

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

Application for Variation of an Environmental Permit

PART A PREVIOUS APPLICATIONS

No previous application for variation of an environmental permit.

The environmental permit was previously amended.

Application No. : VEP-321/2010, VEP-374/2012, VEP-443/2014, VEP-485/2015, VEP-512/2016, VEP-561/2019

PART B DETAILS OF APPLICANT

B1. Name : (person or company)

Highways Department

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

B2. Business Registration No. :

(if applicable)

B3. Correspondence Address :

B4. Name of Contact Person :

B5. Position of Contact Person :

B6. Telephone No. :

B7. Fax No. :

B8. E-mail Address : (if any)

PART C DETAILS OF CURRENT ENVIRONMENTAL PERMIT

C1. Name of the Current Environmental Permit Holder :

Highways Department

C2. Application No. of the Current Environmental Permit : VEP-561/2019

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

05 | 2019

Important Notes : Please submit the application together with
(a) 3 copies of this completed form; and
(b) appropriate fee as stipulated in the Environmental Impact Assessment (Fees) Regulation
to the Environmental Protection Department at the following address :

The EIA Ordinance Register Office,
27th floor, Southorn Centre, 130 Hennessy Road,
Wan Chai, Hong Kong.

Tick (✓) the appropriate box

EPD185



PART D PROPOSED VARIATIONS TO THE CONDITIONS IN CURRENT ENVIRONMENTAL PERMIT

| D1. Condition(s) in the Current Environmental Permit : | D2. Proposed Variation(s) : | D3. Reason for Variation(s) : | D4. Describe the environmental changes arising from the proposed variation(s) : | D5. Describe how the environment and the community might be affected by the proposed variation(s) : | D6. Describe how and to what extent the environmental performance requirements set out in the EIA report previously approved or project profile previously submitted for this project may be affected : | D7. Describe any additional measures proposed to eliminate, reduce or control any adverse environmental impact arising from the proposed variation(s) and to meet the requirements in the Technical Memorandum on Environmental Impact Assessment Process : |
|--|---|---|---|---|--|--|
| Figure 1 Existing Rumsey St. Flyover Eastbound Down Ramp to be Permanently Closed and Demolished | Figure 1 Existing Rumsey St. Flyover Eastbound Down Ramp to be <u>Retained and Modified as Rumsey St. Flyover Westbound Up Ramp</u> | Please refer to the Section 1 of the attached Environmental Review Report for Retaining Rumsey Street Flyover Eastbound Down Ramp | Please refer to the Section 1 of the attached Environmental Review Report for Retaining Rumsey Street Flyover Eastbound Down Ramp | Please refer to the Section 1 of the attached Environmental Review Report for Retaining Rumsey Street Flyover Eastbound Down Ramp | Please refer to the Section 1 of the attached Environmental Review Report for Retaining Rumsey Street Flyover Eastbound Down Ramp | Please refer to the Section 1 of the attached Environmental Review Report for Retaining Rumsey Street Flyover Eastbound Down Ramp |

PART E DECLARATION BY APPLICANT

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

[Redacted Signature]

Signature of Applicant

[Redacted Name]

Full Name in Block Letters

[Redacted Position]

Position

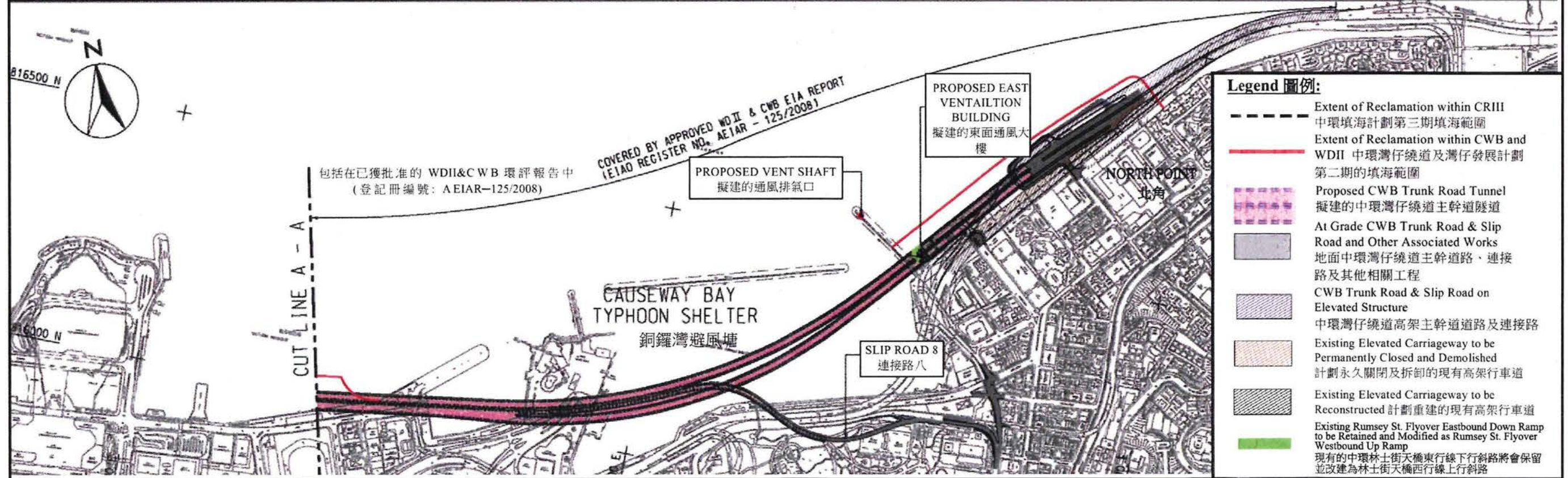
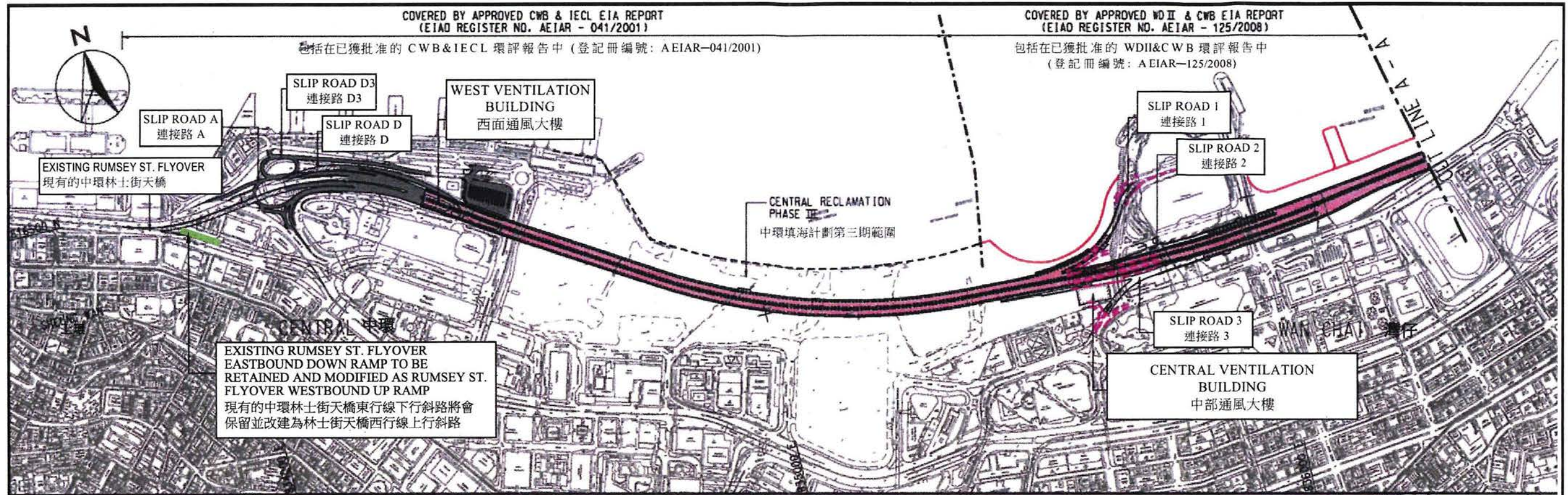


on behalf of Highways Department
Company Name and Chop (as appropriate)

17 Sep 2019
Date

NOTES :

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



Project Title: Central-Wanchai Bypass (CWB) Including Its Road Tunnel and Slip Roads
工程項目名稱: 中環灣仔繞道包括其行車隧道及連接路

Figure 1: Location of the Project
圖 1: 工程項目位置

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1 INTRODUCTION

1.1 Background

- 1.1.1 The current roadwork scheme of the Central – Wan Chai Bypass and Island Eastern Corridor Link (CWB & IECL) was authorized under the Roads (Works, Use and Compensation) Ordinance in 2009. In this authorized roadwork scheme, the existing Rumsey Street Flyover (RSF) eastbound down ramp will be permanently closed and demolished and converted to amenity area, while the existing RSF westbound up ramp will be modified. The permanent closure and demolition of RSF eastbound down ramp was shown in the Environmental Permits (EP-482/2013/A and EP/364/2009/F).
- 1.1.2 Traffic queue is often observed at the existing stop priority junction at Man Cheung Street / RSF westbound up ramp along the right-most lane of Man Cheung Street Underpass during evening peak hours. The queue tails back to Man Cheung Street and occasionally up to the junction Man Cheung Street / Man Yiu Street / Lung Wo Road.
- 1.1.3 The Traffic & Transport Committee (T&TC) of the Central & Western District Council (C&WDC) was concerned about the congested traffic at Connaught Road Central westbound and hence Man Cheung Street. The motorists have to wait a very long queue heading to Connaught Road West tunnel exit. Therefore, they strongly requested to take opportunity of retaining the existing RSF eastbound down ramp for formulating possible improvement scheme.
- 1.1.4 Transport Department (TD) formulated a preliminary improvement proposal which included (i) converting the existing stop priority junction to a merging lane and (ii) re-aligning portion of Connaught Road Central westbound between its junctions with the slip road from the Central-Wan Chai Bypass and Man Cheung Street Underpass.
- 1.1.5 Regarding the latest request from TD in the meeting held in April 2019, the traffic condition at Man Cheung Street and the stop priority junction at Man Cheung Street / RSF westbound up ramp after the full commission of CWB had been reviewed. The necessity and feasibility of retaining the existing RSF eastbound down ramp and providing a merging lane for the RSF westbound up ramp as the improvement scheme had been explored. It was found that the improvement scheme could alleviate the poor performance of the stop priority junction of Connaught Road Central / Man Cheung Street Underpass and hence further minimize the chance of tail back problem from the stop priority junction to Man Cheung Street.

1.2 Reason for Variation

- 1.2.1 The reason for retaining existing RSF eastbound down ramp is to provide a merging lane for RSF westbound up ramp as the improvement scheme to alleviate the poor performance of the stop priority junction of Connaught Road Central / Man Cheung Street Underpass and hence further minimize the chance of tail back problem from the stop priority junction to Man Cheung Street.
- 1.2.2 As the location plan of the Project in current Environmental Permits (EP-482/2013/A and EP/364/2009/F) show the existing RSF eastbound down ramp to be permanently closed and demolished, variations of the current Environmental Permits are required.

1.3 Content of this Environmental Review Report

- 1.3.1 In this Environmental Review Report (ERR), Section 1 provides a general description of the background of this assignment and reasons for variation. Section 2 presents the environmental review on air, noise, landscape and visual impact assessment. Section 3 gives a conclusion of this ERR.

2 EVALUATION OF ENVIRONMENTAL IMPACTS

2.1 Air Quality

- 2.1.1 The vehicle population heading to western part of Hong Kong Island will NOT be affected (increased) due to retaining the existing RSF eastbound down ramp and providing a merging lane heading to western part of Hong Kong Island for alleviating the tail back problem from the original stop priority junction.
- 2.1.2 Under the revised scheme (with no change in traffic speed compared to the original scheme), a portion of westbound traffic to the RSF will utilize the retained RSF eastbound structure. Referring to Figure 3.1.1 in the approved EIA report (AEIAR-041/2001), the closest nearby Air Sensitive Receiver (ASR) is A5 (i.e. Harbour Building). The separation distance between the traffic on the modified RSF and the ASR A5 would be slightly decreased by about 5m.
- 2.1.3 The closest nearby ASR A5 is a G/IC building which adopts centralized air conditioning and has no window opening for ventilation. The fresh air inlet is located at the roof of the building (approx. 96m), which is far above the RSF level, and the building is at about 22m distance away from the RSF down ramp horizontally. Hence, there will be no likelihood of exceedance of AQO and adverse air quality impact on ASR A5 arising from the revised scheme. The location of ASR A5 is shown in **Figure 2.1**.
- 2.1.4 Air quality impacts associated with road traffic are caused mostly by NO₂ and RSP. It is expected that the levels of NO₂ and RSP will be more or less the same, irrespective of whether the existing RSF eastbound down ramp is demolished or retained. The change in air quality impact to the nearby ASRs (e.g. A5) due to the revised scheme is considered minor due to the slight decrease in separation distance with the nearby ASR, as compared to the original scheme of demolishing the existing RSF eastbound down ramp structure.
- 2.1.5 In addition, the performance of westbound traffic on RSF will be improved by using the existing RSF eastbound down ramp and providing a merging lane. The original tail back problem from the stop priority junction to Man Cheung Street could be improved. The revised scheme would also improve the background concentration of air quality.
- 2.1.6 Besides, the revised scheme will involve modification of existing concrete profile barriers, concrete stitching works of existing westbound and eastbound bridge decks, road marking works and etc. Dust generation and hence air quality impact due to the modification works under the revised scheme would comparatively be much lesser than the original scheme during construction.

2.2 Noise Impact

- 2.2.1 Noisy construction activities will be involved during the demolition of the existing RSF eastbound down ramp under the original design. It is anticipated that considerable construction noise impact will be generated due to the demolition works. Also, as the demolition works is in very close proximity to the live traffic, it is very likely that the demolition works could only be carried out stage by stage in non-peak traffic hour or night time in a prolonged period of time.
- 2.2.2 If the existing RSF eastbound down ramp structure is retained for providing a merging lane for RSF westbound up ramp, substantial demolition works of structure will no longer be required, instead it will only involve some relatively minor works, such as removal and modification of bridge parapet, concrete stitching of bridge deck, and road re-surfacing, etc. Therefore, the construction noise impact will be less significant as compared with the original demolition of the existing RSF eastbound down ramp.
- 2.2.3 In addition, it is anticipated that there will be no significant change to traffic noise impact on the nearby NSRs due to retaining the existing RSF eastbound down ramp and providing a merging lane of RSF westbound up ramp, as there will be no additional increase in vehicle population heading to western part of Hong Kong Island due to the proposal of retaining the existing RSF eastbound down ramp.
- 2.2.4 The nearby Noise Sensitive Receivers (NSRs) (i.e. N1, The Bauhinia Hotel - Central (previously called Korea Centre in the EIA Report) and N2, City Hall) as identified in the approved EIA report should not rely on openable windows for ventilation. Also, the buildings in the close proximity to and facing the concerned down ramp are commercial use, except that the Harbour Building is a G/IC building. They have centralized air conditioning and also do not rely on openable windows for ventilation. The locations of NSR N1 and N2 are shown in **Figure 2.2**.
- 2.2.5 The closest nearby NSR identified in approved EIA report is N1, which is located over 100m away from the west side of the concerned RSF eastbound down ramp. It should be more sensitive to the nearby carriageway at its front instead of the concerned RSF down ramp. Under the revised scheme, the westbound traffic will be shifted slightly to the north, i.e. further away from N1. It is anticipated that there will be no significant change to traffic noise impact on the closest nearby NSR, N1, due to the revised scheme.

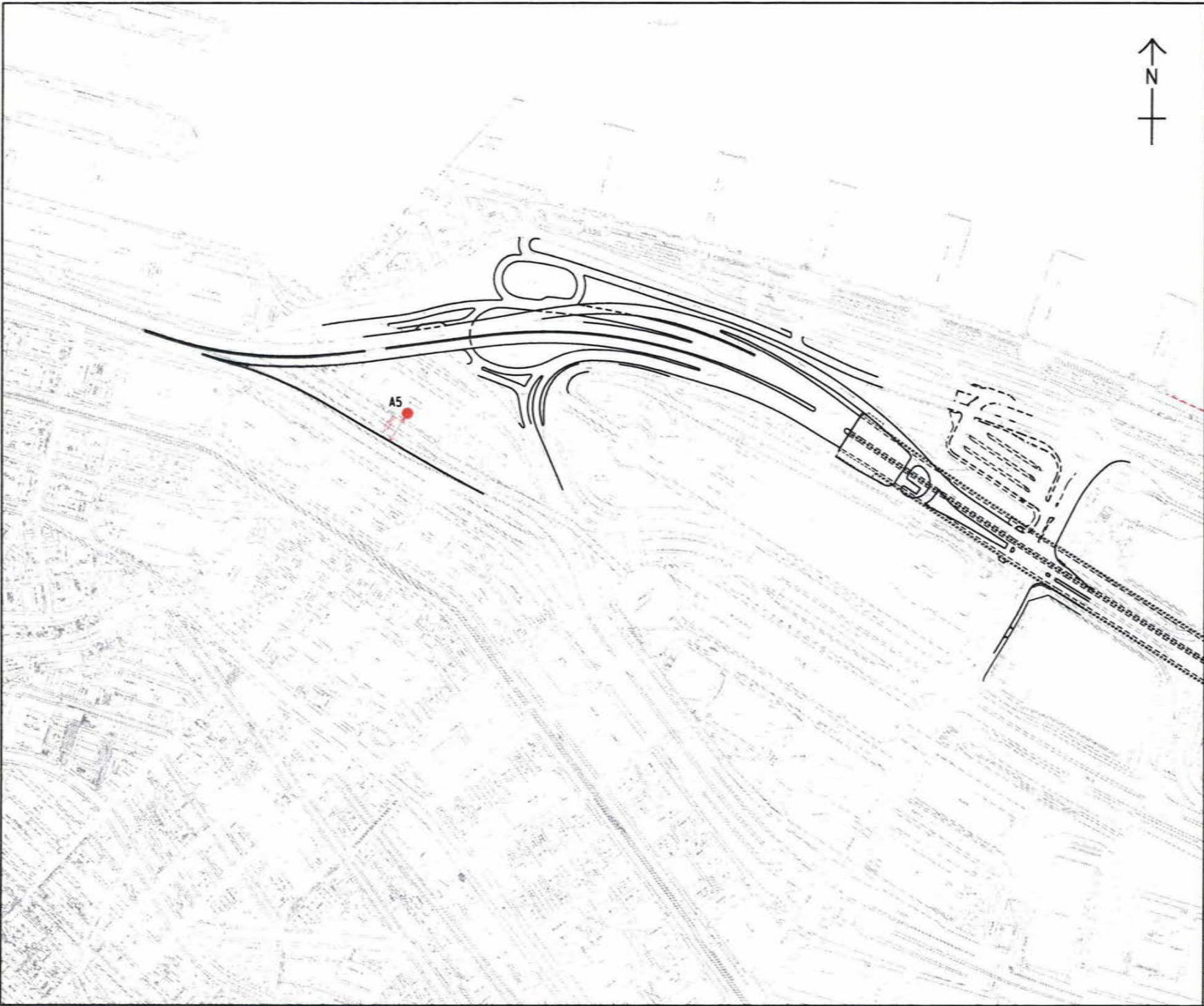
2.3 Landscape and Visual Impact Assessment

- 2.3.1 In the authorized scheme, the existing RSF eastbound down ramp will be demolished and existing amenity area will be reconstructed with additional amenity area to be provided.
- 2.3.2 Under the original design, there will be transplanted trees and various types of shrubs to be planted within the newly amenity area. However, these transplanted trees will be affected if the existing RSF eastbound down ramp is retained. It is required to seek relevant government departments to identify alternative location(s) to accommodate the affected trees.
- 2.3.3 Referring to Chapter 7 of Landscape Visual Assessment (LVIA) of the approved EIA report (except Figure 7.2.1 and Figure 7.3.1), there is no specific assessment or explicit description about the demolition of the existing RSF eastbound structure. Figure 7.2.1 and Figure 7.3.1 indicate the location of demolition of existing RSF eastbound only. There are also no particular identification of key Visual Sensitive Receiver (VSR) and requirement of any mitigation measures for the concerned demolition of existing RSF eastbound structure.
- 2.3.4 Although the affected planting area is covered in the drawing namely "Mitigation Measure" of Figure 7.6.1 in the approved EIA report, it is considered that all planting areas as shown in the figure should be classified as additional mitigation measures within the available areas of the Project for implementation of soft landscape treatment, as interpreted from item 7.6.1 in the approved EIA report.
- 2.3.5 Regarding the VSRs in the vicinity of RSF, VSR1 to VSR9 are the nearby VSRs. However, these VSRs should be referred to have potential visual impacts from the works such as "*construction activities, at grade slip roads, Rumsey Street Flyover Extension, West Ventilation Building & tunnel portal*", but no specific mentions of the concerned demolition of existing RSF eastbound structure. The locations of VSRs are shown in **Figure 2.3**.
- 2.3.6 Although the trees and shrubs originally to be planted at the location of the RSF eastbound down ramp will be reduced under the revised scheme, there are still additional planting adjacent to the RSF under the revised scheme as compared to the condition before CWB commissioning. In this connection, there would be no significant landscape and visual impact on the nearby VSRs due to the revised scheme. The landscape area adjacent to the RSF is shown in **Figure 2.4**.

3 CONCLUSION

- 3.1.1 An environmental review has been conducted for the proposed variation to the EPs due to the proposed revision in retaining RSF eastbound down ramp to provide a new merging lane for RSF westbound up ramp as an improvement scheme.
- 3.1.2 The closest nearby ASR A5 is a G/IC building which adopts centralized air conditioning and has no window opening for ventilation, there will be no likelihood of exceedance of AQO and adverse air quality impact on ASR A5 arising from the revised scheme.
- 3.1.3 The closest nearby NSR N1 located over 100m away from the west side of the RSF eastbound down ramp, it is anticipated that there will be no significant change to traffic noise impact on N1 arising from the revised scheme.
- 3.1.4 Despite reduced planting area at the location of the RSF eastbound down ramp, there are still additional planting adjacent to the RSF under the revised scheme as compared to the condition before CWB commissioning. There would be no significant landscape and visual impact on the nearby VSRs arising from the revised scheme.
- 3.1.5 The variation under the revised scheme would not be a material change.

Figures



LEGEND :
 A5
 AIR SENSITIVE RECEIVER

| | | |
|-----|-------------|------|
| NO. | DESCRIPTION | DATE |
| | | |

Highways Department 路政署
 Major Works Project Management Office

CENTRAL - WAN CHAI BYPASS AND IEC LINK
 LOCATION OF AIR SENSITIVE RECEIVER

AECOM

| | | |
|--------------------|------------------|----------|
| DRAWING NO. 圖紙編號 | | |
| FIGURE 2.1 | | |
| DATE OF ISSUE 日期 | PROJECT NO. 項目編號 | SCALE 比例 |
| | | |
| DRAWING SCALE 圖紙比例 | | |
| A3 1 : 3000 | | |
| DRAWING UNIT 圖紙單位 | | |
| METRES 公尺 | | |

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11/07/2019
 11/07/2019
 11/07/2019



LEGEND :

N1
● NOISE SENSITIVE RECEIVER

| | | | |
|-----|-------------|------|----|
| NO. | DESCRIPTION | DATE | BY |
| | | | |

Highways Department 路政署
Major Works Project Management Office

CENTRAL - WAN CHAI BYPASS AND IEC LINK

LOCATION OF NOISE SENSITIVE RECEIVER

AECOM

| | | | |
|-----------------|-------------|-----------------|--|
| DRG. NO. 圖紙編號 | | | |
| FIGURE 2.2 | | | |
| DESIGNED BY | CHECKED BY | A.E.T. APPROVED | |
| DRAWN BY | SCALE | DATE | |
| DATE | A3 1 : 3000 | | |
| UNIT OF MEASURE | | METRES | |

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LEGEND :
 VSR1
 VISUAL SENSITIVE RECEIVER

| | |
|--|--|
| Scale | 1:3000 |
| Project Name | CENTRAL - WAN CHAI BYPASS AND IEC LINK |
| Department | Highways Department 路政署 |
| Office | Major Works Project Management Office |
| LOCATION OF VISUAL SENSITIVE RECEIVER | |
| AECOM | |
| DRAWING: FIGURE 2.3 | |
| Scale | A3 1 : 3000 |
| Unit | METRES |
| © COPYRIGHT RESERVED | |

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