



Lam Environmental Services Limited

Contract No. HY/2020/08
Flyover from Kwai Tsing Interchange Upramp to
Kwai Chung Road

CONTRACT NO: HY/2020/08

**FLYOVER FROM KWAI TSING INTERCHANGE UPRAMP
TO KWAI CHUNG ROAD**

UNDER ENVIRONMENTAL PERMIT NO. EP-541/2017/A

Proposal For
Alternative Air Quality Monitoring Stations Revision B

CLIENTS:

Highway Department

PREPARED BY:

Lam Environmental Services Limited

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DATE: 26 August 2021

Contract No. HY/2020/08 Flyover from Kwai Tsing Interchange Upramp to Kwai Chung Road

Response to EPD comment on Proposal for
Alternative Air Quality Monitoring Station on 25 August 2021

Item	EPD comment(s)	Response to comment(s)
iii	<p>Please clarify the followings:</p> <ul style="list-style-type: none">• The attached rejection letter is from the Housing Authority, and not from Carnival Restaurant as stated in your email; and• Whether IEC has verified the supplementary information provided.	<p>Carnival Restaurant is the tenant as the commercial property is owned by Housing Authority. Therefore, the access permission for set up of air quality monitoring station at the boundary of Carnival Restaurant shall be obtained from the premise owner which is Housing Authority.</p> <p>Please refer to the verification letter from IEC for the updated proposal with supplementary information incorporated to justify the selection of alternative location.</p>



27 August 2021

Our ref: WDG/(HY/2020/08)/M45/300/0104

Highways Department
Works Division
Works Section / NT
7th Floor, Trade and Industry Tower
3 Concorde Road
Kowloon

Attn.: Ms. YAU Man Shan, Doris (CHE/Works)

Dear Madam,

Contract No. HY/2020/08
Flyover from Kwai Tsing Interchange Upramp to Kwai Chung Road
Change of Air Quality Monitoring Station

We refer to the ET's revised proposal submitted via email 26 August 2021 regarding the captioned, please note that we have no objection in principle on the proposal based on the justification.

Yours faithfully,
WSP (Asia) Limited

HON Kwok Wai, Eric
Supervisor's Representative

EH/TK/ct

Encl.

cc	IEC	Attn: Mr. Vega Wong	w/e
	ET	Attn: Mr. Raymond Dai	w/e

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科技環保(香港)有限公司

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Date: 27th August 2021

Highways Department
Works Division
Works Section / NT
7th Floor, Trade and Industry Tower,
3 Concorde Road, Kowloon

Dear Sirs,

Contract No. HY/2020/08
Flyover From Kwai Tsing Interchange Upramp to Kwai Chung Road
Independent Environmental Checker

Proposal For Alternative Air Quality Monitoring Station

We refer to the Contract No. HY/2020/08 Flyover From Kwai Tsing Interchange Upramp to Kwai Chung Road under Environmental Permit No. EP-541/2017/A Proposal For Alternative Air Quality Monitoring Stations Revision B by the Environmental Team dated 26 August 2021. Please note we have no objections in principle on the captioned proposal.

Should you have any query, please feel free to contact the undersigned at 2877 3122 (vegawong@nt.com.hk).

Yours Sincerely,
For and on behalf of
Nature & Technologies (HK) Limited

Vega Wong
Independent Environmental Checker
c.c.

WSP (Attn: Mr. Stephen Ho/Mr. Eric Hon) [by Email: Stephen.YC.Ho@wsp.com; Eric.Hon@wsp.com]
Lam Environmental Services Limited (Attn: Mr. Raymond Dai) [by Email: raymond dai@lamenviro.com]



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1 Introduction

1.1 Background

1.1.1 To fulfil future traffic growth and to prevent traffic congestion in the future during peak traffic flow hour at Tsuen Wan Road (TWR) near Kwai Tsing Interchange (KT I/C), an additional southbound lane (a separate viaduct) is introduced on TWR and connected to the existing lane on the west side of Kwai Chung Road (KCR).

1.1.2 Lam Environmental Services Limited has been commissioned by Highways Department to undertake the Environmental Monitoring and Audit (EM&A) works as defined in the Environmental Permit (EP) (EP-541/2017/A) for Contract No. HY/2020/08 -Construction of Flyover from Kwai Tsing Interchange Upramp to Kwai Chung Road (Hereafter named "the Project").

1.1.3 Based on the recent site visit on 25 June 2021, limited location access, lack of power supply and land availability problem for setting up air quality monitoring stations at HKEAA-Lai King Assessment Centre (AMC03) were observed (refer to **Figure 1**). Therefore, it presents a need to relocate the existing monitoring station to alternative location in the vicinity of the site boundary with the below justification.

1.2 Requirement under EM&A manual

1.2.1. According to Section 2.5.3 of the EM&A manual, when alternative monitoring location is proposed, the following criteria, as far as practicable, shall be followed:

1.2.2. Air Monitoring

- (i) At the site boundary or such locations close to the major dust emission source;
- (ii) Close to the air sensitive receivers; and
- (iii) Take into account the prevailing meteorological conditions.

1.2.3. According to Section 2.5.2 of the EM&A manual, the Environmental Team (ET) shall propose updated monitoring location and seek approval from ER and agreement from IEC on the proposal when the status and locations of the air sensitive receivers change.

2. Proposal for Alternative Monitoring Station

- 2.1. The ET has conduct initial site visit on 25 June 2021 to inspect the current situation of the monitoring location at HKEAA-Lai King Assessment Centre. Due to land availability problem, it is not possible to set up the monitoring station at ground floor. No electricity supply for High Volume Sampler for air monitoring at both rooftop and ground level and the only access to the rooftop is via maintenance cat-ladder which is not recommended by HKEAA for frequent weekly monitoring visit due to safety concern. As a result, the original location is not appropriate and alternative monitoring location should be proposed by ET. An alternative monitoring location, i.e. Ming King House was located during site visit and permission was obtained. Original and proposed alternative air monitoring station are illustrated in **Figure 2**.
- 2.2. The proposed air quality monitoring station for baseline monitoring and impact monitoring are summarized in the following table:

Parameter	Monitoring Location ID	Location in EM&A Manual	Proposed Alternative Location
Air Quality	AMC03/AMC03A	HKEAA-Lai King Assessment Centre	Rooftop of Ming King House ¹

Remark 1: Given that the ground floor of Ming King House is mainly sitting-out area, no space and electricity supply are available for installation and operation of the monitoring equipment. Lai King Estate Office has also requested the monitoring shall be conducted at a location where will not cause disturbance to nearby residents. Hence, it is proposed to conduct air quality monitoring at rooftop instead of ground floor.

- 2.3. Nearby air sensitive receivers including Ming King House, Yat King House and Carnival Restaurant (Kwai Chung) have been considered on proposing alternative monitoring location. However, Yat King House is considered unsuitable for conducting dust monitoring as it is located further away from the site boundary and original monitoring location (AMC03), and the construction dust will be blocked by the buildings at the west which act as physical barrier. Due to occupation of public space and establishment of electricity supply, the premise owner (Housing Authority) of Carnival Restaurant (Kwai Chung) has formally rejected our proposal of setting up environmental monitoring equipment. Please refer to the attached rejection letter for your information.
- 2.4. An alternative location, i.e. Ming King House was located and permission was obtained to set up the monitoring location at the roof. The proposed alternative air quality monitoring location is selected in accordance with Section 2.5.3 of the EM&A manual. The proposed air quality (AMC03A) is at the site boundary close to the major dust emission source. AMC03A is situated next to the original location AMC03, the distance between the two air quality monitoring stations is approximately 17m. The meteorological conditions should be the same in comparison with AMC03. Since Ming King House is located at the front-row downwind location from the construction works area when the northerly wind prevails, construction dust will arrive at Ming King House first and then HKEAA-Lai King Assessment Centre. The HVS installed at Ming King



House could capture construction dust without restriction from physical obstructions at the front, compare to that installed at other nearby monitoring locations to be proposed potentially. Therefore, the roof of Ming King House would be comparably more favourable for dust measurement when prevailing meteorological conditions are taken into account as per Section 2.5.3 of the EM&A Manual. The position and orientation of the monitoring equipment shall be followed according to Section 2.5.4 of EM&A Manual and seek agreement with ER.

- 2.5. In conclusion, the proposed alternative monitoring location is considered to be the most representative of the original air quality monitoring station as set out in EM&A programme under EP-541/2017/A.

LEGEND:

- PROPOSED WIDENING OF BRIDGE DECK / ABUTMENT
- PROPOSED MAUDUCT
- PROPOSED REPROVISIONED FOOTBRIDGE
- PROJECT BOUNDARY
- CONSTRUCTION DUST MONITORING LOCATION
- PROPOSED COLUMN
- PROPOSED ALTERNATIVE CONSTRUCTION DUST MONITORING LOCATION

No.	Date	Description	Drawn by	Checked by
1	12/11/2015	Issue for public consultation	W. Chan	H. Chan
2	12/11/2015	Issue for public consultation	W. Chan	H. Chan
3	12/11/2015	Issue for public consultation	W. Chan	H. Chan
4	12/11/2015	Issue for public consultation	W. Chan	H. Chan
5	12/11/2015	Issue for public consultation	W. Chan	H. Chan
6	12/11/2015	Issue for public consultation	W. Chan	H. Chan
7	12/11/2015	Issue for public consultation	W. Chan	H. Chan
8	12/11/2015	Issue for public consultation	W. Chan	H. Chan
9	12/11/2015	Issue for public consultation	W. Chan	H. Chan
10	12/11/2015	Issue for public consultation	W. Chan	H. Chan
11	12/11/2015	Issue for public consultation	W. Chan	H. Chan
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13	12/11/2015	Issue for public consultation	W. Chan	H. Chan
14	12/11/2015	Issue for public consultation	W. Chan	H. Chan
15	12/11/2015	Issue for public consultation	W. Chan	H. Chan
16	12/11/2015	Issue for public consultation	W. Chan	H. Chan
17	12/11/2015	Issue for public consultation	W. Chan	H. Chan
18	12/11/2015	Issue for public consultation	W. Chan	H. Chan
19	12/11/2015	Issue for public consultation	W. Chan	H. Chan
20	12/11/2015	Issue for public consultation	W. Chan	H. Chan
21	12/11/2015	Issue for public consultation	W. Chan	H. Chan
22	12/11/2015	Issue for public consultation	W. Chan	H. Chan
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32	12/11/2015	Issue for public consultation	W. Chan	H. Chan
33	12/11/2015	Issue for public consultation	W. Chan	H. Chan
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42	12/11/2015	Issue for public consultation	W. Chan	H. Chan
43	12/11/2015	Issue for public consultation	W. Chan	H. Chan
44	12/11/2015	Issue for public consultation	W. Chan	H. Chan
45	12/11/2015	Issue for public consultation	W. Chan	H. Chan
46	12/11/2015	Issue for public consultation	W. Chan	H. Chan
47	12/11/2015	Issue for public consultation	W. Chan	H. Chan
48	12/11/2015	Issue for public consultation	W. Chan	H. Chan
49	12/11/2015	Issue for public consultation	W. Chan	H. Chan
50	12/11/2015	Issue for public consultation	W. Chan	H. Chan

土木工務拓展處
CEDD Civil Engineering and Development Department
 OFFICE: NEW TERRACES (WEST) AND WEST KOWloon DISTRICT OFFICE
 ASCENT NO. CE 8 (2012) (41)
 FLYOVER FROM KWAI CHUNG INTERCHANGE UPRAMP TO KWAI CHUNG ROAD - INVESTIGATION

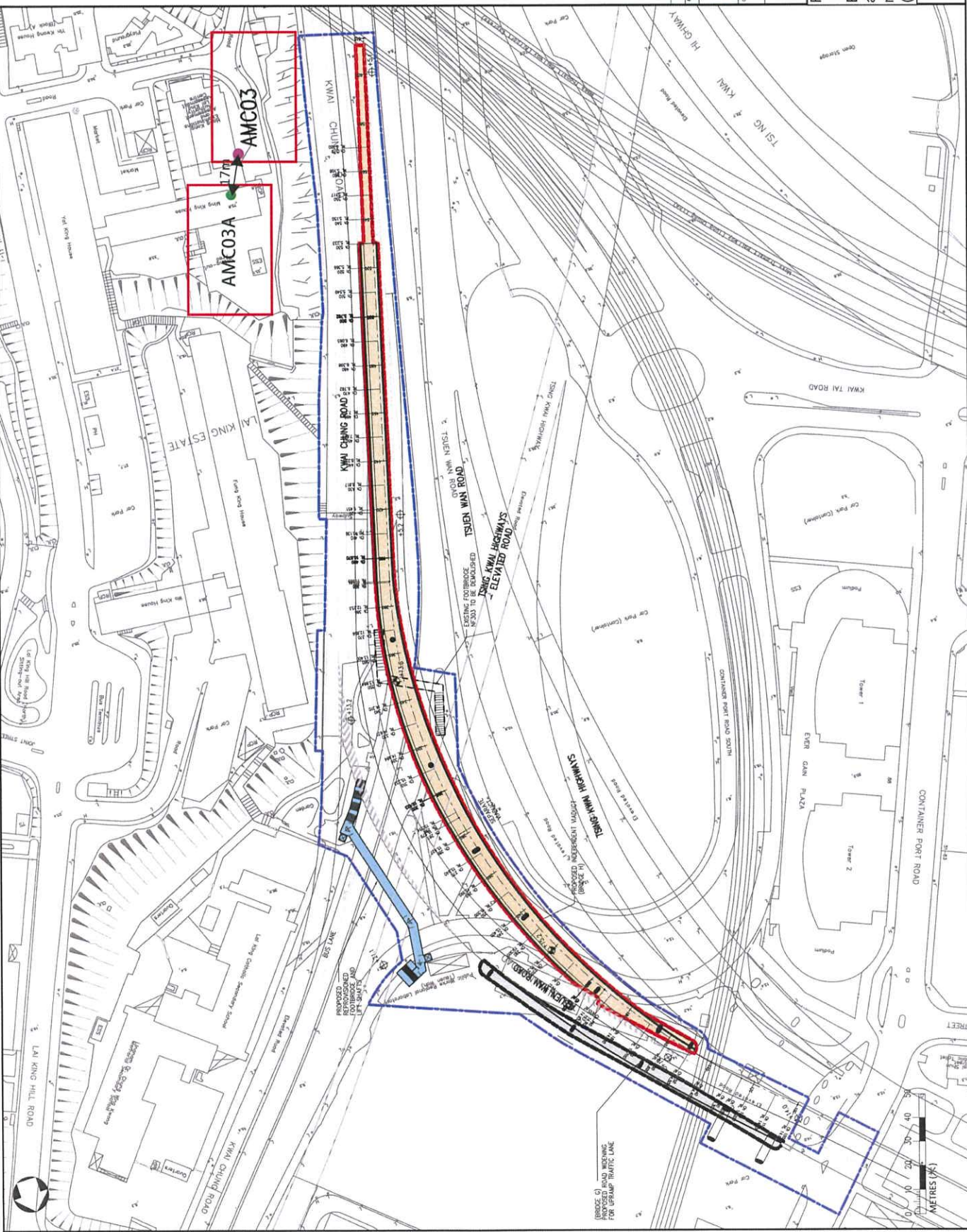


Figure 2

Existing and proposed alternative air quality monitoring stations (AMC03A)





Lam Environmental Services Limited
 19/F, Remex Centre,
 42 Wong Chuk Hang Road,
 Hong Kong

By Fax: 2882 3331

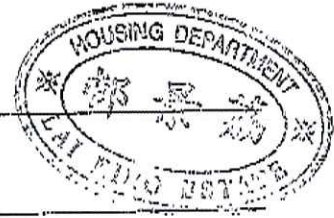
Quotation Ref. No. WDS/2021
Environmental Team for Construction of Flyover from Kwai Tsing Interchange
Upramp to Kwai Chung Road
Under Environmental Permit No. EP-541/2017/A

Request for Access Permission
for Provision and Operation of Air Monitoring Station at G/F, Carnival Restaurant
(Kwai Chung)

< Receipt >

We hereby acknowledge receipt of your letter.
 We ~~agree~~ / object * your staff to conduct environmental impact monitoring works within the boundary of our premises during the tentative monitoring schedule.

Authorised Signature
 (with Company Chop)



Name in Block Letters

Chris CHUNG
AHM/Lai King(1)

Name of Organization

Housing Department, HK SAR

Date

23 Aug. 2021

* Please delete as appropriate