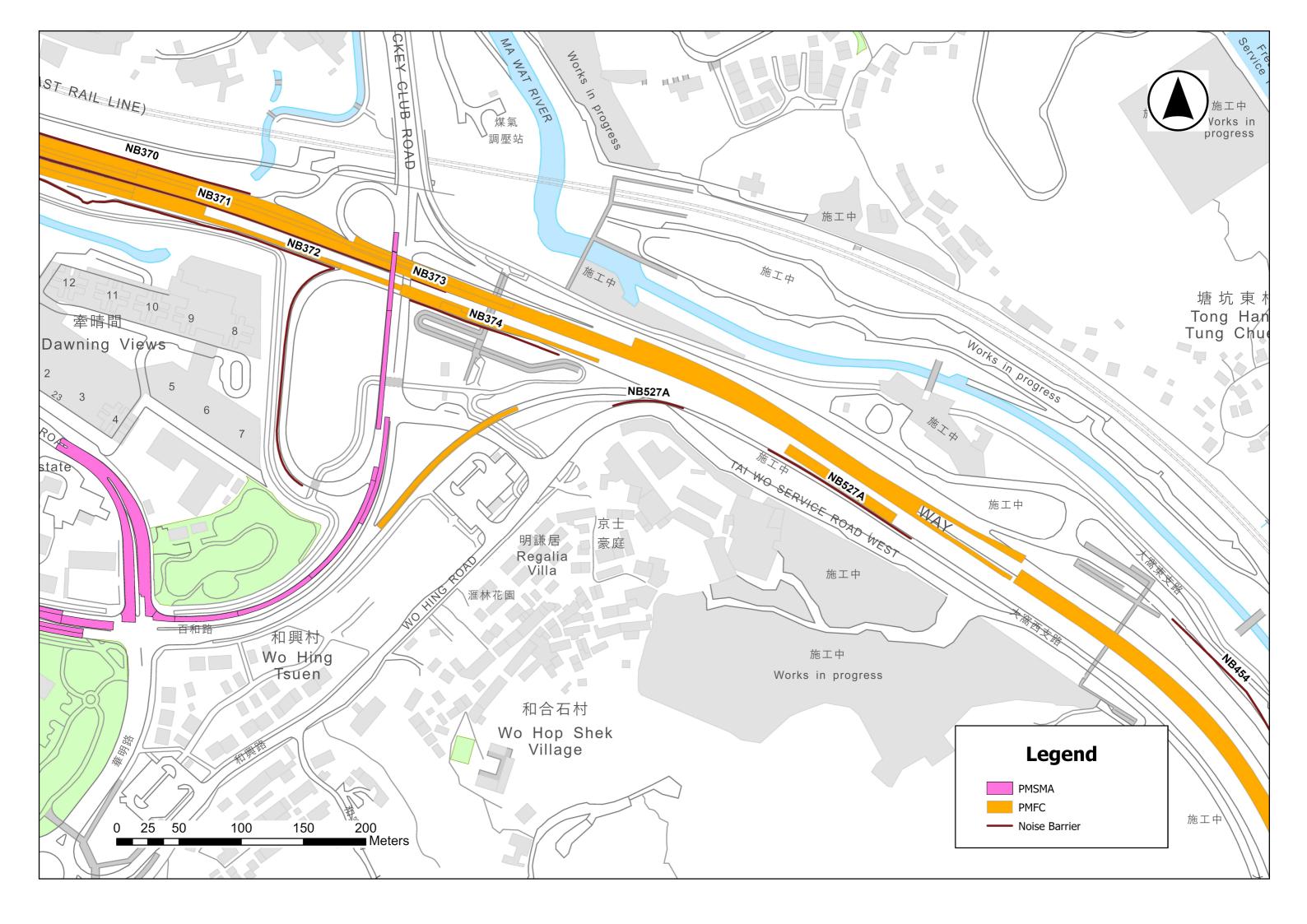
In order to carry out the RTNIA, we would be grateful if you could provide us the below information:

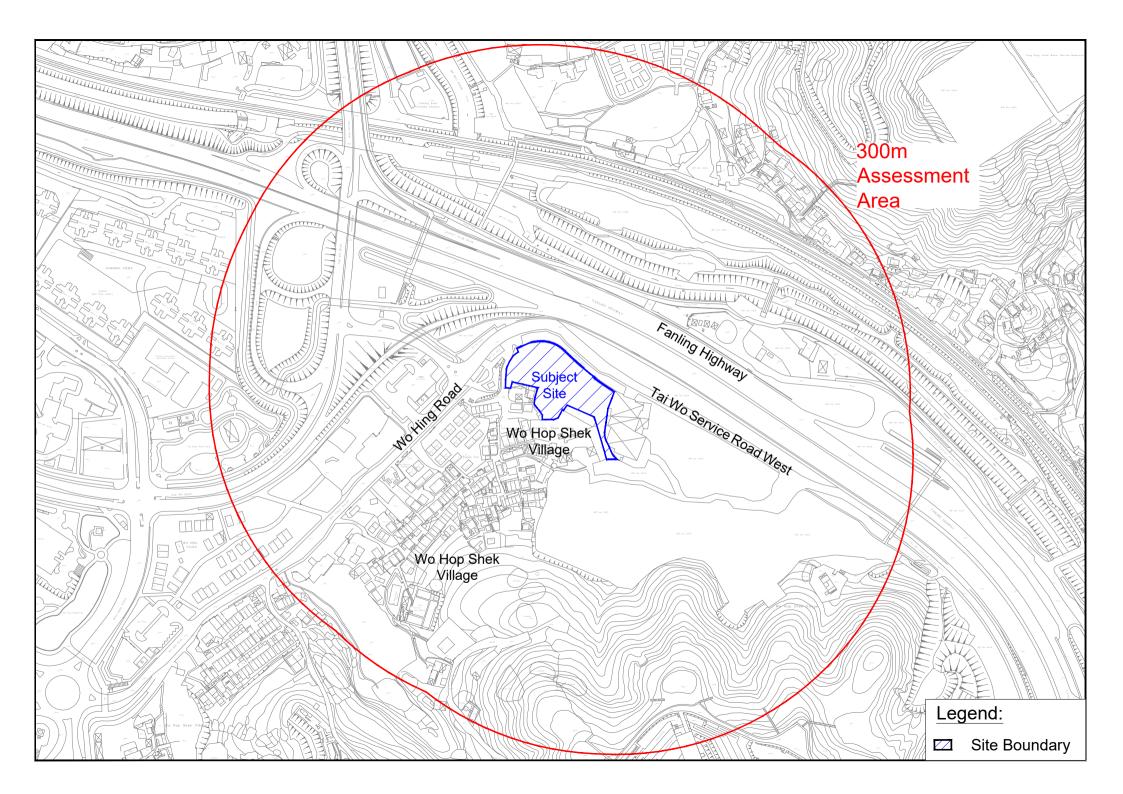
- 1. Latest Low Noise Road Surfacing extent (setting out) and material type (e.g. PMSMA6 and PMFC) applied on the existing/panned roads within 300m assessment area;
- 2. Maintenance records of low noise road surfacing materials; and
- 3. As-built drawing of noise barrier at the existing/planned roads within 300m assessment area.

If appropriate, could we have a visit of your office for the inspection of such information, please?

Should you have any questions on this enquiry, please do not hesitate to contact me, or our Billy Fan at 3465 2828.

2828.	
Kind regards Coco Ma	
Assistant Environmental Consultant	
D +852 3465 2807	
cocoma@ramboll.com	





Appendix 2.3 Results of Road Traffic Noise Impact Assessment (Base Case Scenario)



#### Predicted Road Traffic Noise (L10, dB(A)) at Selected Sensitive Receivers Base Case (AM Peak Flow)

Tower 1

Floor	mPD	N1-01	N1-02	N1-03	N1-04	N1-05	N1-06	N1-07	N1-08	N1-09	N1-10	N1-11	N1-12	N1-13	N1-14	N1-15	N1-16	N1-17	N1-18	N1-19	N1-20	N1-21	N1-22	N1-23
7/F	61.8	81	78	75	72	70	68	66	65	66	69	69	69	71	73	77	77	77	77	77	78	78	79	81
8/F	64.9	81	79	77	75	73	71	69	67	67	69	69	70	71	73	77	77	77	78	78	78	79	79	81
9/F	68.1	81	79	78	77	75	74	72	70	69	69	69	70	71	73	77	77	78	78	78	78	79	80	81
10/F	71.2	81	79	78	78	76	75	73	72	71	69	69	70	71	73	77	78	78	78	78	79	79	79	81
11/F	74.4	81	80	79	78	77	76	74	73	72	69	69	70	71	73	77	78	78	78	78	79	79	79	81
12/F	77.5	81	80	79	78	77	76	75	74	73	69	69	70	71	73	77	78	78	78	78	79	79	79	81
Max No	ise Level	81	80	79	78	77	76	75	74	73	69	69	70	71	73	77	78	78	78	78	79	79	80	81

Floor	mPD	N2-01	N2-02	N2-03	N2-04	N2-05	N2-06	N2-07	N2-08	N2-09	N2-10	N2-11	N2-12	N2-13	N2-14	N2-15	N2-16	N2-17	N2-18	N2-19	N2-20	N2-21	N2-22	N2-23
7/F	61.8	81	78	76	76	75	74	73	73	73	70	66	66	66	66	66	64	63	62	61	61	61	61	65
8/F	64.9	81	79	78	77	76	75	75	74	74	71	66	66	67	67	66	65	64	63	62	62	62	62	68
9/F	68.1	81	79	78	78	77	76	76	75	75	71	66	66	67	67	67	66	65	64	63	63	63	62	69
10/F	71.2	81	79	79	78	77	77	76	76	75	72	66	67	67	67	67	66	65	64	63	63	63	63	70
11/F	74.4	81	79	79	78	78	77	77	76	76	72	66	67	67	67	67	67	65	64	63	64	63	63	70
12/F	77.5	81	80	79	78	78	78	77	77	76	72	66	67	67	67	67	67	65	64	64	64	63	63	70
13/F	80.7	81	80	79	78	78	78	77	77	76	72	66	66	67	67	67	67	66	65	64	64	64	63	70
14/F	83.8	81	80	79	79	78	78	77	77	77	72	66	66	67	67	68	67	66	65	64	64	64	63	70
15/F	87.0	81	80	79	79	78	78	77	77	77	72	66	66	67	68	68	67	66	65	64	64	64	64	71
16/F	90.1	81	80	79	79	78	78	78	77	77	72	66	66	67	68	68	67	66	65	64	64	64	65	72
17/F	93.3	81	80	79	79	78	78	78	77	77	72	66	67	67	68	68	68	67	66	65	65	66	67	73
18/F	96.4	81	80	79	79	78	78	78	77	77	73	67	67	68	69	69	69	68	67	66	66	67	68	73
Max No	ise Level	81	80	79	79	78	78	78	77	77	73	67	67	68	69	69	69	68	67	66	66	67	68	73

Max Noise Level	01

#### Predicted Road Traffic Noise (L10, dB(A)) at Selected Sensitive Receivers Base Case (PM Peak Flow)

Tower 1

Floor	mPD	N1-01	N1-02	N1-03	N1-04	N1-05	N1-06	N1-07	N1-08	N1-09	N1-10	N1-11	N1-12	N1-13	N1-14	N1-15	N1-16	N1-17	N1-18	N1-19	N1-20	N1-21	N1-22	N1-23
7/F	61.8	81	77	75	72	69	67	65	64	65	68	69	69	71	73	77	77	77	77	77	78	78	79	81
8/F	64.9	81	79	77	75	73	70	68	66	66	69	69	69	71	73	77	77	77	77	78	78	79	80	81
9/F	68.1	81	79	78	77	75	73	71	69	68	69	69	69	71	73	77	77	78	78	78	78	79	80	81
10/F	71.2	81	80	79	78	76	74	73	72	71	69	69	69	71	73	77	77	78	78	78	79	79	80	81
11/F	74.4	81	80	79	78	77	75	74	73	72	69	69	69	71	73	77	78	78	78	78	79	79	80	81
12/F	77.5	81	80	79	78	77	76	75	74	73	69	69	69	71	73	77	78	78	78	78	79	79	79	81
Max No	ise Level	81	80	79	78	77	76	75	74	73	69	69	69	71	73	77	78	78	78	78	79	79	80	81

Tower	2	

Floor	mPD	N2-01	N2-02	N2-03	N2-04	N2-05	N2-06	N2-07	N2-08	N2-09	N2-10	N2-11	N2-12	N2-13	N2-14	N2-15	N2-16	N2-17	N2-18	N2-19	N2-20	N2-21	N2-22	N2-23
7/F	61.8	81	78	76	75	74	74	73	73	72	70	66	66	66	66	66	64	63	62	61	61	61	61	64
8/F	64.9	81	79	78	76	76	75	74	74	73	70	66	66	66	66	66	65	64	63	62	62	62	62	68
9/F	68.1	81	79	78	78	77	76	76	75	75	71	66	66	66	66	66	65	64	63	63	63	62	62	69
10/F	71.2	81	79	79	78	77	77	76	76	75	71	66	66	66	67	66	66	65	64	63	63	63	62	70
11/F	74.4	81	79	79	78	78	77	77	76	76	71	66	66	66	67	67	66	65	64	63	63	63	62	70
12/F	77.5	81	80	79	78	78	77	77	76	76	72	66	66	66	67	67	66	65	64	63	63	63	62	70
13/F	80.7	81	80	79	78	78	78	77	77	76	72	66	66	66	67	67	66	65	64	63	64	63	63	70
14/F	83.8	81	80	79	78	78	78	77	77	77	72	66	66	66	67	67	66	65	64	64	64	63	63	71
15/F	87.0	81	80	79	79	78	78	77	77	77	72	66	66	66	67	67	67	65	65	64	64	64	64	71
16/F	90.1	81	80	79	79	78	78	77	77	77	72	66	66	66	67	68	67	66	65	64	64	64	65	72
17/F	93.3	81	80	79	79	78	78	77	77	77	72	66	66	67	68	68	68	67	66	64	65	66	67	73
18/F	96.4	81	80	79	79	78	78	78	77	77	72	67	67	68	69	69	69	68	67	65	66	67	68	73
Max No	ise Level	81	80	79	79	78	78	78	77	77	72	67	67	68	69	69	69	68	67	65	66	67	68	73

Max. Noise Level: 81

#### Predicted Road Traffic Noise (L10, dB(A)) at Selected Sensitive Receivers Base Case (Combined)

Tower 1

Floor	mPD	N1-01	N1-02	N1-03	N1-04	N1-05	N1-06	N1-07	N1-08	N1-09	N1-10	N1-11	N1-12	N1-13	N1-14	N1-15	N1-16	N1-17	N1-18	N1-19	N1-20	N1-21	N1-22	N1-23
7/F	61.8	81	78	75	72	70	68	66	65	66	69	69	69	71	73	77	77	77	77	77	78	78	79	81
8/F	64.9	81	79	77	75	73	71	69	67	67	69	69	70	71	73	77	77	77	78	78	78	79	80	81
9/F	68.1	81	79	78	77	75	74	72	70	69	69	69	70	71	73	77	77	78	78	78	78	79	80	81
10/F	71.2	81	80	79	78	76	75	73	72	71	69	69	70	71	73	77	78	78	78	78	79	79	80	81
11/F	74.4	81	80	79	78	77	76	74	73	72	69	69	70	71	73	77	78	78	78	78	79	79	80	81
12/F	77.5	81	80	79	78	77	76	75	74	73	69	69	70	71	73	77	78	78	78	78	79	79	79	81
Max No	ise Level	81	80	79	78	77	76	75	74	73	69	69	70	71	73	77	78	78	78	78	79	79	80	81

Floor	mPD	N2-01	N2-02	N2-03	N2-04	N2-05	N2-06	N2-07	N2-08	N2-09	N2-10	N2-11	N2-12	N2-13	N2-14	N2-15	N2-16	N2-17	N2-18	N2-19	N2-20	N2-21	N2-22	N2-23
7/F	61.8	81	78	76	76	75	74	73	73	73	70	66	66	66	66	66	64	63	62	61	61	61	61	65
8/F	64.9	81	79	78	77	76	75	75	74	74	71	66	66	67	67	66	65	64	63	62	62	62	62	68
9/F	68.1	81	79	78	78	77	76	76	75	75	71	66	66	67	67	67	66	65	64	63	63	63	62	69
10/F	71.2	81	79	79	78	77	77	76	76	75	72	66	67	67	67	67	66	65	64	63	63	63	63	70
11/F	74.4	81	79	79	78	78	77	77	76	76	72	66	67	67	67	67	67	65	64	63	64	63	63	70
12/F	77.5	81	80	79	78	78	78	77	77	76	72	66	67	67	67	67	67	65	64	64	64	63	63	70
13/F	80.7	81	80	79	78	78	78	77	77	76	72	66	66	67	67	67	67	66	65	64	64	64	63	70
14/F	83.8	81	80	79	79	78	78	77	77	77	72	66	66	67	67	68	67	66	65	64	64	64	63	71
15/F	87.0	81	80	79	79	78	78	77	77	77	72	66	66	67	68	68	67	66	65	64	64	64	64	71
16/F	90.1	81	80	79	79	78	78	78	77	77	72	66	66	67	68	68	67	66	65	64	64	64	65	72
17/F	93.3	81	80	79	79	78	78	78	77	77	72	66	67	67	68	68	68	67	66	65	65	66	67	73
18/F	96.4	81	80	79	79	78	78	78	77	77	73	67	67	68	69	69	69	68	67	66	66	67	68	73
Max No	ise Level	81	80	79	79	78	78	78	77	77	73	67	67	68	69	69	69	68	67	66	66	67	68	73

Max. Noise Level:

Appendix 2.4 Results of Road Traffic Noise Impact Assessment (Mitigated Scenario)



#### Predicted Road Traffic Noise (L10, dB(A)) at Selected Sensitive Receivers Mitigated Case (Acoustic Fin) (AM Peak Flow)

Tower 1

Floor	mPD	N1-01	N1-02	N1-03	N1-04	N1-05	N1-06	N1-07	N1-08	N1-09	N1-10	N1-11	N1-12	N1-13	N1-14	N1-15	N1-16	N1-17	N1-18	N1-19	N1-20	N1-21	N1-22	N1-23
7/F	61.8	78	76	74	72	69	67	66	64	66	69	69	69	71	73	77	77	77	77	77	78	78	78	78
8/F	64.9	78	78	76	75	73	71	68	66	67	69	69	70	71	73	77	77	77	77	78	78	78	78	78
9/F	68.1	78	78	77	76	74	73	72	70	69	69	69	70	71	73	77	77	78	78	78	78	78	78	78
10/F	71.2	78	78	78	77	76	74	73	72	71	69	69	70	71	73	77	77	78	78	78	78	78	78	78
11/F	74.4	78	78	78	77	76	75	74	73	72	69	69	70	71	73	77	77	78	78	78	78	78	78	78
12/F	77.5	78	79	78	77	77	76	74	73	73	69	69	70	71	73	77	77	78	78	78	78	78	78	78
Max No	ise Level	78	79	78	77	77	76	74	73	73	69	69	70	71	73	77	77	78	78	78	78	78	78	78

Floor	mPD	N2-01	N2-02	N2-03	N2-04	N2-05	N2-06	N2-07	N2-08	N2-09	N2-10	N2-11	N2-12	N2-13	N2-14	N2-15	N2-16	N2-17	N2-18	N2-19	N2-20	N2-21	N2-22	N2-23
7/F	61.8	78	77	76	75	75	74	73	73	73	70	66	66	66	66	66	64	63	62	61	61	61	61	64
8/F	64.9	78	77	77	76	76	75	75	74	73	71	66	66	67	67	66	65	64	63	62	62	62	62	68
9/F	68.1	78	78	78	77	76	76	76	75	75	71	66	66	67	67	67	66	65	64	63	63	63	62	69
10/F	71.2	78	78	78	77	77	77	76	76	75	72	66	67	67	67	67	66	65	64	63	63	63	63	70
11/F	74.4	78	78	78	78	77	77	76	76	76	72	66	67	67	67	67	66	65	64	63	64	63	63	70
12/F	77.5	78	78	78	78	77	77	77	76	76	72	66	67	67	67	67	66	65	64	64	64	63	63	70
13/F	80.7	78	78	78	78	78	77	77	77	76	72	66	66	67	67	67	67	66	65	64	64	64	63	70
14/F	83.8	78	78	78	78	78	77	77	77	76	72	66	66	67	67	67	67	66	65	64	64	64	63	70
15/F	87.0	78	78	78	78	78	77	77	77	77	72	66	66	67	67	67	67	66	65	64	64	64	64	71
16/F	90.1	78	78	78	78	78	77	77	77	77	72	66	66	67	68	68	67	66	65	64	64	64	65	72
17/F	93.3	78	78	78	78	78	78	77	77	77	72	66	67	67	68	68	68	67	66	65	65	66	67	73
18/F	96.4	78	78	78	78	78	78	77	77	77	73	67	67	68	69	69	69	68	67	66	66	67	68	73
Max No	ise Level	78	78	78	78	78	78	77	77	77	73	67	67	68	69	69	69	68	67	66	66	67	68	73

Max Noise Level:	70

#### Predicted Road Traffic Noise (L10, dB(A)) at Selected Sensitive Receivers Mitigated Case (Acoustic Fin) (PM Peak Flow)

Tower 1

Floor	mPD	N1-01	N1-02	N1-03	N1-04	N1-05	N1-06	N1-07	N1-08	N1-09	N1-10	N1-11	N1-12	N1-13	N1-14	N1-15	N1-16	N1-17	N1-18	N1-19	N1-20	N1-21	N1-22	N1-23
7/F	61.8	81	76	74	71	69	66	65	63	65	68	69	69	71	73	77	77	77	77	77	77	78	78	81
8/F	64.9	81	78	76	74	72	70	68	66	66	69	69	69	71	73	77	77	77	77	78	78	78	78	81
9/F	68.1	81	78	77	76	74	73	71	69	68	69	69	69	71	73	77	77	77	78	78	78	78	78	81
10/F	71.2	81	78	78	77	76	74	72	71	70	69	69	69	71	73	77	77	78	78	78	78	78	78	81
11/F	74.4	81	78	78	77	76	75	73	72	72	69	69	69	71	73	77	77	78	78	78	78	78	78	81
12/F	77.5	81	79	78	78	77	76	74	73	72	69	69	69	71	73	77	77	78	78	78	78	78	78	81
Max No	ise Level	81	79	78	78	77	76	74	73	72	69	69	69	71	73	77	77	78	78	78	78	78	78	81

Tower	2	

Floor	mPD	N2-01	N2-02	N2-03	N2-04	N2-05	N2-06	N2-07	N2-08	N2-09	N2-10	N2-11	N2-12	N2-13	N2-14	N2-15	N2-16	N2-17	N2-18	N2-19	N2-20	N2-21	N2-22	N2-23
7/F	61.8	81	76	76	75	74	74	73	73	72	70	66	66	66	66	66	64	63	62	61	61	61	61	64
8/F	64.9	81	77	77	76	75	75	74	74	73	70	66	66	66	66	66	65	64	63	62	62	62	62	67
9/F	68.1	81	77	77	77	76	76	75	75	74	71	66	66	66	66	66	65	64	63	63	63	62	62	69
10/F	71.2	81	78	78	77	77	76	76	75	75	71	66	66	66	67	66	66	65	64	63	63	63	62	70
11/F	74.4	81	78	78	78	77	77	76	76	75	71	66	66	66	67	67	66	65	64	63	63	63	62	70
12/F	77.5	81	78	78	78	77	77	77	76	76	72	66	66	66	67	67	66	65	64	63	63	63	62	70
13/F	80.7	81	78	78	78	77	77	77	76	76	72	66	66	66	67	67	66	65	64	63	64	63	63	70
14/F	83.8	81	78	78	78	77	77	77	77	76	72	66	66	66	67	67	66	65	64	64	64	63	63	70
15/F	87.0	81	78	78	78	78	77	77	77	76	72	66	66	66	67	67	66	65	65	64	64	64	64	71
16/F	90.1	81	78	78	78	78	77	77	77	76	72	66	66	66	67	67	67	66	65	64	64	64	65	72
17/F	93.3	81	78	78	78	78	77	77	77	76	72	66	66	67	68	68	68	67	66	64	65	66	67	73
18/F	96.4	81	78	78	78	78	77	77	77	77	72	67	67	68	69	69	69	68	67	65	66	67	68	73
Max No	ise Level	81	78	78	78	78	77	77	77	77	72	67	67	68	69	69	69	68	67	65	66	67	68	73

Max. Noise Level: 81

#### Predicted Road Traffic Noise (L10, dB(A)) at Selected Sensitive Receivers Mitigated Case (Acoustic Fin) (Combined)

Tower 1

Floor	mPD	N1-01	N1-02	N1-03	N1-04	N1-05	N1-06	N1-07	N1-08	N1-09	N1-10	N1-11	N1-12	N1-13	N1-14	N1-15	N1-16	N1-17	N1-18	N1-19	N1-20	N1-21	N1-22	N1-23
7/F	61.8	81	76	74	72	69	67	66	64	66	69	69	69	71	73	77	77	77	77	77	78	78	78	81
8/F	64.9	81	78	76	75	73	71	68	66	67	69	69	70	71	73	77	77	77	77	78	78	78	78	81
9/F	68.1	81	78	77	76	74	73	72	70	69	69	69	70	71	73	77	77	78	78	78	78	78	78	81
10/F	71.2	81	78	78	77	76	74	73	72	71	69	69	70	71	73	77	77	78	78	78	78	78	78	81
11/F	74.4	81	78	78	77	76	75	74	73	72	69	69	70	71	73	77	77	78	78	78	78	78	78	81
12/F	77.5	81	79	78	78	77	76	74	73	73	69	69	70	71	73	77	77	78	78	78	78	78	78	81
Max No	ise Level	81	79	78	78	77	76	74	73	73	69	69	70	71	73	77	77	78	78	78	78	78	78	81

Floor	mPD	N2-01	N2-02	N2-03	N2-04	N2-05	N2-06	N2-07	N2-08	N2-09	N2-10	N2-11	N2-12	N2-13	N2-14	N2-15	N2-16	N2-17	N2-18	N2-19	N2-20	N2-21	N2-22	N2-23
7/F	61.8	81	77	76	75	75	74	73	73	73	70	66	66	66	66	66	64	63	62	61	61	61	61	64
8/F	64.9	81	77	77	76	76	75	75	74	73	71	66	66	67	67	66	65	64	63	62	62	62	62	68
9/F	68.1	81	78	78	77	76	76	76	75	75	71	66	66	67	67	67	66	65	64	63	63	63	62	69
10/F	71.2	81	78	78	77	77	77	76	76	75	72	66	67	67	67	67	66	65	64	63	63	63	63	70
11/F	74.4	81	78	78	78	77	77	76	76	76	72	66	67	67	67	67	66	65	64	63	64	63	63	70
12/F	77.5	81	78	78	78	77	77	77	76	76	72	66	67	67	67	67	66	65	64	64	64	63	63	70
13/F	80.7	81	78	78	78	78	77	77	77	76	72	66	66	67	67	67	67	66	65	64	64	64	63	70
14/F	83.8	81	78	78	78	78	77	77	77	76	72	66	66	67	67	67	67	66	65	64	64	64	63	70
15/F	87.0	81	78	78	78	78	77	77	77	77	72	66	66	67	67	67	67	66	65	64	64	64	64	71
16/F	90.1	81	78	78	78	78	77	77	77	77	72	66	66	67	68	68	67	66	65	64	64	64	65	72
17/F	93.3	81	78	78	78	78	78	77	77	77	72	66	67	67	68	68	68	67	66	65	65	66	67	73
18/F	96.4	81	78	78	78	78	78	77	77	77	73	67	67	68	69	69	69	68	67	66	66	67	68	73
Max No	ise Level	81	78	78	78	78	78	77	77	77	73	67	67	68	69	69	69	68	67	66	66	67	68	73

Max Noise Level	01

#### Predicted Road Traffic Noise (L10, dB(A)) at Selected Sensitive Receivers Mitigated Case (Acoustic Window (Baffle Type) and Acoustic Fin )

Tower 1

Floor	mPD	N1-01	N1-02	N1-03	N1-04	N1-05	N1-06	N1-07	N1-08	N1-09	N1-10	N1-11	N1-12	N1-13	N1-14	N1-15	N1-16	N1-17	N1-18	N1-19	N1-20	N1-21	N1-22	N1-23
7/F	61.8	69	68	66	63	69	67	66	64	66	69	69	69	62	65	68	68	69	69	69	69	69	69	70
8/F	64.9	70	69	68	66	64	62	68	66	67	69	69	70	62	65	69	69	69	69	69	69	70	70	70
9/F	68.1	70	70	69	68	66	65	63	70	69	69	69	70	62	65	69	69	69	69	69	70	70	70	70
10/F	71.2	70	70	69	69	67	66	64	63	62	69	69	70	62	65	69	69	69	69	69	70	70	70	70
11/F	74.4	70	70	70	69	68	67	65	64	64	69	69	70	62	65	69	69	69	69	69	70	70	70	70
12/F	77.5	70	70	70	69	68	67	66	65	64	69	69	70	62	65	69	69	69	69	69	70	70	70	70
Max No	ise Level	70	70	70	69	69	67	68	70	69	69	69	70	62	65	69	69	69	69	69	70	70	70	70

Floor	mPD	N2-01	N2-02	N2-03	N2-04	N2-05	N2-06	N2-07	N2-08	N2-09	N2-10	N2-11	N2-12	N2-13	N2-14	N2-15	N2-16	N2-17	N2-18	N2-19	N2-20	N2-21	N2-22	N2-23
7/F	61.8	69	68	67	67	66	65	65	64	64	70	66	66	66	66	66	64	63	62	61	61	61	61	64
8/F	64.9	69	69	68	68	67	67	66	65	65	62	66	66	67	67	66	65	64	63	62	62	62	62	68
9/F	68.1	70	69	69	69	68	68	67	67	66	63	66	66	67	67	67	66	65	64	63	63	63	62	69
10/F	71.2	70	69	69	69	69	68	68	67	67	63	66	67	67	67	67	66	65	64	63	63	63	63	70
11/F	74.4	70	69	69	69	69	68	68	68	67	63	66	67	67	67	67	66	65	64	63	64	63	63	70
12/F	77.5	70	70	69	69	69	69	68	68	67	63	66	67	67	67	67	66	65	64	64	64	63	63	70
13/F	80.7	70	70	70	69	69	69	68	68	68	64	66	66	67	67	67	67	66	65	64	64	64	63	70
14/F	83.8	70	70	70	69	69	69	69	68	68	64	66	66	67	67	67	67	66	65	64	64	64	63	70
15/F	87.0	70	70	70	69	69	69	69	68	68	64	66	66	67	67	67	67	66	65	64	64	64	64	62
16/F	90.1	70	70	70	69	69	69	69	68	68	64	66	66	67	68	68	67	66	65	64	64	64	65	63
17/F	93.3	70	70	70	69	69	69	69	68	68	64	66	67	67	68	68	68	67	66	65	65	66	67	64
18/F	96.4	70	70	70	70	69	69	69	68	68	64	67	67	68	69	69	69	68	67	66	66	67	68	65
Max No	ise Level	70	70	70	70	69	69	69	68	68	70	67	67	68	69	69	69	68	67	66	66	67	68	70

Max. Noise Level: 70

Noise level exceed stardand of 70 dB(A)

AW(BT)-1 AW(BT)-2

Appendix 3.1 Site Survey Photo Records



### Appendix 3.1 - Site Survey Photo Records

### 4 June 2025 Site Survey



1. Brilliant Towing Company. Minor activities (e.g. tyre replacement) and parking of lorries were observed. (G01)



2. K. Kee Engineering Company Limited. Covered warehouse was identified. Operation of electic hoist was observed. (E01 to E05)

EA Report	Proposed EV Mobility City with Ancillary Staff Quarters and Talent Accommodation at Various Lots in D.D. 51 and Adjoining Government Land, Fanling



Noise Source	Noise Source ID	x	У	Quantity	Day and Evening Time SWL, dB(A)
K. Kee Engineering Company Limited	E01	833405.3	838491.2	1	95.0
K. Kee Engineering Company Limited	E02	833403.1	838485.5	1	95.0
K. Kee Engineering Company Limited	E03	833400.8	838479.8	1	95.0
K. Kee Engineering Company Limited	E04	833399.4	838476.0	1	95.0
K. Kee Engineering Company Limited	E05	833397.9	838472.3	1	95.0
Brilliant Towing Company	G01	833396.3	838466.7	1	97.0

Appendix 3.3 Results of Fixed Noise Impact Assessment



# Proposed EV Mobility City with Ancillary Staff Quarters and Talent Accommodation at Various Lots in D.D. 51 and Adjoining Government Land, Fanling Detailed Calculation of Fixed Source Noise Impact Assessment

NSR	х	у								
F01	833365.5	838497.6								
Source	Source ID	х	у	Day and Evening Time SWL, dB(A)	Shortest Distance from Noise Source to NSR, m	Distance Attenuation, dB(A)	Barrier Correction, dB(A)	Tonality Correction, dB(A)	Façade Correction, dB(A)	Day and Evening Time SPL, Leq (30min) dB(A)
K. Kee Engineering Company Limited	E01	833405.3	838491.2	95.0	40	-40	0	3	3	60.9
K. Kee Engineering Company Limited	E02	833403.1	838485.5	95.0	39	-40	0	3	3	61.1
K. Kee Engineering Company Limited	E03	833400.8	838479.8	95.0	40	-40	0	3	3	61.1
K. Kee Engineering Company Limited	E04	833399.4	838476.0	95.0	40	-40	0	3	3	60.9
K. Kee Engineering Company Limited	E05	833397.9	838472.3	95.0	41	-40	0	3	3	60.7
Brilliant Towing Company	G01	833396.3	838466.7	97.0	44	-41	0	0	3	59.2

Predicted SPL, dB(A)

68

Acceptable Noise Level for ASR "C", dB(A)

70

<sup>\*</sup> No night time operation for all noise sources

# Proposed EV Mobility City with Ancillary Staff Quarters and Talent Accommodation at Various Lots in D.D. 51 and Adjoining Government Land, Fanling Detailed Calculation of Fixed Source Noise Impact Assessment

NSR	х	у								
F02	833354.8	838482.2								
Source	Source ID	х	у	Day and Evening Time SWL, dB(A)	Shortest Distance from Noise Source to NSR, m	Distance Attenuation, dB(A)	Barrier Correction, dB(A)	Tonality Correction, dB(A)	Façade Correction, dB(A)	Day and Evening Time SPL, Leq (30min) dB(A)
K. Kee Engineering Company Limited	E01	833405.3	838491.2	95.0	51	-42	0	3	3	58.8
K. Kee Engineering Company Limited	E02	833403.1	838485.5	95.0	48	-42	0	3	3	59.3
K. Kee Engineering Company Limited	E03	833400.8	838479.8	95.0	46	-41	0	3	3	59.7
K. Kee Engineering Company Limited	E04	833399.4	838476.0	95.0	45	-41	0	3	3	59.9
K. Kee Engineering Company Limited	E05	833397.9	838472.3	95.0	44	-41	0	3	3	60.1
Brilliant Towing Company	G01	833396.3	838466.7	97.0	44	-41	0	0	3	59.1

Predicted SPL, dB(A)

67

Acceptable Noise Level for ASR "C", dB(A)

70

<sup>\*</sup> No night time operation for all noise sources

# Proposed EV Mobility City with Ancillary Staff Quarters and Talent Accommodation at Various Lots in D.D. 51 and Adjoining Government Land, Fanling Detailed Calculation of Fixed Source Noise Impact Assessment

NSR	х	у								
F03	833315.2	838526.6								
Source	Source ID	х	у	Day and Evening Time SWL, dB(A)	Shortest Distance from Noise Source to NSR, m	Distance Attenuation, dB(A)	Barrier Correction, dB(A)	Tonality Correction, dB(A)	Façade Correction, dB(A)	Day and Evening Time SPL, Leq (30min) dB(A)
K. Kee Engineering Company Limited	E01	833405.3	838491.2	95.0	97	-48	0	3	3	53.3
K. Kee Engineering Company Limited	E02	833403.1	838485.5	95.0	97	-48	0	3	3	53.3
K. Kee Engineering Company Limited	E03	833400.8	838479.8	95.0	98	-48	0	3	3	53.2
K. Kee Engineering Company Limited	E04	833399.4	838476.0	95.0	98	-48	0	3	3	53.2
K. Kee Engineering Company Limited	E05	833397.9	838472.3	95.0	99	-48	0	3	3	53.1
Brilliant Towing Company	G01	833396.3	838466.7	97.0	101	-48	0	0	3	51.9

Predicted SPL, dB(A)

61

Acceptable Noise Level for ASR "C", dB(A)

70

<sup>\*</sup> No night time operation for all noise sources

EA Report	Proposed EV Mobility City with Ancillary Staff Quarters and Talent Accommodation at Various Lots in D.D. 51 and Adjoining Government Land, Fanling
Appendix 4.1	Correspondence with Environmental Protection Department

### **Billy Fan**

From: ceciliaymchan@epd.gov.hk

**Sent:** 26 June 2025 11:27

To: Billy Fan

**Subject:** Request of Informtaion for Odour Complaints within 200m Assessment Area from

Application Site - Various Lots in DD 51, Fanling

You don't often get email from ceciliaymchan@epd.gov.hk. Learn why this is important

Your ref: SDMFLD51EI00\_0\_0002L.25

Dear Mr. FAN,

I refer to your letter dated 17 Jun 2025 on the captioned.

Regarding your enquiries in above letter, this Regional Office has checked the record within the period of 17 Jun 2019 - 17 Jun 2025. There are 3 records of odour complaints within the 200m assessment area, all received in 2024.

Should you have any query on the matter, please contact the undersigned at 2158 5718. Thank you.

Regards, Cecilia CHAN Regional Office (North) /EPD



Ref.: SDMFLD51EI00\_0\_0002L.25

By Fax (2685 1155) & Post

17 June 2025

Environmental Protection Department
Environmental Compliance Division
Regional Office (North), North
10th floor, Shatin Government Offices
No.1 Sheung Wo Che Road, Sha Tin, New Territories

Dear Sir / Madam,

## Request of Information for Odour Complaints within 200m Assessment Area from Application Site

We are the environmental consultant employed by the project proponent for conducting an Environmental Assessment for the Proposed Development at Various Lots in D.D. 51, Fanling.

Of particular interest is whether there is any information regarding historical complaints received in the past five years (2019-2024) and this year (2025) on the odour issue (if any) within 200m Assessment Area from the Application Site.

If there are odour complaints within 200m Assessment Area from the Application Site, we would be much appreciated if you would provide us the number of complaints received in each year between 2019 to 2025.

We would be grateful if there is any additional information including the date of the complaint, the affected area, as well as any identification of the odour source(s) and any mitigation measures or improvements of the odour source(s) that have been implemented after receiving the complaint(s), if necessary.

Due to the urgency of the project, we would be much appreciated if you could provide the requested information by **30 June 2025**.

Should you have any queries, please do not hesitate to contact the undersigned at 3465 2828.

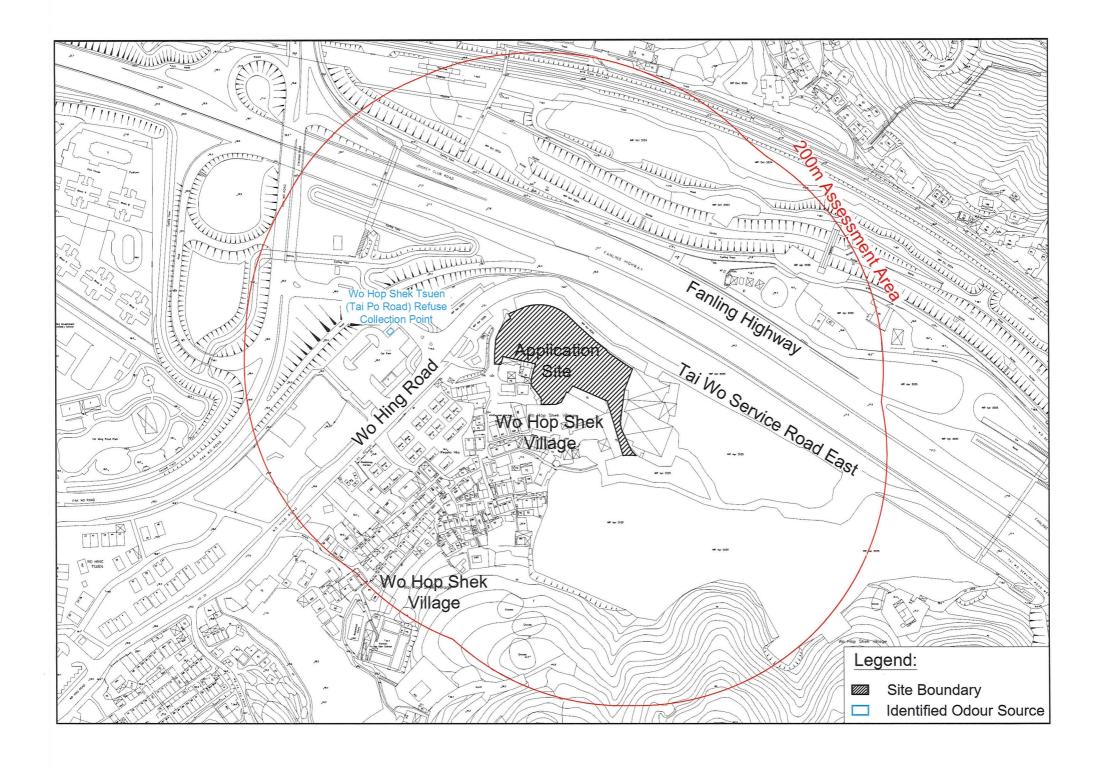
Yours faithfully, For and on behalf of Ramboll Hong Kong Limited

Billy Fan

**Principal Consultant** 

Encl. Plan of 200m Assessment Area and Application Site

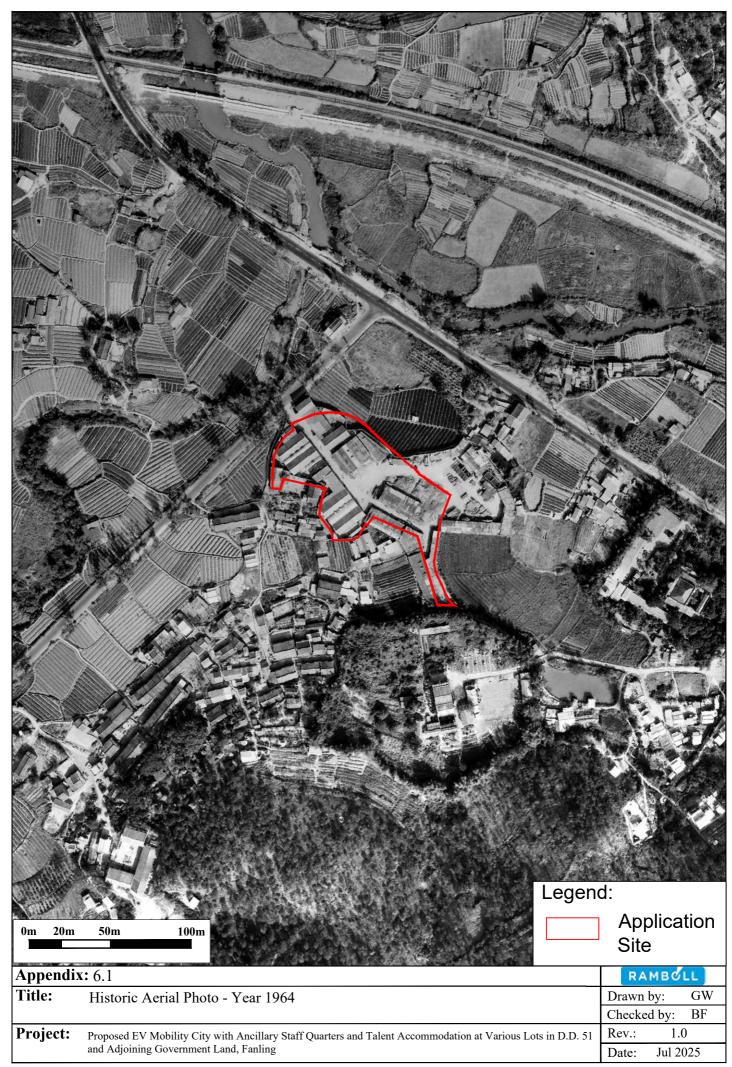
 $Q:\Projects\\SDMFLD51EI00\\02\ Project\ Management\\02\ Corr\\SDMFLD51EI00\_0\_0002L.25.docx$ 

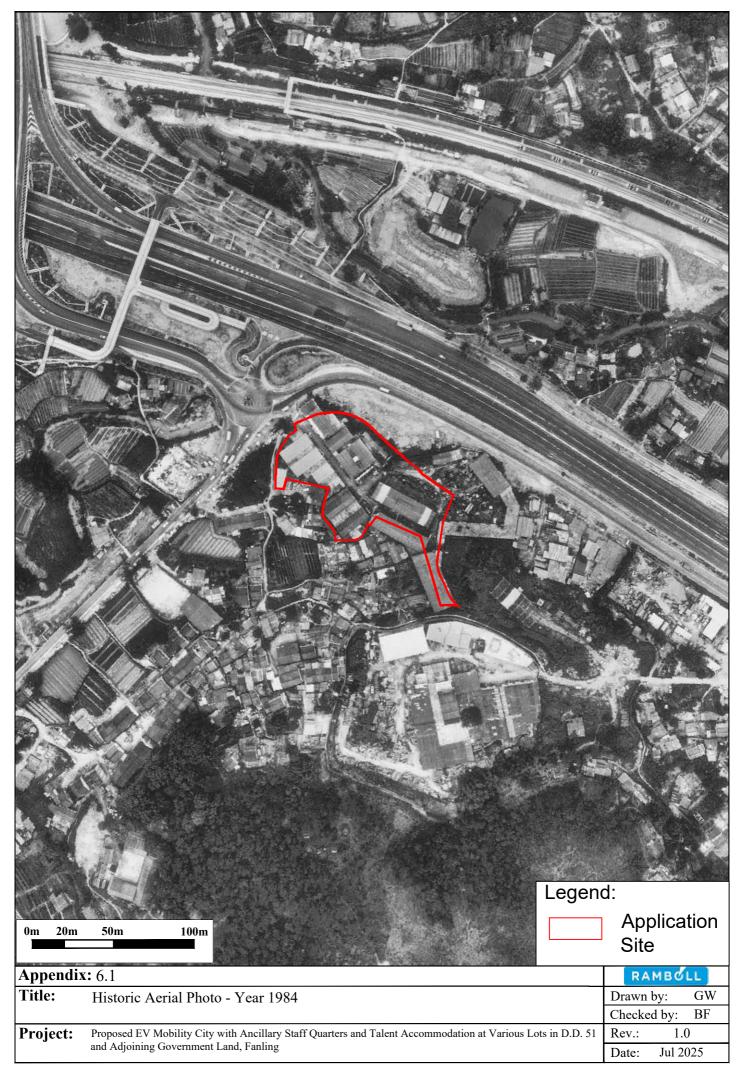


Appendix 6.1 Historic Aerial Photo

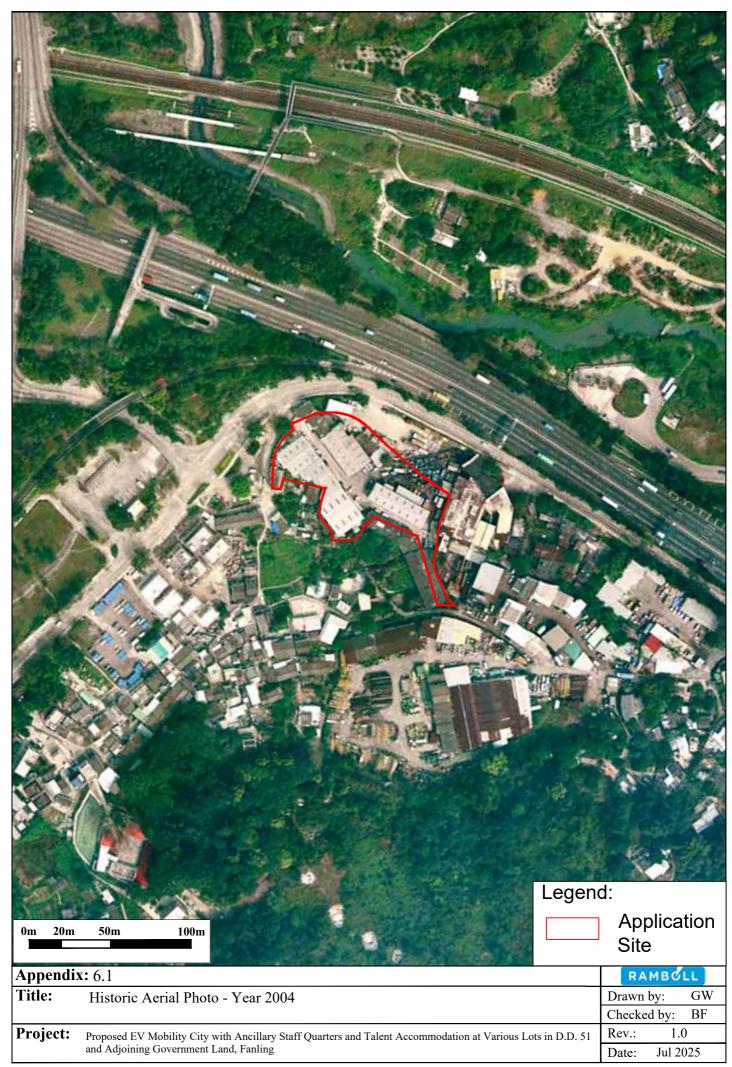


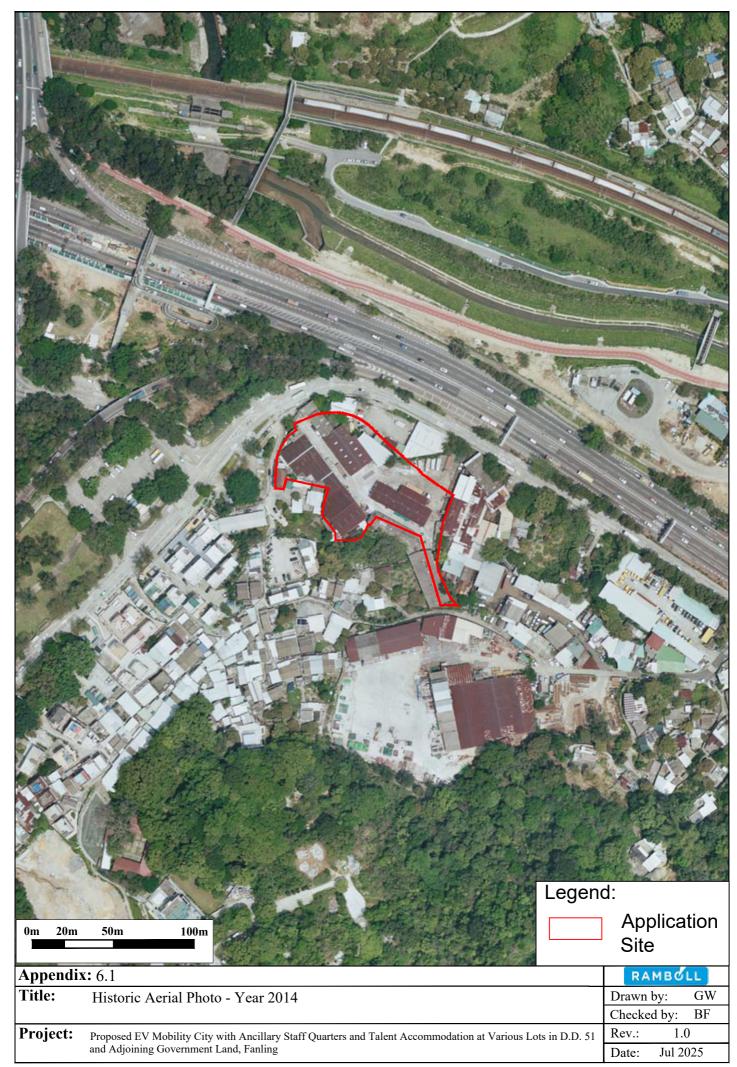


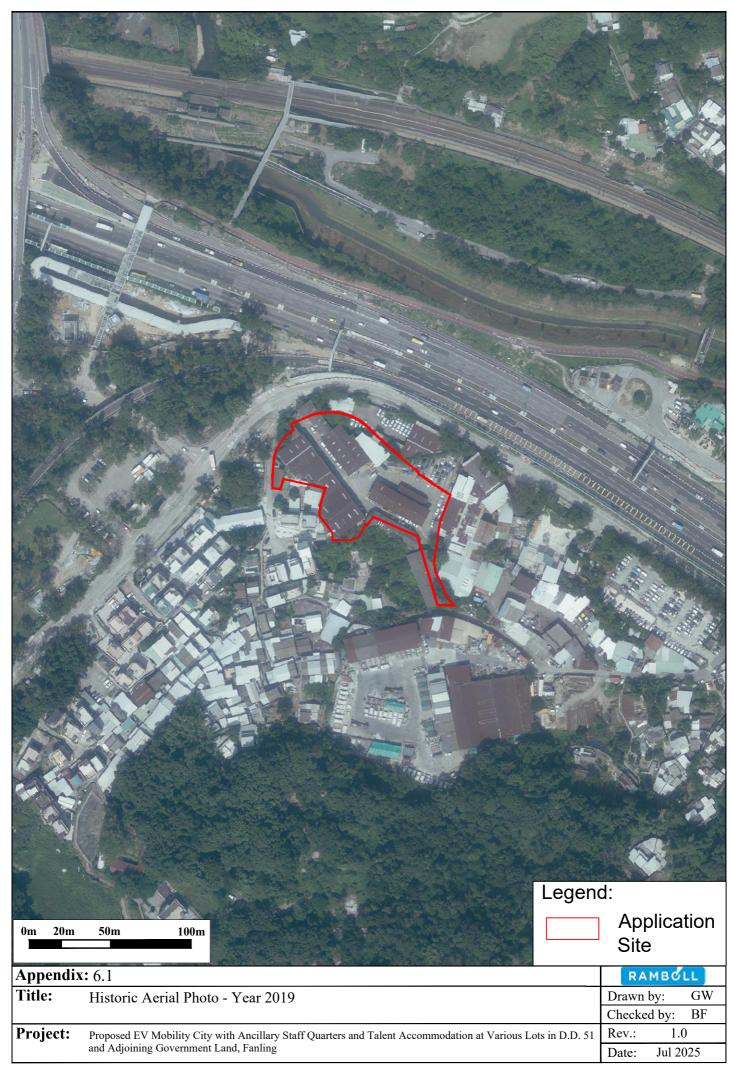
















**Appendix 6.2** Correspondence with Various Departments



Ref.: SDMFLD51EI00\_0\_0003L.25

19 June 2025

Planning Department,
District Planning Branch,
New Territories District Planning Division,
Fanling, Sheung Shui & Yuen Long East District Planning Office
Unit 2202, 22/F, CDW Building,
388 Castle Peak Road, Tsuen Wan, N.T.
Hong Kong

By Fax (3168 4074) & Post

Dear Sir / Madam,

Land Contamination Assessment Study for Planning Application for Proposed Development at Various Lots in DD 51, Fanling
Enquiry for Land Contamination Information

We are conducting a Land Contamination Assessment Study for a site at Fanling. As required by the "Practice Guide for Investigation and Remediation of Contaminated Land" published by the Environmental Protection Department of the Government of HKSAR (EPD), information pertaining to the change of land uses/past activities/incidents/accidents at the Application Site are required as part of the vetting process.

Of particular interests are current and historical site information, any change on the land use, future land use and any information relating to land contamination issues of the Application Site. A location plan for the project is enclosed for your reference.

Due to the tight timeline of the project, we would be much appreciated if you could provide the requested information by **02 July 2025**.

Should you have any query, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Ms. Grace Wong at 3465 2868 (email: gkfwong@ramboll.com). We sincerely seek your feedback on this matter. Thank you in advance for any assistance you can provide.

Yours faithfully, For and on behalf of Ramboll Hong Kong Limited

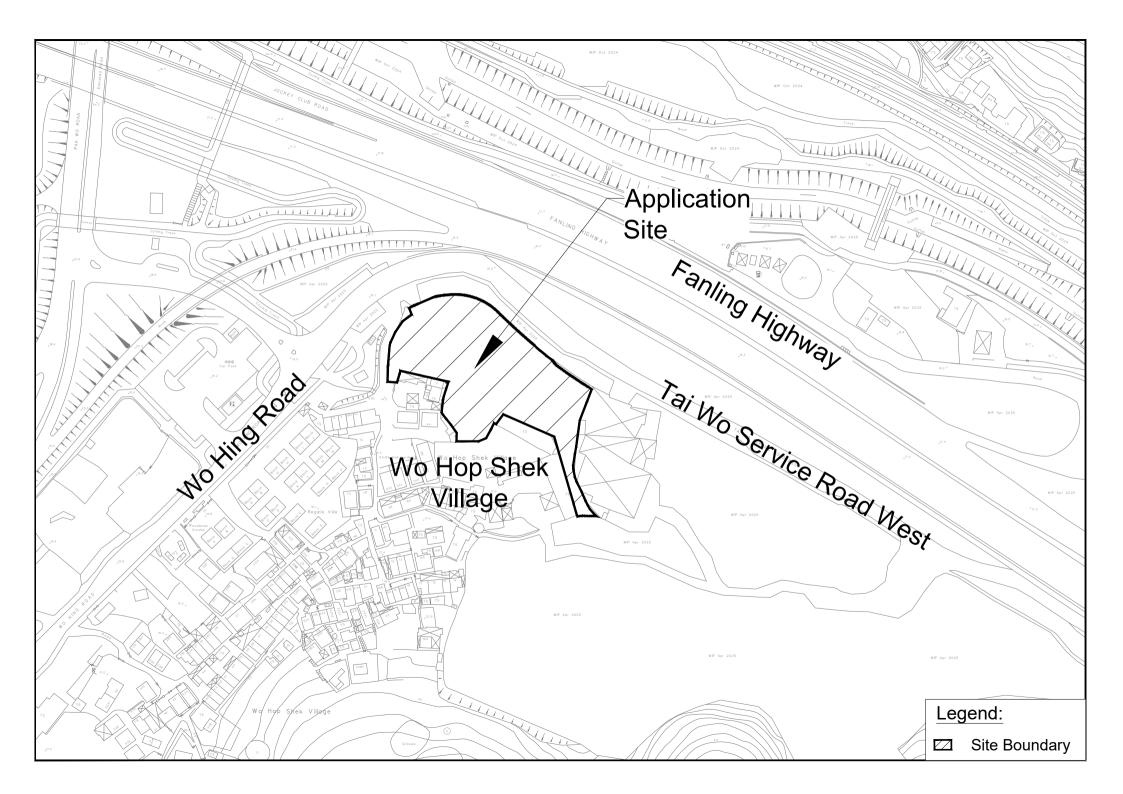
Billy Fan

**Principal Consultant** 

Enclosure: Location Plan of the Application Site

\\aphkfps3\Drive Q\Projects\SDMFLD51EI00\02 Project Management\02 Corr\SDMFLD51EI00\_0\_0003L.25.docx

Ramboll Hong Kong Limited 英環香港有限公司 21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899 www.ramboll.com



### 規劃署

粉嶺、上水及元朗東規劃處 新界荃灣青山公路388號 中染大廈22樓2202室

Your Reference:



#### **Planning Department**

Fanling, Sheung Shui & Yuen Long East District Planning Office Unit 2202, 22/F, CDW Building, 388 Castle Peak Road, Tsuen Wan, N.T.

D	ECEIVE 0 4 JUL 2025				
	0	4	JUL	2025	
D	V.				

By Post and Fax (3465 2899)

2 July 2025

本署檔號 Our Refere

Our Reference: PLO/FSYLE / 6-20/1

電話號碼

來函檔號

Tel. No.:

3168 4049

傳真機號碼

Fax No.:

3168 4074

Ramboll Hong Kong Limited 21/F, BEA Harbour View Centre 56 Gloucester Road, Wan Chai Hong Kong (Attn: Billy FAN)

Dear Sir/Madam,

# Land Contamination Assessment for Planning Application for Proposed Development at Various Lots in D.D. 51, Fanling

I refer to your letter dated 19.6.2025 regarding the captioned.

The subject site falls within an area zoned "Government, Institution or Community" ("G/IC") on the approved Fanling/Sheung Shui Outline Zoning Plan No. S/FSS/28. The proposed amendment for rezoning the subject site from "Industrial" to "G/IC" for a reserved primary school was approved by the Chief Executive in Council on 3.1.2017 under section 9(1) of the Town Planning Ordinance. For the details of the site history including the change on the land use and planned development, you may refer to the RNTPC Paper No. 1/16 and TPB Paper No. 10170 dated 8.1.2016 and 23.9.2016 respectively available on the Town Planning Board website https://www.tpb.gov.hk/en/resources/general\_papers.html.

Should you have any queries on the above, please contact the undersigned at 3168 4049.

	and the second s	
Projects SDM FLOS 1E LOO O-COK	St.28	(Andrea YAN)
Maconomy no.: 32800 1545		for District Planning Officer/
Circulation: Read Action		Fanling, Sheung Shui & Yuen Long East
BF B		Planning Department
PL - 3		
GW Internal		
Site record (FS-0271) No		
Document Scan		
Keep Hard Copy 規劃	署35周年 <b>割出更多</b> ロ	J能・ 創造無限機遇 rre of Boundless Opportunities



Ref.: SDMFLD51EI00\_0\_0004L.25

19 June 2025

Environmental Protection Department, Environmental Compliance Division, Regional Office (North), North 10<sup>th</sup> Floor, Shatin Government Offices, No.1 Sheung Wo Che Road, Sha Tin, N.T. Hong Kong

By Fax (2685 1133) & Post

Dear Sir / Madam,

# Land Contamination Assessment Study for Planning Application for Proposed Development at Various Lots in DD 51, Fanling Enquiry for Land Contamination Information

We are conducting a Land Contamination Assessment Study for a site at Fanling. As required by the "Practice Guide for Investigation and Remediation of Contaminated Land" published by the Environmental Protection Department of the Government of HKSAR (EPD), information pertaining to the change of land uses/past activities/incidents/accidents at the Application Site are required as part of the vetting process.

Of particular interests is whether there are any registered chemical waste producers under your record in the Application Site, any waste disposal record, any accidental spillage record, any submission relating to land contamination assessment and any information you could provide which might be useful for our study. A location plan for the project is enclosed for your reference.

Due to the tight timeline of the project, we would be much appreciated if you could provide the requested information by **02 July 2025**.

Should you have any query, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Ms. Grace Wong at 3465 2868 (email: gkfwong@ramboll.com). We sincerely seek your feedback on this matter. Thank you in advance for any assistance you can provide.

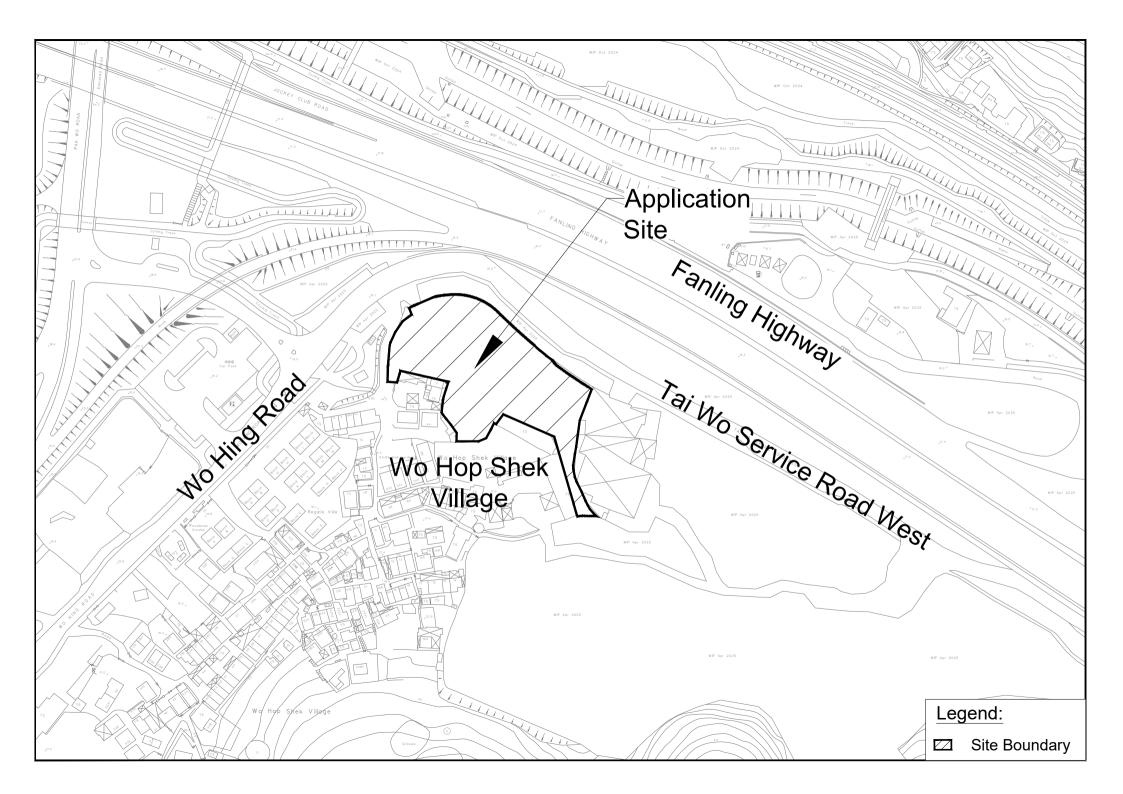
Yours faithfully, For and on behalf of Ramboll Hong Kong Limited

Billy Fan

**Principal Consultant** 

Enclosure: Location Plan of the Application Site

\\aphkfps3\Drive Q\Projects\SDMFLD51EI00\02 Project Management\02 Corr\SDMFLD51EI00\_0\_0004L.25.docx



#### **Grace KF Wong**

From: ceciliaymchan@epd.gov.hk
Sent: Thursday, June 26, 2025 11:10 AM

To: Billy Fan
Cc: Grace KF Wong

**Subject:** Enquiry for Land Contamination Information - Various Lots in DD 51, Fanling

Some people who received this message don't often get email from ceciliaymchan@epd.gov.hk. Learn why this is important

Your ref: SDMFLD51EI00 0 0004L.25

Dear Mr. FAN,

I refer to your letter dated 19 Jun 2025 on the captioned.

Regarding your enquiries in above letter, this Regional Office has no record of spillage or leakage of chemical waste or chemicals within the concerned site for the past 2 years. You may like to check with other relevant parties or departments for such information as appropriate.

As registered chemical waste producers at the location are concerned, a register of chemical waste producers is available for inspection in the Territorial Control Office of this department. If you would like to inspect, please contact Mr. H. T. MAN at 2835 1017 for making appointment to view the records.

Should you have any query on the matter, please contact the undersigned at 2158 5718. Thank you.

Regards, Cecilia CHAN Regional Office (North) /EPD



Ref.: SDMFLD51EI00\_0\_0005L.25

19 June 2025

Fire Services Department
Corporate Strategy Command,
Corporate Services Division,
9th Floor, Fire Services Headquarters Building, 1 Hong Chong Road,
Tsim Sha Tsui East, Kowloon

By Email (aio\_fsd@hkfsd.gov.hk)

Dear Sir / Madam,

Land Contamination Assessment Study for Planning Application for Proposed Development at Various Lots in DD 51, Fanling

<u>Enquiry for Land Contamination Information</u>

We are conducting a Land Contamination Assessment Study for a site at Fanling. As required by the "Practice Guide for Investigation and Remediation of Contaminated Land" published by the Environmental Protection Department of the Government of HKSAR (EPD), information pertaining to the change of land uses/past activities/incidents/accidents at the Application Site are required as part of the vetting process.

Of particular interests are spill and incident reports (including records of fire at the Application Site) that we believe your Department might have record of. Furthermore, we would also like to know whether anywhere of the Applications Site had applied or possessed license for dangerous goods storage. Location plan & lot plan for the project are enclosed for your reference.

Due to the tight timeline of the project, we would be much appreciated if you could provide the requested information by **02 July 2025**.

Should you have any query, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Ms. Grace Wong at 3465 2868 (email: gkfwong@ramboll.com). We sincerely seek your feedback on this matter. Thank you in advance for any assistance you can provide.

Yours faithfully, For and on behalf of Ramboll Hong Kong Limited

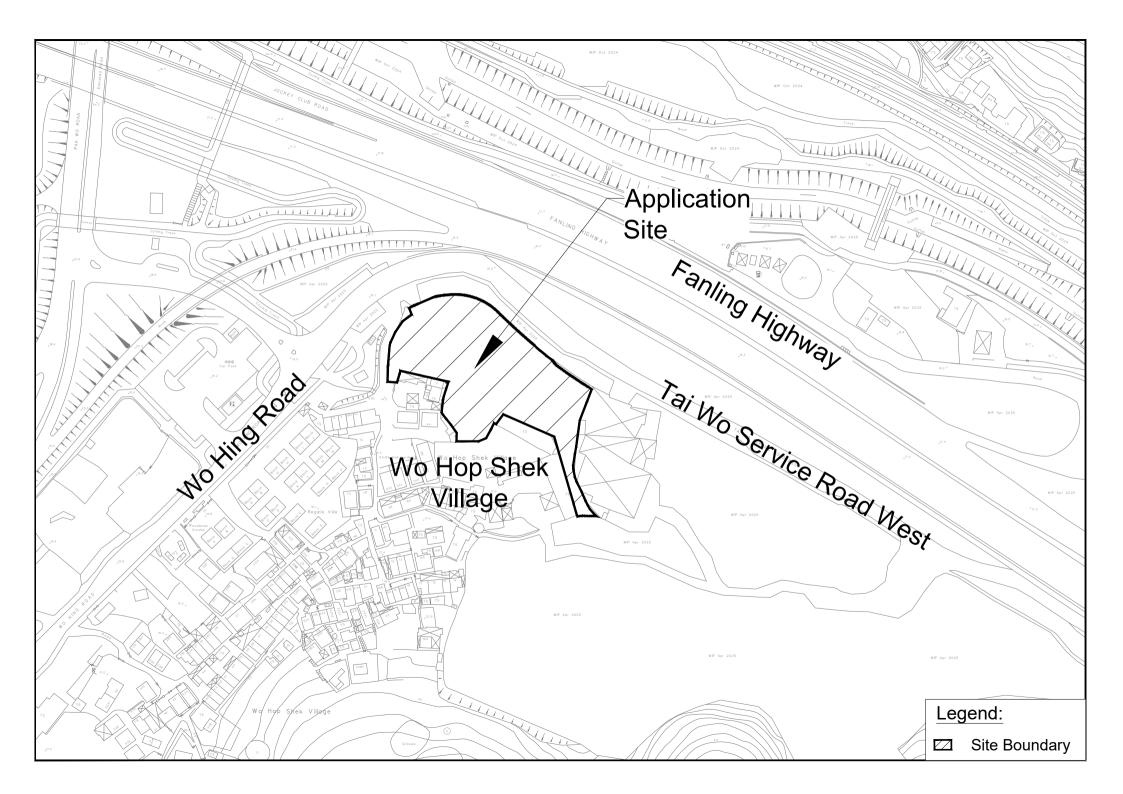
Billy Fan

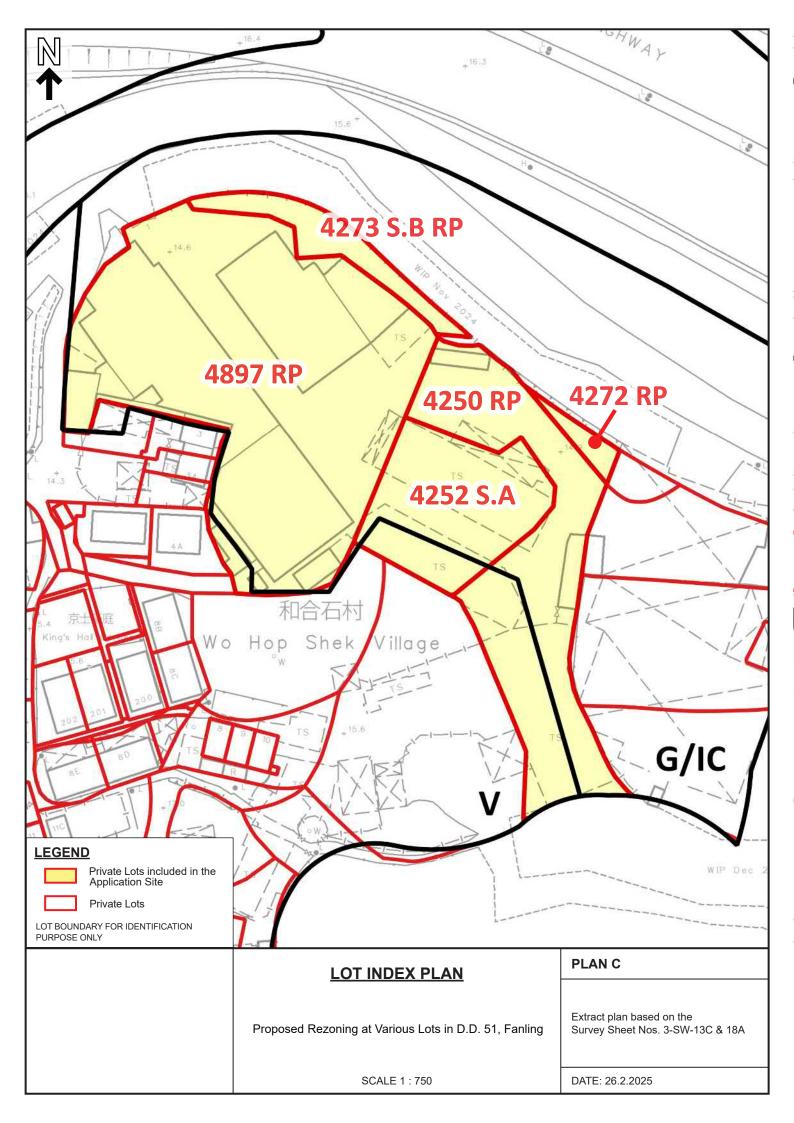
**Principal Consultant** 

Enclosure: Location Plan & Lot Plan of the Application Site and Appointment Letter from Client

\\aphkfps3\Drive Q\Projects\SDMFLD51EI00\02 Project Management\02 Corr\SDMFLD51EI00\_0\_0005L.25.docx

Ramboll Hong Kong Limited 英環香港有限公司 21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899 www.ramboll.com





#### **Grace KF Wong**

**From:** yin\_hei\_chow@hkfsd.gov.hk on behalf of ado\_lea\_cs@hkfsd.gov.hk

**Sent:** Monday, July 7, 2025 8:45 AM

To: Grace KF Wong
Cc: OE8 CS/FSD

**Subject:** Re: Fw: Land Contamination Assessment Study for Planning Application for

Proposed Development at Various Lots in DD 51, Fanling-Enquiry for Land

Contamination Information

Follow Up Flag: Follow up Flag Status: Flagged

You don't often get email from ado\_lea\_cs@hkfsd.gov.hk. Learn why this is important

Our reference: (15) in FSD GR 6-5/4 R Pt. 59 Your reference: SDMFLD51EI00 0 0005L.25

Dear Ms. WONG,

# <u>Land Contamination Assessment Study for Planning Application for Proposed Development at Various</u> <u>Lots in DD 51, Fanling</u> <u>Request for Information of Dangerous Goods & Incident Records</u>

I refer to your email of 19.6.2025 regarding the captioned request and reply below in response to your questions:-

Please be advised that neither records of dangerous goods license, fire incidents nor incidents of spillage / leakage of dangerous goods were found in connection with the given conditions of your request at the subject location.

If you have further questions, please feel free to contact the undersigned.

Best regards,

CHOW Yin-hei Assistant Divisional Officer (Legal Affairs) Corporate Services Division Fire Services Department

Tel.: 2733 7896

#### Remark:

Lift incidents are excluded unless otherwise required.

#### Disclaimer:

\*Fire Services Department uses its best endeavor to ensure the accuracy and reliability of the information provided, but cannot guarantee its accuracy and reliability and accepts no liability of any nature for any loss or damage arising from any inaccuracies or omissions that may from the information provided.



Ref.: SDMFLD51EI00\_0\_0006L.25

19 June 2025

Lands Department
Lands Administration Office
District Lands Office, North
6th Floor, North District Government Offices,
3 Pik Fung Road, New Territories

By Fax (2675 9224) & Post

Dear Sir / Madam,

# Land Contamination Assessment Study for Planning Application for Proposed Development at Various Lots in DD 51, Fanling Enquiry for Land Contamination Information

We are conducting a Land Contamination Assessment Study for a site at Fanling. As required by the "Practice Guide for Investigation and Remediation of Contaminated Land" published by the Environmental Protection Department of the Government of HKSAR (EPD), information pertaining to the change of land uses/past activities/incidents/accidents at the Application Site are required as part of the vetting process.

Of particular interests are information on spillage accidents, illegal/contaminating land uses or uncontrolled dumping uses, current and historical land use information, previous short term tenancy and any information relating to land contamination issues of the Application Site. Location plan and lot plan for the project are enclosed for your reference.

Due to the tight timeline of the project, we would be much appreciated if you could provide the requested information by **02 July 2025**.

Should you have any query, please do not hesitate to contact the undersigned at 3465 2828 (email: bfan@ramboll.com) or our Ms. Grace Wong at 3465 2868 (email: gkfwong@ramboll.com). We sincerely seek your feedback on this matter. Thank you in advance for any assistance you can provide.

Yours faithfully, For and on behalf of Ramboll Hong Kong Limited

Billy Fan

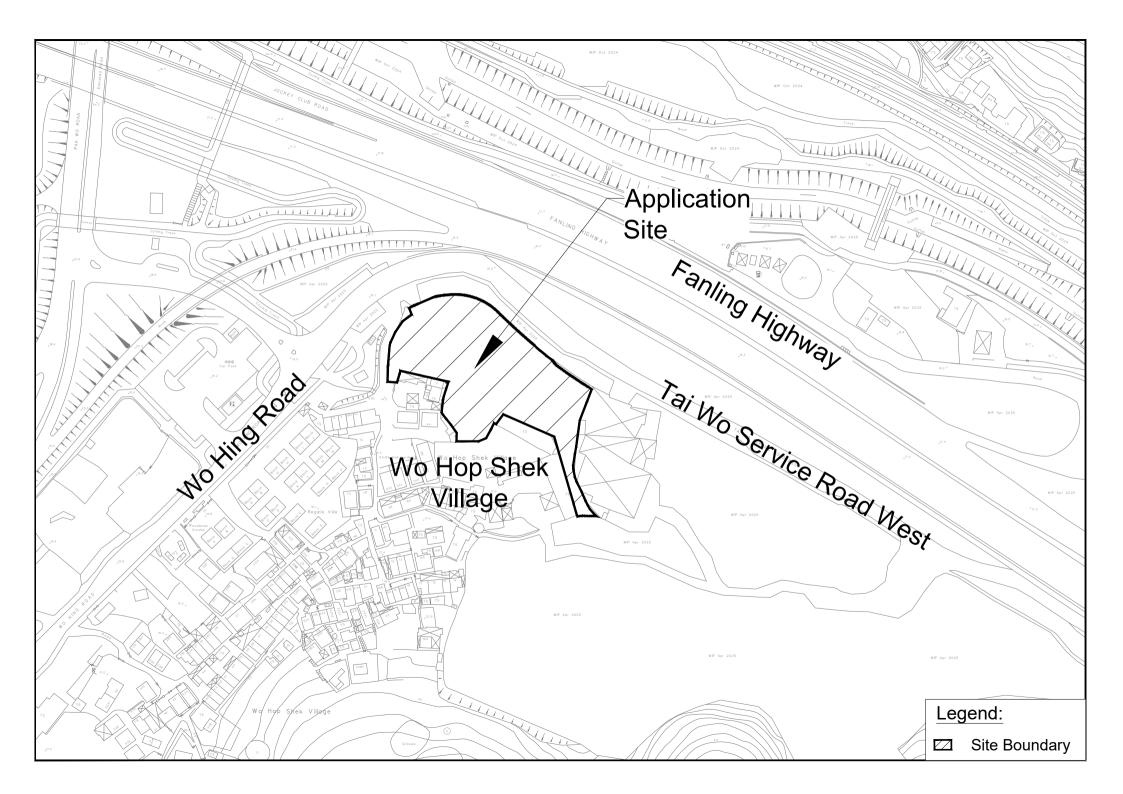
**Principal Consultant** 

Enclosure:

Location Plan and Lot Plan of the Application Site

\\aphkfps3\Drive Q\Projects\SDMFLD51EI00\02 Project Management\02 Corr\SDMFLD51EI00\_0\_0006L.25.docx

Ramboll Hong Kong Limited 英環香港有限公司 21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899 www.ramboll.com





覆函請註明本署檔號

Please quote Our Reference in response to this

地政總署 北區地政處 DISTRICT LANDS OFFICE, NORTH LANDS DEPARTMENT

電話

Tel:

2675 1535

圖文傳真 Fax: 2675 9224

電郵地址 Email: gendlon@landsd.gov.hk

本署檔號

(ろ) in LANDSD Our Ref:

來函檔號

Your Ref:

DLOs-009-004-N-PO-149-25-106-P001

SDMFLD51E100 0 0006L.25

我們矢志努力不懈,提供盡善盡美的土地行政服務。 We strive to achieve excellence in land administration.

新界粉嶺壁峰路三號北區政府合署六樓

6/F., NORTH DISTRICT GOVERNMENT OFFICES 3 PIK FUNG ROAD, FANLING, NEW TERRITORIES

網址 Website: www.landsd.gov.hk

1 2 AUG 2025

Ramboll Hong Kong Limited 21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong

Dear Sir/Madam,

#### **Land Contamination Assessment Study** for Planning Application for Proposed Development at Various Lots in D.D. No. 51, Fanling

I refer to your letter dated 19.6.2025.

Please be advised that this office has no relevant record as required in para.2 of your letter. You may obtain relevant information from other department(s) with prescribed fee, such as Land Registry.

Should you have any questions, please contact the undersigned.

Ramboll Hong Kong L

Yours faithfully,

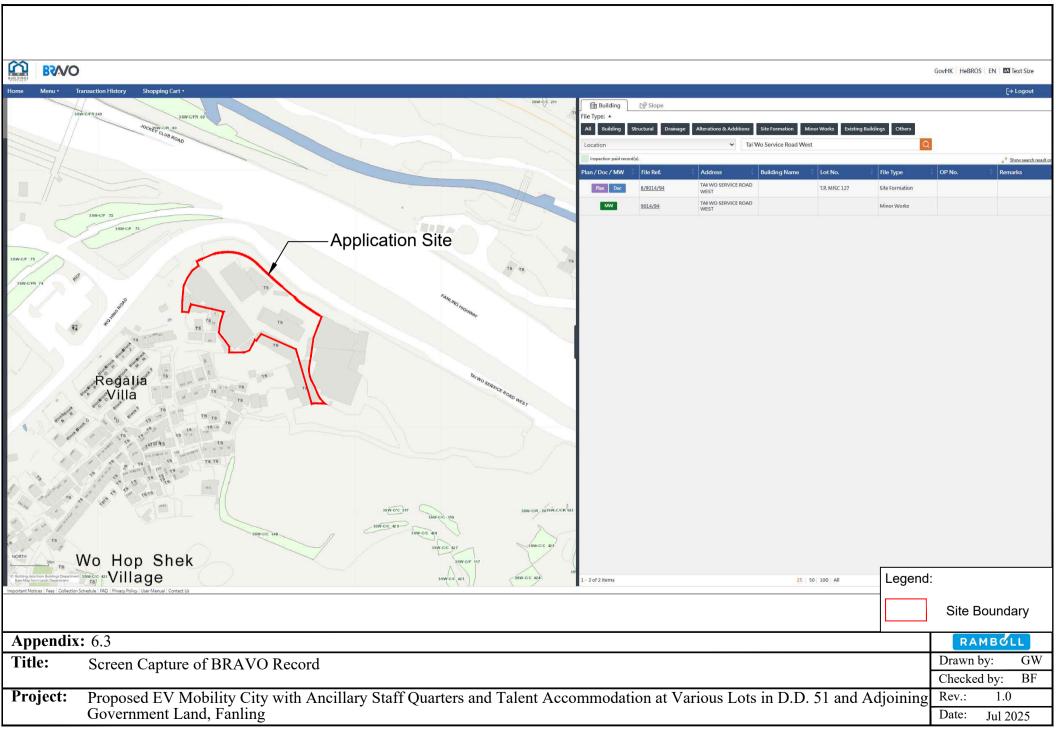
(H.L. MO)

for District Lands Officer, North

Maconomy no.: Circulation: Action Document Scan Keep Hard Copy

Appendix 6.3 Screen Capture of BRAVO Record





Appendix 6.4 Site Walkover Checklist



#### **Site Walkover Checklist**

Scheduled plant shut-down:

## **GENERAL SITE DETAILS** SITE OWNER/CLIENT Sime Darby Motor Services Limited (SDMS) **PROPERTY ADDRESS** Various Lots in DD51, Wo Hing Road, Fanling PERSON CONDUCTING THE QUESTIONNAIRE NAME Mike Kwan **POSITION** Environmental Consultant (Ramboll Hong Kong Limited) **AUTHORIZED OWNER/CLIENT REPRESENTATIVE (IF APPLICABLE)** NAME Carol Lo **POSITION TELEPHONE** 2437 1611 **SITE ACTIVITIES** Briefly describe activities carried out on site, including types of products/chemicals/materials handled. Obtain a flow schematic if possible. Number of employees: Full-time: Part-time: Guard (Contract) Temporary/Seasonal: 1 Maximum no. of people on site at any time: Typical hours of operation: 24hours Number of shifts: Days per week: Weeks per year: 52

Detail the main sources of energy at the site: Gas Yes/No Electricity Yes/No Coal Yes/No Oil Yes/No Other Yes/No SITE DESCRIPTION This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site. What is the total site area: Approximately 5480m<sup>2</sup> What area of the site is covered by buildings (%): About 50% Please list all current and previous owners/occupiers if possible. **Previous Occupiers: Various tenants Current Occupiers: SDMS** Is a site plan available? If yes, please attach. Yes/No (Please refer to the attached site plan) Are there any other parties on site as tenants or sub-tenants? Yes/No If yes, identify those parties: Describe surrounding land use (residential, industrial, rural, etc.) and identify neighbouring facilities and types of industry. North: Carriageway: Fanling Highway, Tai Wo Service Road West

North: Carriageway: Fanling Highway, Tai Wo Service Road West

South: Residential: Wo Hop Shek Village, Regalia Villa

East: Industrial: K. Kee Engineering Company Limited

Residential: Planned Public Housing Site at Fanling Area 48

Open Space: Wo Hing Road Car Park

Carriageway: Wo Hing Road

West:

#### **Site Walkover Checklist**

Describe the topography of the area (flat terrain, rolling hills, mountains, by a large body of water, vegetation, etc.).

Generally flat terrain with vegetation located at south and northwest. Low rise residential and/ or village type developments located from south to southwest of the Application Site.

State the size and location of the nearest residential communities.

Wo Hop Shek Village (village development) and Regalia Villa (16 buildings, 3 storeys each)

Are there any sensitive habitats nearby, such as nature reserves, parks, wetlands or sites of special scientific interest?

No

#### Questionnaire with Existing/Previous Site Owner or Occupier

Ref.		Yes/No	Notes
1.	What are the main activities/operations at the above address?	-	The site is currently vacant and used for storage of vehicle.
2.	How long have you been occupying the site?	-	10 years
3.	Were you the first occupant on site? (If yes, what was the usage of the site prior to occupancy?)	No	-
4.	Prior to your occupancy, who occupied the site?	-	Various tenants
5.	What were the main activities/operations during their occupancy?	-	The site previously occupied by various tenant used as repairing warehouse, goods storage, and logistics company.
6.	Have there been any major changes in operations carried out at the site in the last 10 years?	No	the site was mainly used for vehicle parking in the last 10 years.
7.	Have any polluting activities been carried out in the vicinity of the site in the past?	-	-
8.	To the best of your knowledge, has the site ever been used as a petrol filling station/car service garage?	No	-
9.	Are there any boreholes/wells or natural springs either on the site or in the surrounding area?	No	-
10	Do you have any registered hazardous installations as defined under relevant ordinances? (If yes, please provide details.)	No	-
11.	Are any chemicals used in your daily operations? (If yes, please provide details.)	No	-
	Where do you store these chemicals?	-	-
12.	Material inventory lists, including quantities and locations available? (If yes, how often are these inventories updated?)	No	-
13.	Has the facility produced a separate hazardous substance inventory?	No	-

Ref.		Yes/No	Notes
14.	Have there ever been any incidents or accidents (e.g.		
	spills, fires, injuries, etc.) involving any of these	No	-
	materials? (If yes, please provide details.)		
15.	How are materials received (e.g. rail, truck, etc.) and		
	stored on site (e.g. drums, tanks, carboys, bags, silos,	-	Truck
	cisterns, vaults and cylinders)?		
16.	Do you have any underground storage tanks?	Nie	
	(If yes, please provide details.)	No	-
	How many underground storage tanks do you have		
	on site?	-	-
	What are the tanks constructed of?	-	-
	What are the contents of these tanks?	-	-
	Are the pipelines above or below ground?	-	-
	If the pipelines are below ground, has any leak and		
	integrity testing been performed?	-	-
	Have there been any spills associated with these		
	tanks?	-	-
17.	Are there any disused underground storage tanks?	No	No underground storage tank.
18.	Do you have regular check for any spillage and		
	monitoring of chemicals handled?	No	No chemical handling on site
	(If yes, please provide details.)		Site
19.	How are the wastes disposed of?	-	Only general refuge from site guard is disposed.
20.	Have you ever received any notices of violation of		ÿ .
	environmental regulations or received public	No	-
	complaints? (If yes, please provide details.)		
21.	Have any spills occurred on site?	NI -	
	(If yes, please provide details.)	No	-
	When did the spill occur?	-	-
	What were the substances spilled?	-	-
	What was the quantity of material spilled?	-	-
	Did you notify the relevant departments of the spill?	-	-
	What were the actions taken to clean up the spill?	-	-
	What were the areas affected?	-	-
22.	Do you have any records of major renovation of your		The guard room had been
	site or rearrangement of underground utilities, pipe	Yes	The guard room had been renovated. No
	work/underground tanks (If yes, please provide details.)		rearrangement of utilities.
23.	Have disused underground tanks been removed or	N1 -	No underground storage
	otherwise secured (e.g. concrete, sand, etc.)?	No	tank.
24.	Are there any known contaminations on site?		
	(If yes, please provide details.)	No	-
		•	

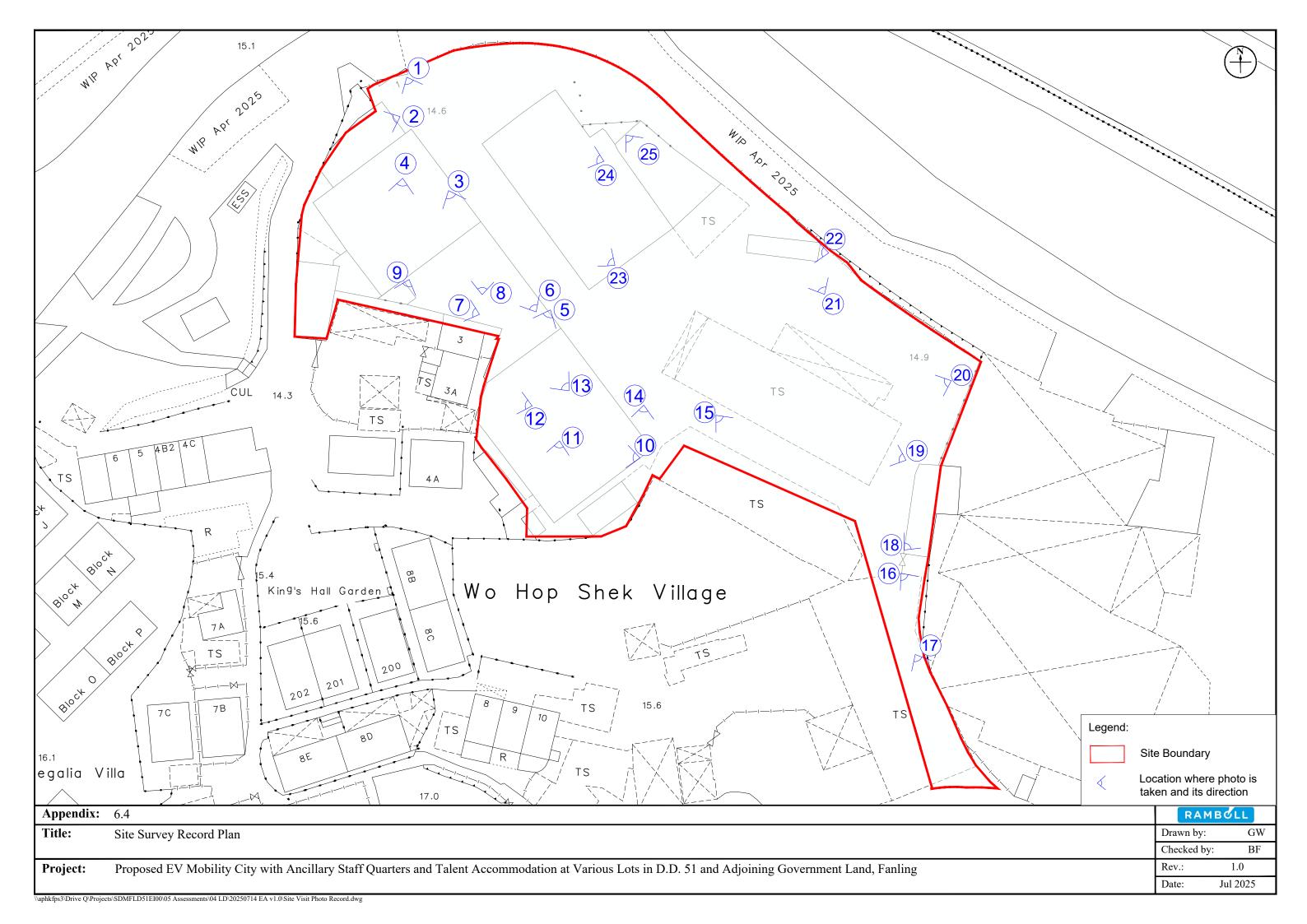
Ref.		Yes/No	Notes
25.	Has the site ever been remediated?		
	(If yes, please provide details.)	-	-

### **Observations**

1.	Are chemical storage areas provided with secondary	-	There is no chemical
	containment (i.e. bund walls and floors)?		storage on site. Chemical
	containment (ner santa mans ana neors).		storage areas are not
			provided.
2.	What are the conditions of the bund walls and floors?	-	-
3.	Are any surface water drains located near to drum	-	-
	storage and unloading areas?		
4.	Are any solid or liquid waste (other than wastewater)	Yes	
	generated at the site?		General refuse from site
	(If yes, please provide details.)		guard
5.	Is there a storage site for the wastes?	No	-
6.	Is there an on-site landfill?	No	-
7.	Were any stressed vegetation noted on site during the	No	
	site reconnaissance?		-
	(If yes, please indicate location and approximate size.)		
8.	Were any stained surfaces noted on-site during the site	Yes	Paint saint is observed on
	reconnaissance? (If yes, please provide details.)		the paved road within the
			Site.
9.	Are there any potential off-site sources of	Yes	K. Kee Engineering
	contamination?		Company Limited located immediate east of the Site.
			Repairing of large
			construction machinery
			and storage of metal
			sheets were observed.
10.	Does the site have any equipment which might contain	No	
	polychlorinated biphenyls (PCBs)?		-
11.	Are there any sumps, effluent pits, interceptors or	No	
	lagoons on site?		-
12.	Any noticeable odours during site walkover?	No	-
13.	Are any of the following chemicals used on site: fuels,	No	
	lubricating oils, hydraulic fluids, cleaning solvents, used		
	chemical solutions, acids, anti-corrosive paints,		-
	thinners, coal, ash, oily tanks and bilge sludge, metal		
	wastes, wood preservatives and polyurethane foam?		
	l	L	l .

Appendix 6.5 Site Survey Photo Records







1. Site entrance with concrete paved in good condition.



2. Guard room near site entrance.



3. Individual room inside the warehouse. Construction waste is observed.



4. Material storage.



5. Vacant land inside the abandoned factory.



6. Vacant land inside the abandoned factory.



7. Vacant land inside the abandoned factory. Water observed on the ground.



8. Vacant land inside the abandoned factory. Water observed on the ground.



9. Individual room inside the abandoned factory (vacant).



10. Material storage.



11. Vacant land inside the warehouse.



12. Abandoned metal racks and wooden cabinets are observed in the warehouse.



13. Abandoned metal racks are observed in the warehouse.



14. Damaged pallets are observed.



15. Concrete paved access road within the Application Site. Paint stains are observed with no crack.



16. Vacant land inside the abandoned factory.



17. Vacant land inside the abandoned factory.



18. Vacant land inside the abandoned factory.



19. Temporary structure used for vehicle parking.



20. Temporary structure used for vehicle parking.



21. Abandoned restroom.



22. Abandoned restroom.



23. Temporary structure used for vehicle parking.



24. Temporary structure with abandoned metal racks.



25. Temporary structure with abandoned metal racks.