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#### **QUARTERLY EM&A REPORT**

#### September 2020 – November 2020

Client :		Civil Engineering and Development Department, HKSAR	
Contract No.	:	KLN/2015/07	
Contract Name	:	Environmental Monitoring Works for Contract KL/2014/03 – Kai Tak Development – Stage 3 Infrastructure Works for Developments at the Southern Part of the Former Runway	
Report No.	:	0405/15/ED/1280B	
EP-337/2009		Distributor Roads Serving the Planned Kai Tak elopment Area	
EP-339/2009/A	Build	ommissioning of the Remaining Parts (Ex-GFS ding, Radar Station and Hong Kong Aviation Club) e former Kai Tak Airport	
FP-451/2013	Trun	k Road T2	

EP-451/2013 Trunk Road T2

Prepared by Toby K. H. Wan 2 **Reviewed by** Cyrus C. Y. Lai 2 **Certified by** 2 Colin K. L. Yung **Environmental Team Leader** MateriaLab Consultants Limited



4 March 2021

Ref.: CEDKTDS3EM00\_0\_0537L.21

By Post and Email

Hyder-Meinhardt Joint Venture 17/F, Two Harbour Square, 180 Wai Yip Street, Kwun Tong Kowloon, Hong Kong

Attention: Mr. Pat Lam

Dear Mr. Lam,

#### Re: Contract No. KL/2014/03 – Kai Tak Development – Stage 3 Infrastructure Works for Developments at the Southern Part of the Former Runway Quarterly EM&A Report for September 2020 to November 2020

Reference is made to the Environmental Team's submission of the Quarterly EM&A Report for September 2020 to November 2020 (Report No. 0405/15/ED/1280B) we received by e-mail on 4 March 2021.

Please be informed that we have no adverse comment on the captioned report.

Thank you for your attention. Please do not hesitate to contact us should you have any queries.

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

Manson Yeung Independent Environmental Checker

c.c.	CEDD	Attn.:	Mr. Simon Kwok	Fax: 2739 0076
	Fugro	Attn.:	Mr. Colin K. L. Yung	By email
	CRBC	Attn.:	Mr. Dickey Yau	Fax: 2283 1689

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#### EXECUTIVE SUMMARY

- i. The Civil Engineering and Development Department HKSAR has appointed MateriaLab Consultants Limited (MCL) to undertake the Environmental Team services for the Project and implement the EM&A works.
- ii. This is the nineteenth Quarterly EM&A Report presents the environmental monitoring and audit works for the period between 1 September 2020 and 30 November 2020. As informed by the Contractor, major activities in the reporting period included:

September 2020	October 2020	November 2020
<ul> <li>September 2020</li> <li>Utility laying</li> <li>Construction of road base and road pavement</li> <li>Landscape works – irrigation systems, tree and shrub planting</li> <li>Laying Cable and Construction for Road</li> </ul>	<ul> <li>October 2020</li> <li>Utility laying</li> <li>Construction of road base and road pavement</li> <li>Landscape works – irrigation systems, tree and shrub planting</li> <li>Laying Cable and Construction for Road</li> </ul>	<ul> <li>November 2020</li> <li>Utility laying</li> <li>Construction of road base and road pavement</li> <li>Landscape works – irrigation systems, tree and shrub planting</li> <li>Laying Cable and Construction for Road</li> </ul>

#### **Breaches of the Action and Limit Levels**

- iii. Seven Action Level exceedance for 24-hr TSP were recorded in the reporting period. Five exceedance were recorded at KTD2c on 14, 24 October 2020 and 11, 16, 21 November 2020. Two exceedance were recorded at KER1 on 24 October 2020 and 16 November 2020.
- iv. A Limit Level exceedance for 24-hr TSP was recorded in the reporting period. An exceedance was recorded at KTD2c on 5 November 2020.
- v. A Limit Level exceedance for construction noise was recorded. Exceedance was recorded at KTD1 on 21 October 2020. No Action / Limit Level exceedance was recorded for construction noise at KTD2c and KER1 in the reporting month.

#### Complaint, Notification of Summons and Successful Prosecution

vi. No environmental complaint and no notification of summons and successful prosecution were received in the reporting period.

#### **Reporting Changes**

vii. No reporting changes in the reporting period.



#### 1. INTRODUCTION

#### 1.1 Background

- 1.1.1 The Kai Tak Development is located in the south-eastern part of Kowloon Peninsula of the HKSAR, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling.
- 1.1.2 Contract No. KL/2014/03 is the works package to construct an approximately 420m long supporting underground structure (SUS) underneath Shing Cheong Road and Cheung Yip Street. The EM&A programme under this Contract is governed by three EPs (EP-337/2009, EP-339/2009/A and EP-451/2013) and two EM&A Manuals (AEIAR-130/2009 and AEIAR-174/2013). The Works to be executed under this Contract and corresponding EPs include but not be limited to the following main items:

#### EP-451/2013 – Trunk Road T2

(i) Construction of approximately 420m long supporting underground structure (SUS) including diaphragm walls, barrettes, piled foundation, top and bottom slabs, end wall and adits underneath Shing Cheong Road and Cheung Yip Street;

#### EP-337/2009 – New Distributor Roads Serving the Planned Kai Tak Development

- (ii) Widening and re-alignment of Cheung Yip Street of approximately 330m long and associated footpaths;
- (iii) Demolition, reconstruction and widening of Shing Cheong Road of approximately 410m long and associated footpaths;
- (iv) Construction of drainage outfall and modification of existing seawall;
- (v) Construction of ancillary works including surface drainage, sewerage, water, fire fighting, street lighting, street furniture, road marking, road signage, utilities and services, irrigation and landscape works.

### EP-339/2009/A – Decommissioning of the Remaining Parts (Ex-GFS Building, Radar Station and Hong Kong Aviation Club) of the former Kai Tak Airport

(vi) Demolition of RADAR Tower and guard house;

#### Other works not covered by any EP

- (vii) Construction of two subways between Phase II of New Acute Hospital (Site A) and Hong Kong Children's Hospital (Site C), and between Phase I of New Acute Hospital (Site B) and Site C;
- (viii) Construction of District Cooling System (DCS) along Cheung Yip Street and Shing Cheong Road
- 1.1.3 The location and boundary of the site is shown in **Figure 1**.
- 1.1.4 This Quarterly EM&A report is required under Section 16.1.2 and 16.7.1 of the EM&A Manual AEIAR-130/2009. It is to report the results and findings of the EM&A programme required in the EM&A Manual.
- 1.1.5 This is the nineteenth Quarterly EM&A Report which summaries the impact monitoring results and audit findings for the Project within the period between 1 September 2020 and 30 November 2020.



#### 1.2 **Project Organization**

- 1.2.1 The project proponent was the Civil Engineering and Development Department, HKSAR (CEDD). Hyder Meinhardt Joint Venture (HMJV) was commissioned by CEDD as the Engineer for the Project. Ramboll Hong Kong Limited was commissioned as the Independent Environmental Checker (IEC). China Road and Bridge Corporation (Hong Kong) (CRBC) was appointed as the main contractor for the construction works under the contract KL/2014/03. MateriaLab Consultants Limited (MCL) was appointed as the Environmental Team (ET) by CEDD to implement the EM&A programme for the Project.
- 1.2.2 The organization structure is shown in **Appendix B**. The key personnel contact names and numbers for the Project are summarized in **Table 1.1**.

Party	Position	Name	Telephone	Fax
Project Proponent (CEDD)	Engineer	Mr. Simon Kwok	3842 7140	2739 0076
Engineer's Representative (HMJV)	Senior Resident Engineer	Mr. Pat Lam	3742 3803	3742 3899
IEC (Ramboll Hong Kong Limited)	Independent Environmental Checker	Mr. Manson Yeung	9700 6767	3465 2899
Main Contractor	Site Agent		5699 4503	2283 1689
(CRBC) Environmental Office (from 26 May 2020)		Miss. Lila Lui	9790 5433	2283 1689
ET (MCL)	Environmental Team Leader	Mr. Colin Yung	3565 4114	3565 4160

 Table 1.1
 Contact Information of Key Personnel

#### 1.3 Construction Programme and Activities

1.3.1 The construction of the Project commenced in February 2016 and is expected to complete in 2020. The construction programme is shown in **Appendix A**. A summary of the major construction activities undertaken in the reporting period were:

September 2020	October 2020	November 2020
<ul> <li>Utility laying</li> <li>Construction of road base and road pavement</li> <li>Landscape works – irrigation systems, tree and shrub planting</li> <li>Laying Cable and Construction for Road Lighting</li> </ul>	<ul> <li>Utility laying</li> <li>Construction of road base and road pavement</li> <li>Landscape works – irrigation systems, tree and shrub planting</li> <li>Laying Cable and Construction for Road Lighting</li> </ul>	<ul> <li>Utility laying</li> <li>Construction of road base and road pavement</li> <li>Landscape works – irrigation systems, tree and shrub planting</li> <li>Laying Cable and Construction for Road Lighting</li> </ul>

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#### 2. SUMMARY OF EM&A REQUIREMENTS AND MONITORING RESULTS

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#### 2.1 Monitoring Requirement

Hona Kona

In accordance with the approved EM&A Manuals, 24-hour Total Suspended Particulates (TSP) level and Leq (30min) at the designated monitoring stations is required. Impact 24-hour TSP monitoring should be carried out at least once every 6 days. In case of complaints, 1-hour TSP monitoring should be carried out at least 3 times per 6 days when the highest dust impacts are likely to occur. Leq (30min) monitoring is conducted for at least once a week during the construction phase between 0700 and 1900 on normal weekdays. The Action and Limit Levels of the air quality monitoring and noise monitoring are given in **Appendix C** 

#### 2.2 Monitoring Locations

- 2.2.1 According to the EM&A Manual, three monitoring locations for air quality monitoring and noise monitoring, namely KTD1, KTD2 and KER1, are covered by this Contract within the South Apron Area of Former Kai Tak Airport. The other two air quality monitoring locations and two noise monitoring locations which are identified in Cha Kwo Ling area, are farther than 500m and 300m away from the site boundary respectively and thus not covered by this Contract. The monitoring works in Cha Kwo Ling area are covered by other Contract(s) respectively.
- 2.2.2 According to the approved alternative baseline air quality and noise monitoring locations (EPD reference: EP2/K19/A/21 Pt.5), the original monitoring locations (KTD1, KTD2 and KER1) are proposed to be replaced by alternative monitoring locations (KTD1a, KTD2a and KER1a).
- 2.2.3 According to the approved relocation of monitoring location KER1a (EPD reference: () in EP2/K19/A/21 Pt.5), the monitoring location KER1a are proposed to be relocated by alternative monitoring locations KER1b.
- 2.2.4 According to the approved relocation of monitoring location KTD2a (EPD reference: () in EP2/K19/A/21 Pt.6), the monitoring location KTD2a are proposed to be relocated by alternative monitoring locations KTD2b.
- 2.2.5 According to the approved relocation of monitoring location KTD2b (EPD reference: () in EP2/K19/A/21 pt.7), the monitoring location KTD2b are proposed to be relocated by alternative monitoring location KTD2c.
- 2.2.6 As informed by the ET of Contract No. ED/2018/04, the monitoring location KTD1a and KER1b have been relocated to KTD1 and KER1 on 3 August 2020.
- 2.2.7 The most updated locations are summarized in **Table 2.1** and shown in **Figure 2**.

Monitoring Station	Location
KTD1	Centre of Excellence in Paediatrics (Rooftop of Children's Hospital)
KTD2c	G/IC Zone next to Kwun Tong Bypass (Next to the Kowloon Bay Sewage Interception Station)
KER1	Future Residential Development at Kerry Godown



#### 2.3 Results and Observations

- 2.3.1 Seven Action Level exceedance for 24-hr TSP were recorded in the reporting period. Five exceedance were recorded at KTD2c on 14, 24 October 2020 and 11, 16, 21 November 2020. Two exceedance were recorded at KER1 24 October 2020 and 16 November 2020.
- 2.3.2 One Limit Level exceedance for 24-hr TSP was recorded in the reporting period. An exceedance was recorded at KTD2c on 5 November 2020.
- 2.3.3 A Limit Level exceedance for construction noise was recorded. Exceedance was recorded at KTD1 on 21 October 2020.
- 2.3.4 No Action / Limit Level exceedance was recorded for construction noise at KTD2c and KER1 in the reporting period.
- 2.3.5 No raining and wind with speed over 5 m/s was observed during noise monitoring according to the onsite observation.
- 2.3.6 Graphical presentation of the monitoring data in the reporting period is presented in **Appendix D**.

#### 2.4 Comparison of Monitoring Results with EIA Predictions

2.4.1 The monitoring data was compared with the EIA predictions as summarized in **Table 2.2** and **Table 2.3**.

Monitoring Station	Receiver Reference	Predicted Maximum 24- hour TSP	imum 24- bur TSP Reporting Period (µg/ m			Average 24-hour TSP concentration in Reporting Period (μg/ m³)		
Station	Reference	Concentration (µg/m³)	Sep 2020	Oct 2020	Nov 2020	Sep 2020	Oct 2020	Nov 2020
KTD1	KTD3	126	31-61	62-157	41-115	47	93	77
KTD2c	-	-	55-100	108-214	146-294	80	150	197
KER1	KTD6	169	41-73	77-209	76-174	57	132	129

 Table 2.2
 Comparison of 24-hr TSP data with EIA predictions

Note:

For KTD2c, there was no receiver reference in the EIA report, AEIAR-174/2013.

Predicted Maximum TSP Concentration extracted from Table 4.14 of EIA Report, AEIAR-174/2013.

#### Table 2.3Comparison of Noise Monitoring data with EIA predictions

Monitoring Station	Receiver	Maximum Predicted Mitigated	Leq <sub>(30min)</sub> dB(A) in Reporting Period		
Monitoring Station	Reference	Construction Noise Level, dB(A)	Sep 2020	Oct 2020	Nov 2020
KTD1	KTD1	74	68-71	70-78	69-75
KTD2c	-	-	73-75	68-73	62-73
KER1	KER1	75	71-74	73-74	71-74

Note:

Maximum Predicted Mitigated Construction Noise Level extracted from Table 5.13 of EIA Report, AEIAR-174/2013.



- 2.4.2 The 24-hour TSP monitoring results at KTD1 in October and KER1 in October and November exceeded the Predicted Maximum 24-hour TSP Concentration in the approved Environmental Impact Assessment (EIA) Report. Seven Action Level exceedance and one Limit Level exceedance were recorded in the reporting period.
- 2.4.3 On 14 October 2020, at KTD2c non-project related construction works were carried out during 24-hr TSP monitoring. Dust was generated from construction site of Trunk Road T2 when C&D materials loading and unloading activities was processing. Thus, it is considered that this exceedance is not project related.
- 2.4.4 On 24 October 2020, at KER1 and KTD2c non-project related construction works were carried out during 24-hr TSP monitoring. Dust arising from the vehicle movement from construction site of Trunk Road T2. Thus, it is considered that this exceedance is not project related.
- 2.4.5 On 24 October 2020, at KTD1 non-project related construction activities at the nearby construction sites of New Acute Hospital and the fluctuation of road traffic along Shing Fung Road which affected the result of 24-hour TSP concentration. Thus, it is considered that this exceedance is not project related.
- 2.4.6 On 5, 11, 16 and 21 November 2020, at KTD2c non-project related construction works were carried out during 24-hr TSP monitoring. Dust was generated from construction site of Trunk Road T2 when C&D materials loading and unloading activities was processing. Thus, it is considered that this exceedance is not project related.
- 2.4.7 On 16 November 2020, at KER1 non-project related construction works were carried out during 24-hr TSP monitoring. Dust arising from the road traffic along Kai Hing Road and the vehicle movement from the adjacent building (Kerry DG Warehouse (Kowloon Bay). Thus, it is considered that this exceedance is not project related.
- 2.4.8 The noise monitoring results at KER1 in the reporting period did not exceed the Maximum Predicted Mitigated Construction Noise Level in the approved Environmental Impact Assessment (EIA) Report and no Action / Limit Level exceedance for KER1 was recorded in the reporting period.
- 2.4.9 The noise monitoring results at KTD1 in October and November exceeded the Maximum Predicted Mitigated Construction Noise Level in the approved Environmental Impact Assessment (EIA) Report. A limit Level exceedance for KTD1 was recorded in the reporting period.
- 2.4.10 On 21 October 2020, at KTD1 a breaker from construction site of New Acute Hospital was operated continuously. The noise generated by the breaker during breaking activity dominates the ambient or background noise. Thus, it is considered that this exceedance is not project related.
- 2.4.11 On 23 November 2020, at KTD1 non-project related construction noise generated from the construction activity at the adjacent construction site (New Acute Hospital at Kai Tak Development Area) and the fluctuations of traffic flow along Shing Fung Road throughout the day. Thus, it is considered that this exceedance is not project related.



#### 3. LANDSCAPE AND VISUAL

#### 3.1 Results and Observations

- 3.1.1 To monitor and audit the implementation of landscape and visual mitigation measures, 13 weekly Landscape and Visual Site audits were carried out and 6 of them were carried out by a Registered Landscape Architect. The weekly Landscape and Visual Impact reports were counter-signed by IEC as according to the requirement of EM&A Manual (AEIAR-130/2009).
- 3.1.2 No non-compliance was recorded in the weekly Landscape and Visual Site audits in the reporting period.
- 3.1.3 Observations and recommendations during site audits are summarized in **Table 5.1**.

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#### 4. WASTE MANAGEMENT

#### 4.1 Results and Observations

- 4.1.1 C&D materials and wastes sorting were carried out on site. Receptacles were available for C&D wastes and general refuse collection.
- 4.1.2 The amount of wastes generated by the site activities in the reporting period is shown in **Appendix E**.
- 4.1.3 The Contractor is advised to properly maintain on site C&D materials and wastes collection, sorting and recording system and maximize reuse / recycle of C&D materials and wastes. The Contractor is reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.
- 4.1.4 The Contractor is reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.



#### 5. SITE INSPECTION

#### 5.1 Site Inspection

- 5.1.1 Site inspections were carried out weekly to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. A summary of the mitigation measures implementation schedule is provided in **Appendix F**.
- 5.1.2 In the reporting quarter, 13 site inspections were carried out. 6 of them were the joint inspections with the IEC, ER, the Contractor and the ET.
- 5.1.3 All the follow-up actions requested by Contractor's ET and IEC during the site inspections were undertaken as reported by the Contractor and confirmed in the following weekly site inspection conducted during the reporting month.
- 5.1.4 Details of observations recorded during the site inspections are presented in **Table 5.1**.

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Table 5.1	<b>Observations and Recommendations of Site Audit</b>

Parameters	Date	Observations and Recommendations	Follow-up				
Air Quality	NA						
Noise		NA					
Water Quality		NA					
Chemical and Waste Management	28 Oct 2020	Reminder: General refuse and construction waste was reminded to clear up regularly to prevent accumulation.	NA				
	4 Nov 2020	Reminder: General refuse and construction waste was reminded to clear up regularly to prevent accumulation.	NA				
Land Contamination		NA					
Landscape and Visual Impact	NA						
General	NA						
Permit / Licenses		NA					



#### 6. ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE

#### 6.1 Environmental Exceedance

- 6.1.1 Seven Action Level exceedance for 24-hr TSP were recorded in the reporting period. Five exceedance were recorded at KTD2c on 14, 24 October 2020 and 11, 16, 21 November 2020. Two exceedance were recorded at KER1 on 24 October 2020 and 16 November 2020.
- 6.1.2 A Limit Level exceedance for 24-hr TSP was recorded in the reporting period. An exceedance was recorded at KTD2c on 5 November 2020.
- 6.1.3 A Limit Level exceedance for construction noise was recorded. Exceedance was recorded at KTD1 on 21 October 2020.
- 6.1.4 No Action / Limit Level exceedance was recorded for construction noise at KTD2c and KER1 in the reporting period.
- 6.1.5 Number of exceedance in the reporting period was summarized in **Table 6.1**.

		Number of exceedance in the reporting period											
	Monitoring		r TSP µg/m	1 <sup>3</sup>	Leo								
Statio	n	Sep 2020	Oct 2020	Nov 2020	Sep 2020	Oct 2020	Nov 2020	Total					
	AL	0	0	0	0	0	0	0					
KTD1	LL	0	0	0	0	1	0	1					
KTD2c	AL	0	2	3	0	0	0	5					
KID2C	LL	0	0	1	0	0	0	1					
KER1	AL	0	1	1	0	0	0	2					
NEK I	LL	0	0	0	0	0	0	0					
Total	AL	0	3	4	0	0	0	7					
rotai	LL	0	0	1	0	1	0	2					

 Table 6.1
 Summary of Exceedance in Reporting Period

#### 6.2 Complaints, Notification of Summons and Prosecution

6.2.1 No inspection notice, notification of summons or prosecution was received in this reporting period. Cumulative complaint log, summaries of complaints, notification of summons and successful prosecutions are presented in **Table 6.2, 6.3 and 6.4**.

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Reference No.	Date of Complaint Received	Received From	Received By	Nature of Complaint	Date of Investigation	Outcome	Date of Reply	
20161207_complaint_c	7 Dec 2016	EPD	Andy Choy (CRBC)	Air	13 Feb 2017	Project- related	13 Feb 2017	
20170209_complaint_c	9 Feb 2017	EPD	Andy Choy (CRBC)	Air	22 Feb2017	Not Project- related	7 Mar 2017	
20170502_complaint_c	2 May 2017	CEDD	Andy Choy (CRBC)	Noise	4 May 2017	Not Valid	22 May 2017	
20170716_complaint_a	16 Jul 2017	CEDD	HMJV	Water Quality	4 Aug 2017	Not Project- related	4 Aug 2017	
20180530_complaint	30 May 2018	EPD	CRBC	Air	9 June 2018	Not Valid	20 Jun 2018	

#### Table 6.2 Environmental Complaints Log

#### Table 6.3 Cumulative Statistics on Complaints

Environmental Parameters	Cumulative No. Brought	No. of Com	No. of Complaints in the Reporting Period					
	Forward	September 2020	October 2020	November 2020	Date			
Air	3	0	0	0	3			
Noise	1	0	0	0	1			
Water	1	0	0	0	1			
Waste	0	0	0	0	0			
Total	0	0	0	0	0			

#### Table 6.4 Cumulative Statistics on Successful Prosecutions

Environmental Parameters	Cumulative No. Brought	No. of Complaints This Reporting Period			Cumulative Project-to-	
	Forward	September 2020	October 2020	November 2020	Date	
Air	0	0	0	0	0	
Noise	0	0	0	0	0	
Water	0	0	0	0	0	
Waste	0	0	0	0	0	
Total	0	0	0	0	0	

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#### 7. IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

#### 7.1 Implementation Status

7.1.1 The Contractor has implemented environmental mitigation measures and requirements as stated in the EIA Reports, the EP and the EM&A Manuals. The implementation status of the mitigation measures during the reporting period is summarized in **Appendix F**.



#### 8. CONCLUSIONS

- 8.1.1 Seven Action Level exceedance for 24-hr TSP were recorded in the reporting period. Five exceedance were recorded at KTD2c on 14, 24 October 2020 and 11, 16, 21 November 2020. Two exceedance were recorded at KER1 on 24 October 2020 and 16 November 2020.
- 8.1.2 One Limit Level exceedance for 24-hr TSP was recorded in the reporting period. An exceedance was recorded at KTD2c on 5 November 2020.
- 8.1.3 A Limit Level exceedance for construction noise was recorded. Exceedance was recorded at KTD1 on 21 October 2020.
- 8.1.4 No Action / Limit Level exceedance was recorded for construction noise at KTD2c and KER1 in the reporting period.
- 8.1.5 13 weekly environmental site inspections were carried out in the reporting period. Recommendations on mitigation measures on chemical and waste management were given to the Contractor for remediating the deficiencies identified during the site inspections.
- 8.1.6 13 weekly Landscape and Visual Site audits were carried out on in the reporting period and 6 of them were carried out by a Registered Landscape Architect in the reporting period. The weekly Landscape and Visual Impact reports were counter-signed by IEC as according to the requirement of EM&A Manual (AEIAR-130/2009). No non-compliance was recorded in the weekly Landscape and Visual Site audits in the reporting period.
- 8.1.7 Referring to the Contractor's information, no notification of summons and successful prosecution was received in the reporting period.
- 8.2 Comment and Recommendations
- 8.2.1 The recommended environmental mitigation measures, as proposed in the EIA reports and EM&A Manuals shall be effectively implemented to minimize the potential environmental impacts from the Project. The EM&A programme would effectively monitor the environmental impacts generated from the construction activities and ensure the proper implementation of mitigation measures.
- 8.2.2 According to the environmental audit performed in the reporting period, the following recommendations were made:

#### Air Quality Impact

• No specific observation was identified in the reporting period.

Construction Noise Impact

• No specific observation was identified in the reporting period.

#### Water Quality Impact

• No specific observation was identified in the reporting period.

#### Chemical and Waste Management

 General refuse and construction waste was reminded to clear up regularly to prevent accumulation. Room 723 & 725, 7/F, Block B, Profit Industrial Building, 1-15 Kwai Fung Crescent, Kwai Fong, Hong Kong. Tel : +852 2450 8238 Fax : +852 2450 8032 E-mail : mcl@fugro.com Website : www.fugro.com



#### Land Contamination

• No specific observation was identified in the reporting period.

#### Landscape and Visual Impact

No specific observation was identified in the reporting period.

#### **General Condition**

• No specific observation was identified in the reporting period.

#### Permit / Licenses

• No specific observation was identified in the reporting period.

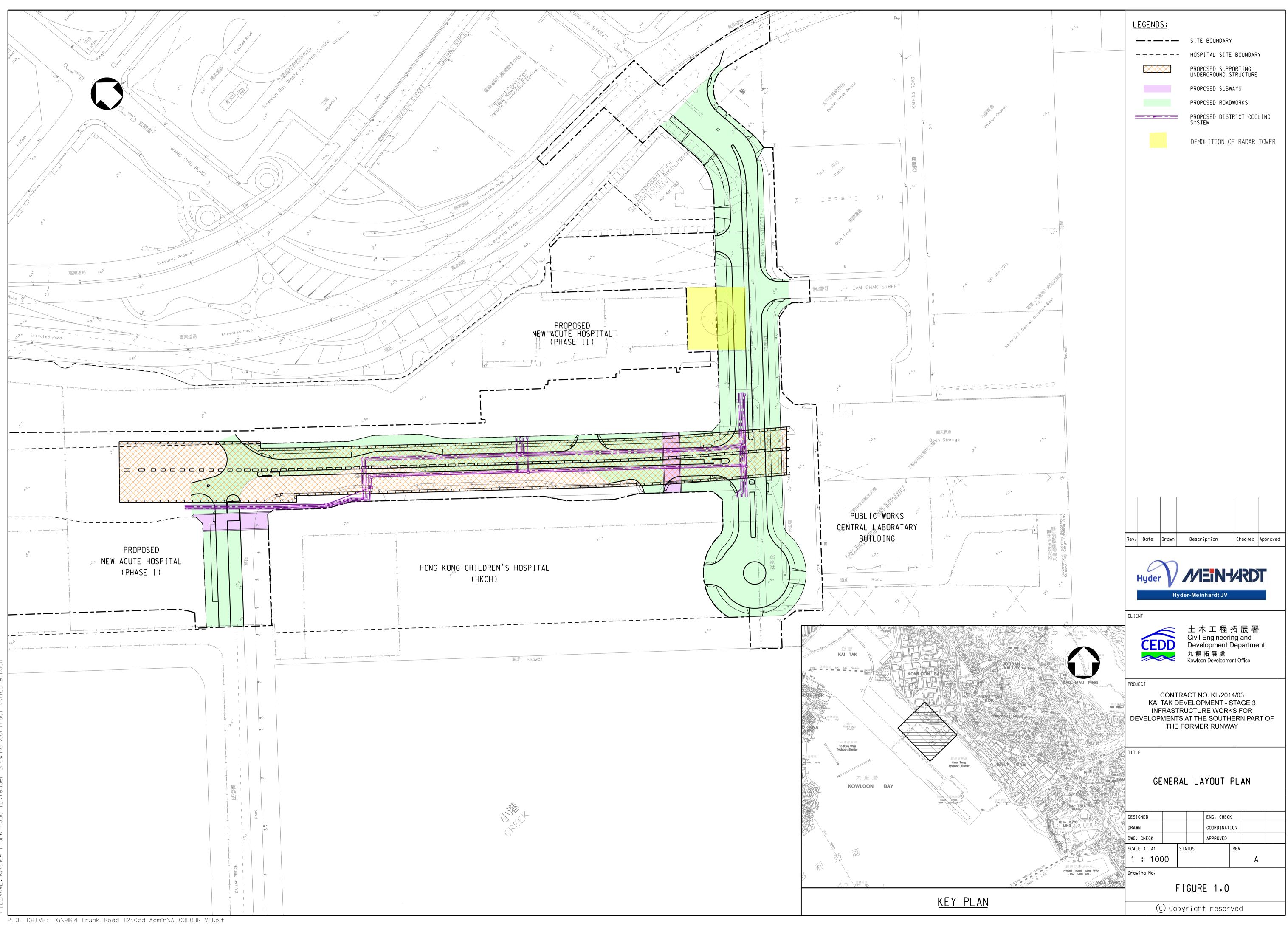
Room 723 & 725, 7/F, Block B, Profit Industrial Building, 1-15 Kwai Fung Crescent, Kwai Fong, Hong Kong. Tel : +852 2450 8238 Fax : +852 2450 8032 E-mail : mcl@fugro.com Website : www.fugro.com



Figure 1

**Project General Layout** 

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INTED BY: kitchan 18/2/2015 13:00:43 .ENAME: K:\9||64 Trunk Road T2\Tender Drawing (Contract I)\

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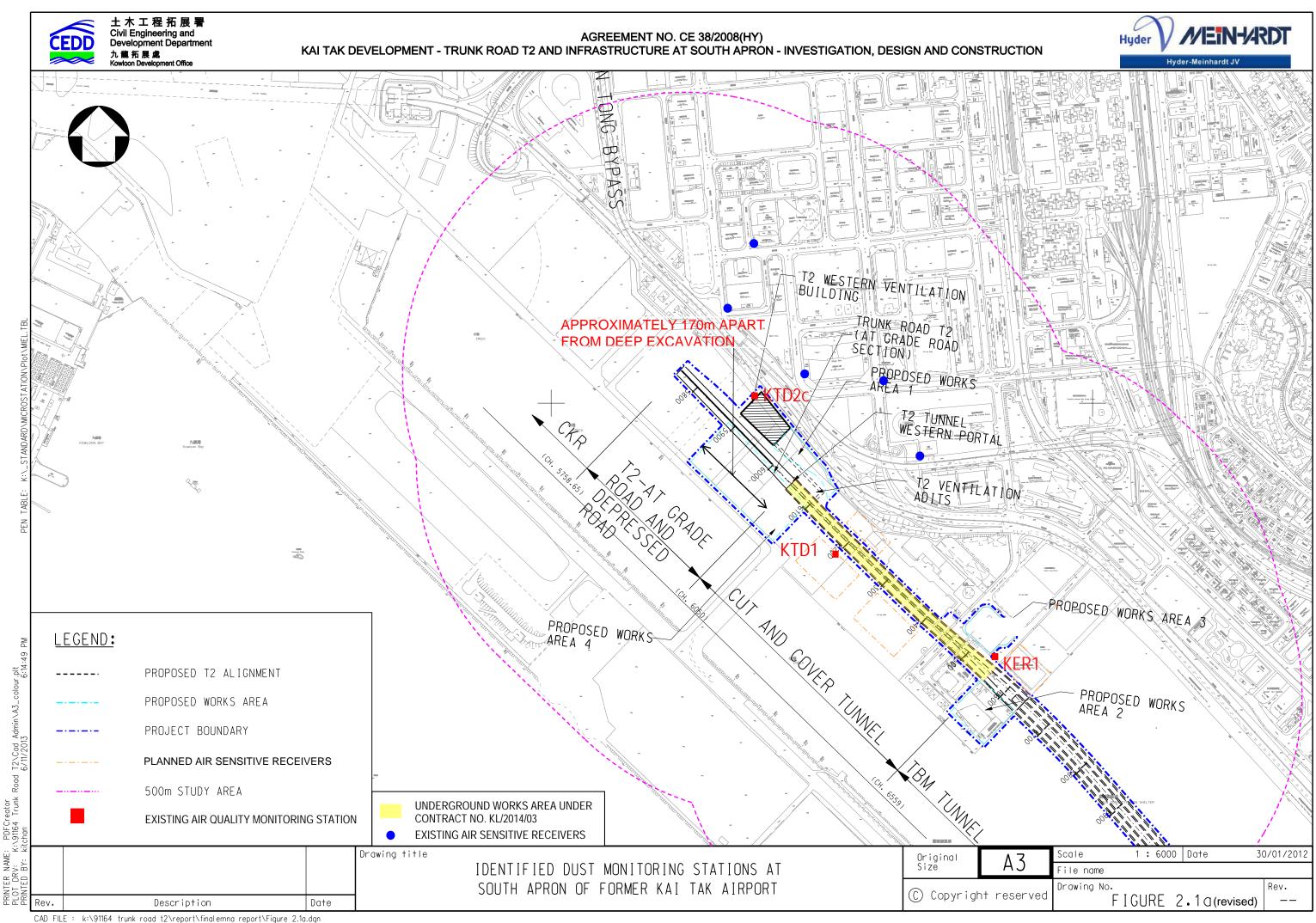
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 : mcl@fugro.com

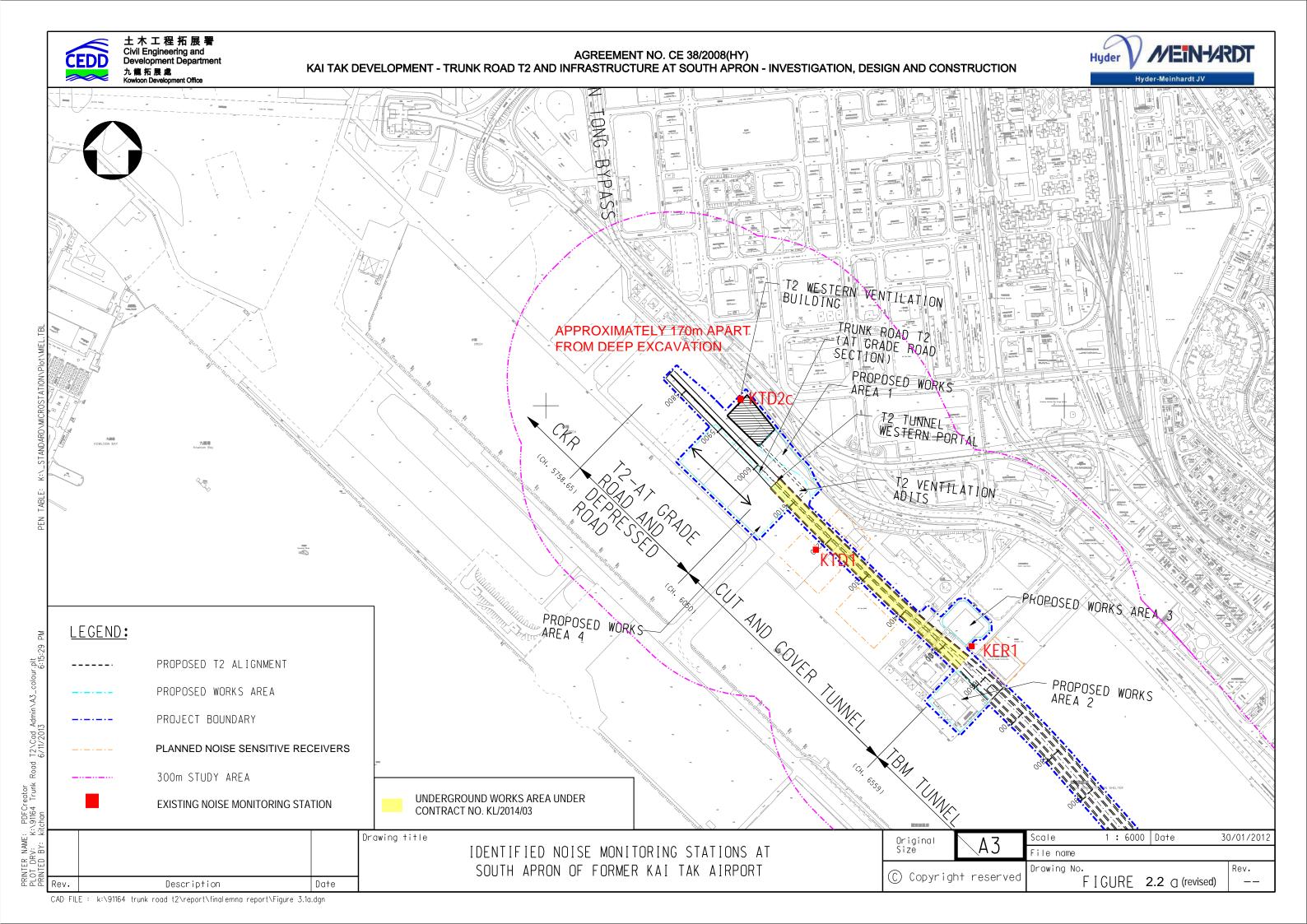
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Figure 2

**Air and Noise Monitoring Locations** 





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Appendix A

**Construction Programme** 

Hyder	MEIN-ARDT				
Hyder - Meinhardt JV					

KL/2014/03 Kai Tak Development - Stage 3 Infrastructure Works for Developments at the Southern Part of the Former

vity ID	Activity Name	Rem Start Dur	Finish	gust 2	September 63	Octo 6
VI /2014/02 Sta	as 2 Infrastructure Works for Developments at the Couthern Dev			16 23	<u>30 06 13 20 2</u>	7 04 11
Project Key Date	ge 3 Infrastructure Works for Developments at the Southern Par	t of the Former R	unway			
• •						
	ncement and Completion					
K-PK-PCC-1200	Project Completion Date	0	31-Aug-20*		<ul> <li>Project Completion Date</li> </ul>	
<b>Project Complet</b>	ion Date					
K-PK-PCD-1000	Section 1-Remainder of the Works (i.e. all Works except Works included in other Section of the Work)	0	31-Aug-20*		<ul> <li>Section 1-Remainder of the Works (i.e. all</li> </ul>	Works except Works in
K-PK-PCD-1300	Section 3 - Construction of District Cooling System (DCS)	0	31-Aug-20*		<ul> <li>Section 3 - Construction of District Coolin</li> </ul>	g System (DCS)
K-PK-PCD-1600	Section 5 - Completion of All Landscape Softworks	0	31-Aug-20*		• Section 5 - Completion of All Landscape S	Softworks
K-PK-PCD-1700	Section 6 - Completion of all Establishment Works for all Landscape Softworks	0	31-Aug-20*		• Section 6 - Completion of all Establishmer	nt Works for all Landsc
K-PK-PCD-1800	Section 7 - Preservation and Protection of Existing Trees	0	31-Aug-20*		• Section 7 - Preservation and Protection of	Existing Trees
Site Handover D	ate					
K-PK-SHD-1000	Portion A	0	31-Aug-20*		• Portion A	
K-PK-SHD-1400	Portion D	0	31-Aug-20*		• Portion D	
K-PK-SHD-1500	Portion E	0	31-Aug-20*		• Portion E	
K-PK-SHD-1600	Portion F	0	31-Aug-20*		• Portion F	
K-PK-SHD-1800	Portion I	0	31-Aug-20*		• Portion I	
K-PK-SHD-1900	Portion K	0	31-Aug-20*		• Portion K	
K-PK-SHD-2000	Portion M	0	31-Aug-20*		• Portion M	
K-PK-SHD-2200	Portion O	0	31-Aug-20*		• Portion O	
K-PK-SHD-2500	Portion R	0	31-Aug-20*		• Portion R	
K-PK-SHD-2600	Portion X	0	17-Sep-20*		◆ Portion X	
General Submiss	sion					
Interfacing Wor	ks					
K-PA-INT-5000	Joint inspection and handover for DCS Contract/ EMSD	4 07-Sep-20	10-Sep-20		Joint inspection and hando	ver for DCS Contract/ I
K-PA-INT-6000	Joint inspection and handover for road works, street furniture and lighting to HyD	4 23-Sep-20	26-Sep-20		Join	t inspection and hando
K-PA-INT-6010	Joint inspection and handover for traffic signal system to TD/EMSD	4 23-Sep-20	26-Sep-20		Join	t inspection and hando
Prelimiaries						
K-DR-PRE-1800	Submission of time-lapsed photographs and video	18 20-Feb-16 A	17-Sep-20		Submission of tir	ne-lapsed photographs
Section 1 of the V	Vorks-Remainder of the Works					
Roadwork and I	Drainage Works					
Road D4-3 (Chin	ng Shung Road)					



中國路德工程有限責任公司 CHINA ROAD AND BRIDGE CORPORATION Milestone
 Critical Activity
 Non-Critical Activity
 Remaining Level of Effort
 Actual Work

3 MRP Sep 2020 - Nov 2020

Page 1 of 3

Project ID :57\_ MPR 31 Aug 20 Layout : KL201403 3MRP Page 1 of 3

r Run	iway		CED		土木工程 Civil Enginee Development 九龍拓展處 Kowloon Developr	Department	
tober				Nove	ember	and sente	mber
64	18 25	01	08	6	5 15	22	66 29
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include	d in other Se	ction of t	ne work)				
scape So	oftworks						
EMSD							
over for	road works,	street fur	niture and	ligh	ting to Hy	/D	
over for	traffic signa	l system t	o TD/FMS	D			
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- 1	daa						
is and vi	lueo						
	Date		nths Rollir ision		ogramme hecked	Δροτοι	her
	31-Aug-20	Sep 20 -			IEUKEU	Approv	eu
	51 / lug-20	200 20 -					
		1					

#### KL/2014/03 Kai Tak Development - Stage 3 Infrastructure Works for Developments at the Southern Part of the Former

vity ID	Activity Name	Rem	Start	Finish	gust				Septembe	r			Oct
		Dur			16	23	30	06	63 13	20	27	04	11
Zone 4 R & D Wor	rks												
SCR2172	Carry out and complete remaining works	16	20-Aug-19 A	17-Sep-20						Carry out a	nd comp	lete remain	ning worl
Road D4-4 (Che	ung Yip Street)												
CH100 to CH150	Cheung Yip Street Cul de Sac												
Cheung Yip Street	t Cul de Sac												
SCR2670	Laying Cable and Construction for Road Lighting	14	06-Jul-20 A	18-Sep-20						Laying Ca	able and (	Constructio	on for Ro
SCR2680	Construction of Footpath	9	10-Apr-20 A	09-Sep-20					Constructio	n of Footpa	ıth		
SCR2690	Construction of Street Furniture	20	25-Jul-20 A	22-Sep-20						Con	struction	of Street F	Furniture
CH220 - CH420 N	Northbound												
Road Works and	Niscellaneous Works												
K-01-RWS-9444	Construction of Footpath	3	17-Dec-19 A	02-Sep-20			Co	onstructio	n of Footp	ath			
	Laying Cable and Footing Construction for Road Lighting	20	25-May-20 A	22-Sep-20						Lay	ing Cable	e and Footii	ing Const
CH220 - CH420 S													
Miscellaneous Wo													
	Construction of Footpath	6		05-Sep-20				Constr	uction of F	-			
K-01-RWS-9632	Construction of Street Furniture	20	31-Aug-20	22-Sep-20						Con	struction	of Street F	furniture
Section 3 of the V	Works- Construction of District Cooling System (Subject to Excision	l)											
<b>Construction of</b>	District Cooling System												
<b>Construction of</b>	DCS Works at Zone 4												
SCR2350	Submission of testing records, as-built drawings	5	19-Feb-20 A	04-Sep-20				Submiss	ion of test	ng records	, as-built	drawings	
SCR2380	Joint inspection and handover for connection to DCS Contract/EMSD	5	28-Jun-20 A	10-Sep-20					Joint inspe	ection and l	nandover	for connec	ction to I
Section 5 of the V	Works-Completion of All Landscape Softworks												
Tree Planting													
K-05-TPG-1150	Tree Planting	10	24-Mar-20 A	19-Sep-20						Tree Pla	nting		
Shrub Planting													
K-05-SPG-1200	Shrub Planting	10	24-Mar-20 A	19-Sep-20						Shrub P	lanting		
Irrigation System				-									
K-05-ISM-1280	Application of Temporary Water Supply with WSD	3	21-Mar-20 A	02-Sep-20			A1	pplication	of Tempo	orary Water	Supply w	vith WSD	
K-05-ISM-1280	Insatllation of Water Meters	5	03-Sep-20	02-Sep-20						Water Mete			
													octing of
K-05-ISM-1300	Testing and commissioning of irrgation system	30	08-Sep-20	07-Oct-20			1				i	le	esting and



#### 中國路橋工程有限責任公司 CHINA ROAD AND BRIDGE CORPORATION

Critical Activity Non-Critical Activity Remaining Level of Effort Actual Work

Milestone

3 MRP Sep 2020 - Nov 2020 Page 2 of 3 Project ID :57\_ MPR 31 Aug 20 Layout : KL201403 3MRP Page 2 of 3

r Rur	nway							
tober					Novem	ber		mber
tober 64					Novem 65			66
	18	25	01	08		15	22	29
ks								
oad Lig	hting							
ouu Lig								
struction	n for Roa	d Light	ing					
;								
DCS Co	ontract/EN	MSD						
-,								
d com	nissionin	g of irr	gation sy	stem				
			3 Month	ns Rolling	g Progr	amme		
	Date		Revisio		Che	cked		oroved
	31-Aug-2		p 20 - No					

	Hyder - Meinhardt JV							CEDD	土木工程拓 Civil Engineering Development De 九龍拓展處 Kowloon Development	展署 and partment Office		
Activit	ty ID Activity Name		Rem	Start	Finish	gust	September 63	October 64	No	vember	m	iber
			Dui			16 23		7 04 11 18 25	01 08	15	22 29	9
H	K-07-001-1000 Section 7 of the W	orks-Preservation and Protection of Existing Trees	7	04-Jan-16 A	06-Sep-20		Section 7 of the Works-Preservat	ion and Protection of Existing Trees				





3 MRP Sep 2020 - Nov 2020 Page 3 of 3

Project ID :57\_ MPR 31 Aug 20 Layout : KL201403 3MRP Page 3 of 3

3 Months Rolling Programme						
Date	Revision	Checked	Approved			
31-Aug-20	Sep 20 - Nov 20					

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Appendix B

**Project Organization Chart** 

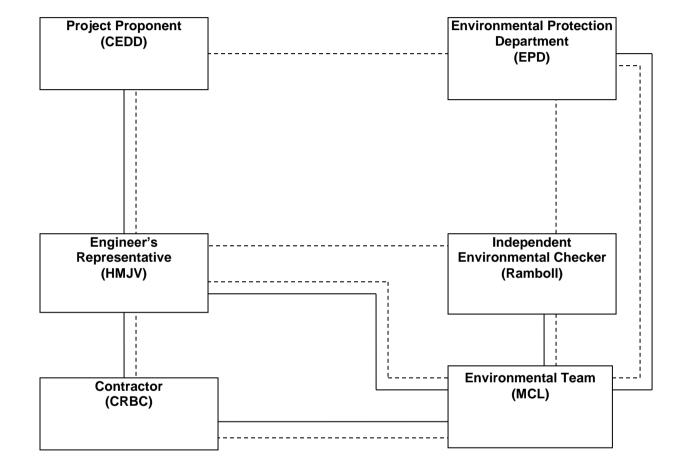
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Legend:					
	Line of Reporting				
	Line of Communication				

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Appendix C

Action and Limit Levels for Air Quality and Noise

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#### Action and Limit Levels for 24-hr TSP and 1-hr TSP

Parameter	Monitoring Station	Action Level (µg/m³)	Limit Level (µg/ m³)
24-hr TSP	KTD1	177	
(µg/m <sup>3</sup> )	KTD2c	157	260
(µg/m²)	KER1	172	
*1-hr TSP	KTD1	285	
(µg/m <sup>3</sup> )	KTD2c	279	500
(µg/11*)	KER1	295	

Note:

1-hr TSP monitoring should be required in case of complaints.

#### Action and Limit Levels for Construction Noise, Leq (30min), dB(A)

Time Period	Location	Action	Limit	
0700-1900 hrs on normal weekdays	KTD1 KTD2c KER1	When one documented complaint is received	75 dB(A)	

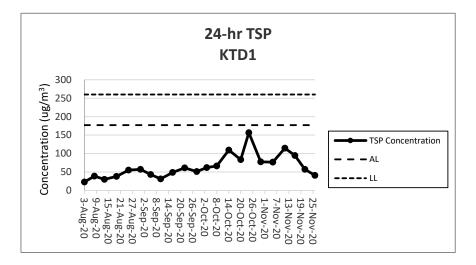
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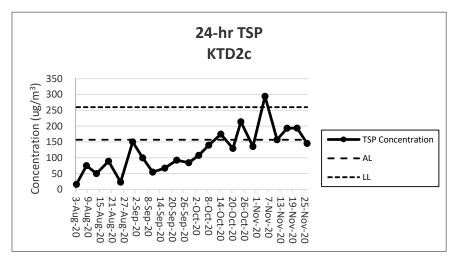
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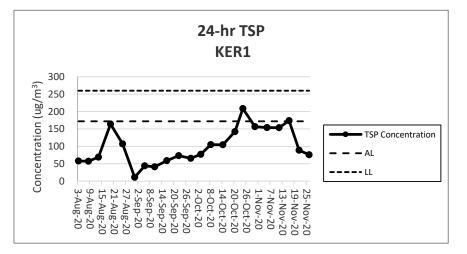


Appendix D

**Graphical Presentation of Monitoring Data** 

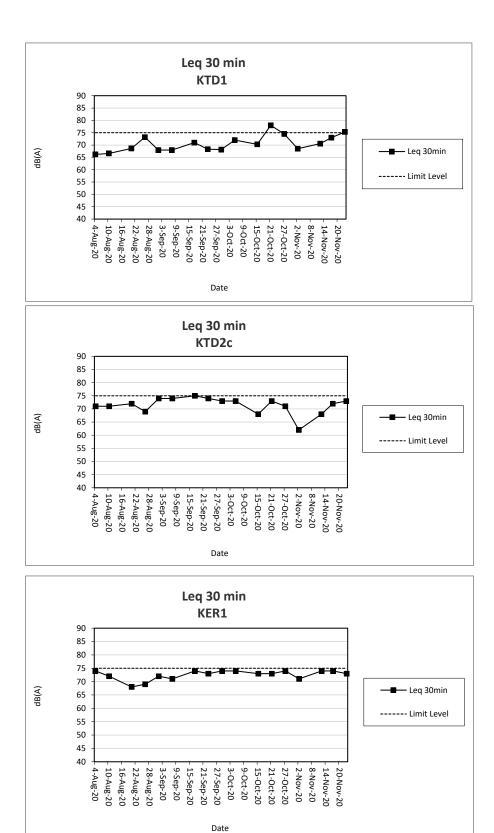






#### Note:

- 1) The major activities being carried out on site during the reporting period can be referred to Section 1.3.1.
- 2) The weather conditions during monitoring in the reporting period was range from cloudy and fine.
- 3) Any other factors which might affect the monitoing results can be referred to Section 2.3.4.



Note:

1) The major activities being carried out on site during the reporting period can be referred to Section 1.3.1.

2) The weather conditions during monitoring in the reporting period was ranged from cloudy and fine.

No raining or wind with speed over 5 m/s was observed during monitoring in the reporting period. 3) Any other factors which might affect the monitoing results can be referred to Section 2.3.4.

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Appendix E

Waste Flow Table

#### **MATERIALAB CONSULTANTS LIMITED** Room 723 & 725, 7/F, Block B, Tel :+852 2450 8238

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Website : www.fugro.com



Waste Flow Table for Year 2016											
	Actual Quantities of Inert C&D Materials Generated Monthly				Actual Quantities of Non-inert C&D Wastes Generated Monthly						
Months	Total Quantity Generated (Inert C&D)	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
2016 Jan	0.159	0.101	0.058	Nil	Nil	Nil	Nil	0.023	0.00002	0.0158	0.0335
2016 Feb	0.291	0.050	0.241	Nil	Nil	Nil	1.34	0.023	0.00002	0.0158	0.0335
2016 Mar	2.7389	0.0407	0.0662	Nil	2.632	Nil	5.92	0.023	0.00002	0.0158	0.0571
2016 Apr	4.1718	0.0578	0.462	Nil	3.652	Nil	12.5	0.023	0.00002	0.0158	0.0426
2016 May	3.592	Nil	0.299	Nil	3.293	Nil	5.23	0.023	0.00002	0.0158	0.0621
2016 June	4.6035	Nil	0.8555	Nil	3.748	Nil	Nil	0.023	0.00002	0.0158	0.0619
2016 July	6.155	0.153	0.015	Nil	5.987	Nil	7.84	0.023	0.00002	0.0158	0.0433
2016 Aug	5.1155	Nil	Nil	Nil	5.1155	Nil	19.93	0.023	Nil	Nil	0.0147
2016 Sept	7.2267	Nil	Nil	Nil	7.2267	Nil	33.65	0.023	Nil	Nil	0.0103
2016 Oct	4.6448	Nil	Nil	Nil	4.6448	Nil	13.30	0.023	Nil	Nil	0.0385
2016 Nov	6.1626	Nil	Nil	Nil	6.1626	Nil	27.06	0.023	Nil	Nil	0.0192
2016 Dec	6.3522	Nil	Nil	Nil	6.3522	Nil	13.30	0.023	Nil	Nil	0.0121
Total	51.213	0.4025	1.9967	Nil	48.8138	Nil	140.07	0.276	0.00014	0.1106	0.4288

Note:

1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.

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Waste Flow	Table for Ye	ar 2017									
		Actual Quant	ities of Inert C&I	D Materials Gene	rated Monthly		Actual	Quantities of Non-	inert C&D Wast	es Generated M	onthly
Months	Total Quantity Generated (Inert C&D)	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
2017 Jan	4.2300	Nil	Nil	Nil	4.2300	Nil	0.015	0.023	Nil	Nil	0.0109
2017 Feb	3.2128	Nil	Nil	Nil	3.2128	Nil	0.015	0.023	Nil	Nil	0.0096
2017 Mar	9.4759	Nil	Nil	Nil	9.4759	Nil	0.034	0.023	Nil	Nil	0.0162
2017 Apr	4.8827	Nil	Nil	Nil	4.8827	Nil	0.016	0.023	Nil	Nil	0.0062
2017 May	3.0366	Nil	Nil	Nil	3.0366	Nil	0.022	0.023	Nil	Nil	0.0282
2017 Jun	2.5656	Nil	Nil	Nil	2.5656	Nil	41.25	Nil	Nil	Nil	0.0357
2017 Jul	5.5267	Nil	0.7851	Nil	4.7416	Nil	4.01	0.4515	Nil	0.25	0.0364
2017 Aug	11.4734	Nil	0.0276	Nil	11.4458	Nil	7.4	Nil	Nil	Nil	0.0196
2017 Sep	23.9373	Nil	2.6167	Nil	21.3206	Nil	3.52	Nil	Nil	Nil	0.0333
2017 Oct	17.8261	Nil	0.4069	Nil	17.4192	Nil	Nil	Nil	Nil	Nil	0.0156
2017 Nov	5.8834	Nil	0.6664	Nil	5.217	Nil	Nil	Nil	Nil	Nil	0.023
2017 Dec	21.3554	Nil	0.4763	Nil	20.8791	Nil	29.13	Nil	Nil	Nil	0.022
Total	113.4059	Nil	4.9790	Nil	108.4269	Nil	85.412	0.5665	Nil	0.25	0.2567

Note:

1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site. 2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.

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Hong Kong.	Website : www.fugro.com

Waste Flow	/ Table for Ye	ear 2018									
		Actual Quant	ities of Inert C&I	D Materials Gene	erated Monthly		Actual	Quantities of Non-	inert C&D Wast	es Generated N	lonthly
Months	Total Quantity Generated (Inert C&D)	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
2018 Jan	10.2340	Nil	Nil	Nil	10.2340	Nil	32.39	Nil	Nil	Nil	0.0161
2018 Feb	6.5256	Nil	Nil	Nil	6.5256	Nil	Nil	Nil	Nil	Nil	0.0235
2018 Mar	28.1995	Nil	Nil	Nil	28.1995	Nil	54.54	Nil	Nil	Nil	0.0190
2018 Apr	11.2165	Nil	Nil	Nil	11.2165	Nil	Nil	Nil	Nil	Nil	0.0270
2018 May	5.6011	Nil	Nil	Nil	5.6011	Nil	Nil	Nil	Nil	Nil	0.0140
2018 Jun	5.8072	Nil	Nil	Nil	5.8072	Nil	93.3	Nil	Nil	Nil	0.0235
2018 Jul	7.4206	Nil	Nil	Nil	7.4206	Nil	Nil	Nil	Nil	Nil	0.0383
2018 Aug	2.0815	Nil	Nil	Nil	2.0815	Nil	Nil	Nil	Nil	Nil	0.0665
2018 Sep	0.3710	Nil	Nil	Nil	0.3710	Nil	Nil	Nil	Nil	Nil	0.0436
2018 Oct	0.9087	Nil	Nil	Nil	0.9620	0.0533	Nil	Nil	Nil	Nil	0.0444
2018 Nov	0.7291	Nil	Nil	Nil	0.7733	0.0589	Nil	Nil	Nil	Nil	0.0225
2018 Dec	-0.0931	Nil	Nil	Nil	0.3860	0.4791	Nil	Nil	Nil	Nil	0.0228
Total	79.0017	Nil	Nil	Nil	79.5783	0.5913	180.23	Nil	Nil	Nil	0.3614

Note:

1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.

#### MATERIALAB CONSULTANTS LIMITED 52 2450 8238

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Hong Kong.	Website	: www.fugro.com
Hong Kong.	Website	: www.fugro.com



Waste Flow	Table for Ye	ar 2019									
		Actual Quant	tities of Inert C&I	D Materials Gene	rated Monthly		Actual	Quantities of Non-i	nert C&D Wast	es Generated M	onthly
Monthly Ending	Total Quantity Generated (Inert C&D)	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
2019 Jan	0.2485	Nil	Nil	Nil	0.7063	0.45774	Nil	Nil	Nil	Nil	0.0100
2019 Feb	0.2790	Nil	Nil	Nil	0.2790	Nil	Nil	Nil	Nil	Nil	0.0076
2019 Mar	0.7376	Nil	Nil	Nil	0.7376	Nil	Nil	Nil	Nil	Nil	0.0929
2019 Apr	0.3694	Nil	Nil	Nil	0.3694	Nil	Nil	Nil	Nil	Nil	0.0365
2019 May	0.4683	Nil	Nil	Nil	0.4683	Nil	Nil	Nil	Nil	Nil	0.0383
2019 Jun	0.8571	Nil	Nil	Nil	0.8571	Nil	Nil	Nil	Nil	Nil	0.0160
2019 Jul	15.2091	Nil	Nil	Nil	15.2091	Nil	Nil	Nil	Nil	Nil	0.0331
2019 Aug	5.7307	Nil	Nil	Nil	5.7307	Nil	Nil	Nil	Nil	Nil	0.0249
2019 Sep	9.0074	Nil	Nil	Nil	9.0074	Nil	Nil	Nil	Nil	Nil	0.0541
2019 Oct	0.6616	Nil	Nil	Nil	0.6616	Nil	Nil	Nil	Nil	Nil	0.0269
2019 Nov	0.8783	Nil	Nil	Nil	0.8783	Nil	Nil	0.17	Nil	Nil	0.0453
2019 Dec	0.6110	Nil	Nil	Nil	0.6110	Nil	Nil	Nil	Nil	Nil	0.0519
Total	35.058	0	0	0	35.5158	0.4577	0	0.17	0	0	0.4375

Note:

1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site. 2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.

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Waste Flow	Table for Ye	ar 2020									
		Actual Quan	tities of Inert C&I	D Materials Gene	rated Monthly		Actua	Quantities of Non-	inert C&D Wast	es Generated M	lonthly
Monthly Ending	Total Quantity Generated (Inert C&D)	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
2020 Jan	0.3807	Nil	Nil	Nil	0.3807	Nil	Nil	Nil	Nil	Nil	0.0276
2020 Feb	0.2862	Nil	Nil	Nil	0.2862	Nil	Nil	Nil	Nil	Nil	0.0365
2020 Mar	0.4291	Nil	Nil	Nil	0.4291	Nil	Nil	Nil	Nil	Nil	0.0270
2020 Apr	0.1812	Nil	Nil	Nil	0.1812	Nil	Nil	Nil	Nil	Nil	0.0201
2020 May	0.2966	Nil	Nil	Nil	0.2966	Nil	Nil	Nil	Nil	Nil	0.0168
2020 Jun	0.1691	Nil	Nil	Nil	0.1691	Nil	Nil	Nil	Nil	Nil	0.0079
2020 Jul	0.0630	Nil	Nil	Nil	0.0630	Nil	Nil	Nil	Nil	Nil	0.0273
2020 Aug	0.1189	Nil	Nil	Nil	0.1189	Nil	Nil	Nil	Nil	Nil	0.0116
2020 Sep	0.1151	Nil	Nil	Nil	0.1151	Nil	Nil	Nil	Nil	Nil	0.0090
2020 Oct	0.0400	Nil	Nil	Nil	0.0400	Nil	Nil	Nil	Nil	Nil	0.0083
2020 Nov	0.0123	Nil	Nil	Nil	0.0123	Nil	Nil	Nil	Nil	Nil	0.0154
2020 Dec											
Total	2.0922	0	0	0	2.0922	0	0	0	0	0	0.2075

Note:

The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
 Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.

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Appendix F

**Environmental Mitigation Implementation Schedule (EMIS)** 

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
Air Quality Measur					
	pads Serving the Pla				1
AEIAR-130/2009 S3.2	EM&A Manual S2.2	8 times daily watering of the work site with active dust emitting activities.	Contractor	All relevant worksites	Implemented
Decommissioning	of the Radar Station	n of the former Kai Tak Airport			
	AEIAR 130/2009 EM&A Manual S4.2.4	The excavation area should be limited to as small in size as possible and backfilled with clean and/or treated soil shortly after excavation work.	Contractor	All relevant worksites	Not Applicable
		The exposed excavated area should be covered by the tarpaulin during night time.			
		The top layer soils should be sprayed with fine misting of water immediately before the excavation.			
Trunk Road T2					
AEIAR-174/2013 S4.9.2.1	AEIAR-174/2013 EM&A Manual S2.3.1.1	Watering of the construction areas 12 times per day to reduce dust emissions by 91.7%, with reference to the "Control of Open Fugitive Dust Sources" (USEPA AP-42). The amount of water to be applied would be 0.91L/m2 for the respective watering frequency.	Contractor	All relevant worksites	Implemented
		Dust enclosures with watering would be provided along the loading ramps and conveyor belts for unloading the C&D materials to the barge for dust suppression.	Contractor	All relevant worksites	Not Applicable
		8 km per hour is the recommended limit of the speed for vehicles on unpaved site roads.	Contractor	All relevant worksites	Implemented
		Good Site Practices			
AEIAR-130/2009 S3.2, S5.2.19,	AEIAR 130/2009 EM&A Manual	Stockpiling site(s) should be lined with impermeable sheeting and bunded. Stockpiles should be fully covered by impermeable sheeting to reduce dust emission.	Contractor	All relevant worksites	Implemented
AEIAR-174/2013 S4.9.2.2	S2.2, S4.2, AEIAR 174/2013 EM&A Manual S2.3.1.2	Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather. Use of frequent watering for particularly dusty construction areas and areas close to ASRs.	Contractor	All relevant worksites	Implemented
		Misting for the dusty material should be carried out before being loaded into the vehicle. Any vehicle with an open load carrying area should have properly fitted side and tail boards.	Contractor	All relevant worksites	Implemented
		Material having the potential to create dust should not be loaded from a level higher than the side and tail boards and should be dampened and covered by a clean tarpaulin.	Contractor	All relevant worksites	Implemented

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
		Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations; The tarpaulin should be properly secured and should extent at least 300 mm over the edges of the sides and tailboards. The material should also be dampened if necessary before transportation.	Contractor	All relevant worksites	Implemented
		The vehicles should be restricted to maximum speed of 10 km per hour. Confined haulage and delivery vehicle to designated roadways insider the site. Onsite unpaved roads should be compacted and kept free of lose materials.	Contractor	All relevant worksites	Implemented
		Vehicle washing facilities should be provided at every vehicle exit point. Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites.	Contractor	All relevant worksites	Implemented
		The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores.			
		Every main haul road should be scaled with concrete and kept clear of dusty materials or sprayed with water so as to maintain the entire road surface wet.	Contractor	All relevant worksites	Not Applicable
		Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides.	Contractor	All relevant worksites	Implemented
		Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed.	Contractor	All relevant worksites	Not Applicable
		Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system.	Contractor	All relevant worksites	Implemented
		Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines.	Contractor	All relevant worksites	Implemented
		Open stockpiles shall be avoided or covered. Prevent placing dusty material storage piles near ASRs.	Contractor	All relevant worksites	Implemented
		Routing of vehicles and position of construction plant should be at the maximum possible distance from ASRs.	Contractor	All relevant worksites	Implemented
		Dark smoke			

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		Dark smoke emission shall be control in accordance with the Air Pollution Control (Smoke) Regulation and ETWB TCW 19/2005.	Contractor	All relevant worksites	Implemented
		Plant and equipment should be well maintained to prevent dark smoke emission.	Contractor	All relevant worksites	Implemented
Noise Measures					
Trunk Road T2					
AEIAR-174/2013 AEIAR-174/201	AEIAR-174/2013 EM&A Manual S3.4.1.1	The use of quieter plant, including Quality Powered Mechanical Equipment (QPME) is specified for the list of equipment: • Concrete lorry mixer • Dump Truck, 5.5 tonne < gross vehicle weight <= 38 tonne • Generator, Super Silenced, 70 dB(A) at 7m • Poker, vibratory, Hand-held (electric) • Water Pump, Submersible (Electric) • Mobile Crane - KOBELCO CKS900 • Excavator, wheeled/tracked - HYUNDAI R80CR-9	Contractor	All relevant worksites	Implemented
		Use of temporary or fixed noise barriers with a surface density of at least 10kg/m <sup>2</sup> to screen noise from movable and stationary plant.	Contractor	All relevant worksites	Not Applicable
		Use of enclosures with covers at top and three sides and a surface density of at least 10kg/m <sup>2</sup> to screen noise from generally static noisy plant such as air compressors.	Contractor	All relevant worksites	Not Applicable
		Use of acoustic fabric for the silent piling system, drill rigs, rock drills etc.	Contractor	All relevant worksites	Implemented
		Good Site Practices			
AEIAR-130/2009 S3.3, S5.3.10,	AEIAR 130/2009 EM&A Manual	Only well-maintained plant should be operated on-site and plant shall be serviced regularly during the construction/ decommissioning program.	Contractor	All relevant worksites	Implemented
AEIAR-174/2013 S5.9.2.1	S2.3, S4.3.2, AEIAR-174/2013	Silencers or mufflers on construction equipment should be utilized and shall be properly maintained during the construction/ decommissioning program.	Contractor	All relevant worksites	Not Applicable
	EM&A Manual S3.4.1.1	Mobile plant, if any, should be sited as far away from NSRs as possible.	Contractor	All relevant worksites	Implemented
		Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or should be throttled down to a minimum.	Contractor	All relevant worksites	Implemented
		Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.	Contractor	All relevant worksites	Implemented

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
		Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction/ decommissioning activities.	Contractor	All relevant worksites	Implemented
		Use of site hoarding as a noise barrier to screen noise at low level NSRs.	Contractor	All relevant worksites	Not Applicable
		For the use of hand held percussive breakers (with mass of above 10kg) and portable air compressors (supply air at 500 kPa or above), the noise level of such PME shall comply with a stringent noise emission standard and a noise emission label shall be obtained from the DEP before use at any time in construction site.	Contractor	All relevant worksites	Implemented
		Quiet powered mechanical equipment (PME) shall be used for the construction of the Project.	Contractor	All relevant worksites	Implemented
		Full enclosures shall be used to screen noise from relatively static PMEs (including air compressor, bar bender, concrete pump, generator and water pump) from sensitive receiver(s).	Contractor	All relevant worksites	Not Applicable
		Movable cantilevered noise barriers shall be used to screen noise from mobile PMEs (including asphalt paver, breaker, excavator and hand-held breaker) from sensitive receiver(s). These movable cantilevered noise barriers shall be located close to the mobile PMEs and shall be moved/adjusted iteratively in step with each movement of the corresponding mobile PMEs in order to maximize their noise reduction effects.	Contractor	All relevant worksites	Not Applicable
		Only approved or exempted Non-road Mobile Machineries (NRMMs) including regulated machines and non-road vehicles with proper labels are allowed to be used in specified activities on-site.	Contractor	All relevant worksites	Implemented
Water Quality Mea	sures				
Trunk Road T2	1				1
		Accidental Spillage			
AEIAR-174/2013 S6.4.8.5	AEIAR-174/2013 EM&A Manual S4.2.1.1	All bentonite slurry should be stored in a container that resistant to corrosion, maintained in good conditions and securely closed; The container should be labelled in English and Chinese and note that the container is for storage of bentonite slurry only.	Contractor	All relevant worksites	Not Applicable
		The storage container should be placed on an area of impermeable flooring and bunded with capacity to accommodate 110% of the volume of the container size or 20% by volume stored in the area and enclosed with at least 3 sides.	Contractor	All relevant worksites	Implemented
		The storage container should be sufficiently covered to prevent rainfall entering the container or bunded area (water collected within the bund must be tested and disposed of as chemical	Contractor	All relevant worksites	Implemented

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
		waste, if necessary). An emergency clean up kit shall be readily available where bentonite fluid will be stored or used.			
		The handling and disposal of bentonite slurries should be undertaken in accordance within ProPECC PN 1/94. Surplus bentonite slurries used in construction works shall be reconditioned and reused wherever practicable. Residual bentonite slurry shall be disposed of from the site as soon as possible as stipulated in Clause 8.56 of the General Specification for Civil Engineering Works. The Contractor should explore alternative disposal outlets for the residual bentonite slurry (dewatered bentonite slurry to be disposed to a public filling area and liquid bentonite slurry, if mixed with inert fill material, to be disposed to a public filling area) and disposal at landfill should be the last resort.	Contractor	All relevant worksites	Not Applicable
AEIAR-174/2013 S6.4.8.8	AEIAR-174/2013 EM&A Manual S4.2.1.1	In order to protect against impacts to the surrounding marine waters of the KTTS and Victoria Harbour in the event of an accidental spillage of fuel or oil, the Contractor will be required to prepare a spill response plan to the satisfaction of AFCD, EPD, FSD, Police, TD and WSD to define procedures for the control, containment and clean-up of any spillage that could occur on the construction site.	Contractor	All relevant worksites	Implemented
		Dredging, Reclamation and Filling			
		No dredging, reclamation or filling in the marine environment shall be carried out.	Contractor	All relevant worksites	Not Applicable
Decommissioning	of the Radar Station	of the former Kai Tak Airport			_
		Building Demolition			
AEIAR-130/2009 S5.4	AEIAR 130/2009 EM&A Manual	The site practices outlined in ProPECC PN 1/94 "Construction Site Drainage" should be followed as far as practicable in order to minimise surface runoff and the chance of erosion.	Contractor	All relevant worksites	Not Applicable
	S4.4	There is a need to apply to EPD for a discharge licence under the WPCO for discharging effluent from the construction site. The discharge quality is required to meet the requirements specified in the discharge licence. All the runoff, wastewater or extracted groundwater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. It is anticipated that the wastewater generated from the works areas would be of small quantity. Monitoring of the treated effluent quality from the works areas should be carried out in accordance with the WPCO license which is under the ambit of regional office (RO) of EPD.	Contractor	All relevant worksites	Not Applicable
		General Construction Works			
		Construction Runoff			

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AEIAR- 130/2009 S3.4, S5.4/ AEIAR- 174/2013 S6.4.8.1	AEIAR 130/2009 EM&A Manual S2.4, S4.4/ AEIAR 174/2013 EM&A Manual S4.2.1.1	Exposed soil areas should be minimised to reduce the potential for increased siltation, contamination of runoff, and erosion. Construction runoff related impacts associated with the above ground construction activities can be readily controlled through the use of appropriate mitigation measures which include the use of sediment traps and adequate maintenance of drainage systems to prevent flooding and overflow.	Contractor	All relevant worksites	Implemented
		Construction site should be provided with adequately designed perimeter channel and pre- treatment facilities and proper maintenance. The boundaries of critical areas of earthworks should be marked and surrounded by dykes or embankments for flood protection. Temporary ditches should be provided to facilitate runoff discharge into the appropriate watercourses, via a silt retention pond. Permanent drainage channels should incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94.	Contractor	All relevant worksites	Implemented
		Ideally, construction works should be programmed to minimise surface excavation works during the rainy season (April to September). All exposed earth areas should be completed as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means.	Contractor	All relevant worksites	Implemented
		Sediment tanks of sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8 m <sup>3</sup> capacity, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity is flexible and able to handle multiple inputs from a variety of sources and particularly suited to applications where the influent is pumped.	Contractor	All relevant worksites	Implemented
		Open stockpiles of construction materials (for examples, aggregates, sand and fill material) of more than 50 m <sup>3</sup> should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.	Contractor	All relevant worksites	Implemented
		Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.	Contractor	All relevant worksites	Implemented
		Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecast, and actions to be taken during or after rainstorms are	Contractor	All relevant worksites	Implemented

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		summarised in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events.			
		Oil interceptors should be provided in the drainage system and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor should have a bypass to prevent flushing during periods of heavy rain.	Contractor	All relevant worksites	Implemented
		An adequately designed and located wheel washing bay should be provided at every site exit, and wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains.	Contractor	All relevant worksites	Implemented
		Drainage It is recommended that on-site drainage system should be installed prior to the commencement of other construction activities. Sediment traps should be installed in order to minimise the sediment loading of the effluent prior to discharge into foul sewers. There should be no direct discharge of effluent from the site into the sea.	Contractor	All relevant worksites	Implemented
		All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge should be adequately designed for the controlled release of storm flows. All sediment control measures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage should be reinstated to its original condition when the construction work has finished or the temporary diversion is no longer required.	Contractor	All relevant worksites	Implemented
		Stormwater Discharges Minimum distances of 100 m should be maintained between the existing or planned stormwater discharges and the existing or planned seawater intakes.	Contractor	All relevant worksites	Implemented
		Sewage EffluentConstruction work force sewage discharges on site are expected to be connected to the existing trunk sewer or sewage treatment facilities. The construction sewage may need to be handled by portable chemical toilets prior to the commission of the on-site sewer system.Appropriate numbers of portable toilets should be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor should also be responsible for waste disposal and maintenance practices.	Contractor	All relevant worksites	Implemented

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
		Debris and Litter In order to maintain water quality in acceptable conditions with regard to aesthetic quality, contractors should be required, under conditions of contract, to ensure that site management is optimised and that disposal of any solid materials, litter or wastes to marine waters does not occur. Debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering into the adjacent harbour waters. Stockpiles of cement and other construction materials should be kept covered when not being used.	Contractor	All relevant worksites	Implemented
		Accidental Spillage Oils and fuels should only be used and stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to the nearby harbour waters, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank, to prevent spilled fuel oils from reaching the coastal waters of the Victoria Harbour WCZ. The bund should be drained of rainwater after a rain event.	Contractor	All relevant worksites	Implemented
		Waste Management Measures			
AEIAR-174/2013 S11.4.8.1	AEIAR-174/2013 EM&A Manual S9.2.1.2	Waste Management Plan Contractor should be requested to submit an outline Waste Management Plan (WMP) prior to the commencement of construction work, in accordance with the ETWB TC(W) No.19/2005 so as to provide an overall framework of waste management and reduction.	Contractor	All relevant worksites	Implemented
AEIAR-130/2009 S3.5, S5.5	AEIAR 130/2009 EM&A Manual S2.5, S4.5	<u>Good Site Practices</u> Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.	Contractor	All relevant worksites	Implemented
		Training of site personnel in proper waste management and chemical waste handling procedures.	Contractor	All relevant worksites	Implemented
		Provision of sufficient waste disposal points and regular collection for disposal.	Contractor	All relevant worksites	Implemented
		Appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	Contractor	All relevant worksites	Implemented
		A recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites).	Contractor	All relevant worksites	Implemented
		Waste Reduction Measures			

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		Sort C&D waste from demolition of the remaining structures to recover recyclable portions such as metals.	Contractor	All relevant worksites	Implemented
		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.	Contractor	All relevant worksites	Implemented
		Encourage collection of aluminum cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force.	Contractor	All relevant worksites	Not Applicable
		Any unused chemicals or those with remaining functional capacity should be recycled.	Contractor	All relevant worksites	Implemented
		Proper storage and site practices to minimize the potential for damage or contamination of construction materials.	Contractor	All relevant worksites	Implemented
		Construction and Demolition Materials			
		Where it is unavoidable to have transient stockpiles of C&D material within the work site pending collection for disposal, the transient stockpiles shall be located away from waterfront or storm drains as far as possible.	Contractor	All relevant worksites	Implemented
		Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric.	Contractor	All relevant worksites	Implemented
		Skip hoist for material transport should be totally enclosed by impervious sheeting.	Contractor	All relevant worksites	Implemented
		Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving a construction site.	Contractor	All relevant worksites	Implemented
		The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores.	Contractor	All relevant worksites	Implemented
		The load of dusty materials carried by vehicle leaving a construction site should be covered entirely by clean impervious sheeting to ensure dust materials do not leak from the vehicle.	Contractor	All relevant worksites	Implemented
		All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet.	Contractor	All relevant worksites	Implemented
		The height from which excavated materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading.	Contractor	All relevant worksites	Implemented
		When delivering inert C&D material to public fill reception facilities, the material should consist entirely of inert construction waste and of size less than 250mm or other sizes as agreed with the Secretary of the Public Fill Committee. In order to monitor the disposal of the surplus C&D	Contractor	All relevant worksites	Implemented

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EIA Ref	EM&A Ref	Environmental Protection Measures / Mitigation Measures	Who to implement the measure	Location / Timing	Construction Phase Implementation Status
		material at the designed public fill reception facility and to control fly tipping, a trip-ticket system as stipulated in the ETWB TCW No. 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Materials" should be included as one of the contractual requirements and implemented by an Environmental Team undertaking the Environmental Monitoring and Audit work. An Independent Environmental Checker should be responsible for auditing the results of the system.			
		<u>Chemical Waste</u> After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals should be collected by a licensed collector for disposal at the CWTF or other licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Contractor	All relevant worksites	Implemented
		General Refuse General refuse should be stored in enclosed bins or compaction units separate from C&D material. A licensed waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D material. Effective collection and storage methods (including enclosed and covered area) of site wastes would be required to prevent waste materials from being blown around by wind, wastewater discharge by flushing or leaching into the marine environment, or creating odour nuisance or pest and vermin problem.	Contractor	All relevant worksites	Implemented
Land Contamination	on Measures	For any evenyotion works conducted at Dadar Station			
AEIAR-130/2009 \$3.6.57	AEIAR 130/2009 EM&A Manual S4.6	For any excavation works conducted at Radar Station As the risk due to dermal contact with groundwater by site workers is uncertain, it is recommended that personnel protective equipment (PPE) be used by site workers as a mitigation measure.	Contractor	All relevant worksites	Not Applicable
Landscape and Vi					
New Distributor Ro	bads Serving the Pla	anned KTD Construction Phase			
AEIAR-130/2009 \$3.8.12	AEIAR 130/2009 EM&A Manual	All existing trees should be carefully protected during construction.	Contractor	All relevant worksites	Not Applicable
	S2.8	Trees unavoidably affected by the works should be transplanted where practical. Detailed transplanting proposal will be submitted to relevant government departments for approval in	Contractor	All relevant worksites	Not Applicable

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		accordance with ETWBC 2/2004 and 3/2006. Final locations of transplanted trees should be agreed prior to commencement of the work.			
		Control of night-time lighting.	Contractor	All relevant worksites	Not Applicable
		Erection of decorative screen hoarding.	Contractor	All relevant worksites	Not Applicable
Trunk Road T2					
		Construction Phase			
AEIAR-174/2013 S9.9.1.1	AEIAR-174/2013 EM&A Manual	All works shall be carefully designed to minimize impacts on existing landscape resources and visually sensitive receivers. Existing trees within works area shall be retained and protected.	Contractor	All relevant worksites	Not Applicable
	S7.2.1.2	Existing trees of good quality and condition that are unavoidably affected by the works should be transplanted.	Contractor	All relevant worksites	Not Applicable
		Large temporary stockpiles of excavated material shall be covered with unobtrusive sheeting to prevent dust and dirt spreading to adjacent landscape areas and vegetation, and to create a neat and tidy visual appearance.	Contractor	All relevant worksites	Not Applicable
		Construction plant and building material shall be orderly and carefully stored in order to create a neat and tidy visual appearance.	Contractor	All relevant worksites	Implemented
		Erection of decorative screen hoarding should be designed to be compatible with the existing urban context.	Contractor	All relevant worksites	Not Applicable
		All lighting in construction site shall be carefully controlled to minimize light pollution and night- time glare to nearby residences and GIC user. The contractor shall consider other security measures, which shall minimize the visual impacts.	Contractor	All relevant worksites	Not Applicable
General Condition					
		The Permit Holder shall display conspicuously a copy of this Permit on the Project site(s) at all vehicular site entrances/exits or at a convenient location for public's information at all times. The Permit Holder shall ensure that the most updated information about the Permit, including any amended Permit, is displayed at such locations. If the Permit Holder surrenders a part or the whole of the Permit, the notice he sends to the Director shall also be displayed at the same locations as the original Permit. The suspended, varied or cancelled Permit shall be removed from display at the Project site(s).	Contractor	All relevant worksites	Implemented

Implementation status: Implemented / Partially Implemented / Not Implemented / Not Applicable