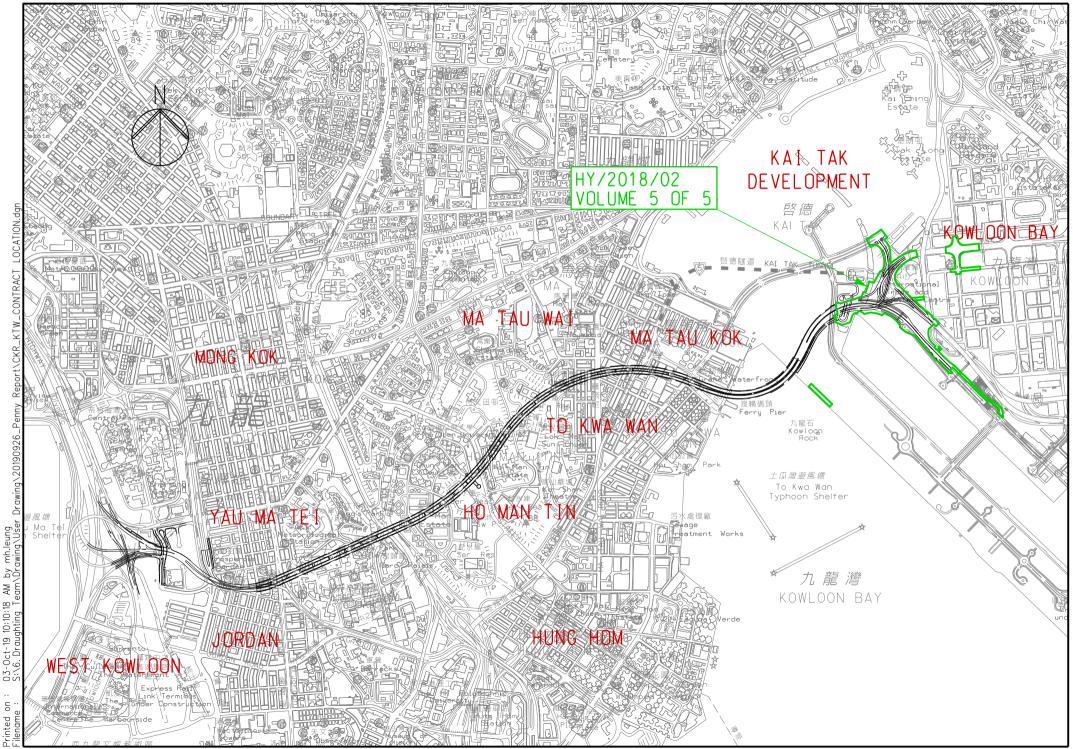
# Vol. 5 of 5 EP-457/2013/C Central Kowloon Route Kai Tak East Contract No. HY/2018/02 February 2020



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#### Environmental Permit No. EP-457/2013/C

#### **Central Kowloon Route**

### **Independent Environmental Checker Verification**

Works Contract:	Kai Tak East (HY/2018/02)

#### **Reference Document/Plan**

Document/Plan to be-Certified/ Verified:	Monthly EM&A Report No.6 (February 2020)
Date of Report:	9 March 2020 (Rev. 1)
Date received by IEC:	9 March 2020

#### **Reference EP Condition**

Environmental Permit Condition:

Submission of Monthly EM&A Report of the Project

3.4 Four hard copies and one electronic copy of monthly EM&A Report shall be submitted to the Director within 2 weeks after the end of each reporting month throughout the entire construction period. The EM&A Reports shall include a summary of all non-compliance. The submissions shall be certified by the ET Leader and verified by the IEC as complying with the requirements as set out in the EM&A Manual before submission to the Director. Additional copies of the submission shall be provided to the Director upon request by the Director.

3.4

#### **IEC Verification**

I hereby verify that the above referenced document/<del>plan</del> complies with the above referenced condition of EP-457/2013/C.

Mandy 20.

Ms Mandy To Independent Environmental Checker Date:

10 March 2020

Our ref: 0436942\_IEC Verification Cert\_KTE\_Monthly EM&A Rpt No.6.docx



# Alchmex – Paul Y Joint Venture

## Central Kowloon Route Contract HY/2018/02

# Section of Kai Tak East

# Monthly EM&A Report No. 6

## (Period from 1 to 29 February 2020)

## Rev. 1

## (9 March 2020)

		Name	Signature
Prepared by		Nicola Y. C. Mau (Environmental Consultant)	A
Checked Reviewed by	&	Nelson T. H. Tsui (Senior Environmental Consultant)	24
Approved Certified by	&	Kevin W. M. Li (Environmental Team Leader)	K.

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#### **EXECUTIVE SUMMARY**

- A.1 Alchmex Paul Y Joint Venture ("Contractor") commenced the construction works of Highway Department (HyD) Central Kowloon Route Contract No. HY/2018/02 – Section of Kai Tak East ("The Project") on 9 September 2019. This is the 6<sup>th</sup> monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the period from 1 February 2020 to 29 February 2020.
- A.2 A summary of major Construction activities by Contractor for the Project during the reporting month is listed below.

#### **Construction Activities undertaken**

- Ground Investigation at Portion 1A & 2B
- Bored Pile at Portion 1A
- Foundation Work for the Foot Bridge at Kai Fuk Road
- Sheet Pilling Works for Adit at Area 1D3
- Sheet Pilling Works for Underpass at Portion 3B
- A.3 A summary of regular construction dust monitoring activities in this reporting period is listed below:

Construction dust (24-hour TSP) monitoring	
E-A1	5 times
Construction dust (1-hour TSP) monitoring	
E-A1	15times

- A.4 Joint weekly site inspections were conducted by representatives of Environmental team (ET), Contractor and Engineer on 5, 12, 19, 26 February 2020. Details of the audit findings and implementation status are presented in Section 5.
- A.5 Bi-weekly inspection of the implementation of landscape and visual mitigation measures by ET was conducted on 5, 19 February 2020. Details of the audit findings and implementation status are presented in Section 5.
- A.6 Details of waste management are presented in Section 3.
- A.7 No exceedance of the Action and Limit Levels of 24-hour TSP and 1-hour TSP monitoring were recorded during the reporting month.
- A.8 No complaint or non-compliance was received in the reporting month.
- A.9 No notification of summons and prosecution was received in the reporting period.

A.10 A summary of Construction Activities provided by Contractor in next reporting month is listed below:

#### **Construction Activities to be undertaken**

- Ground Investigation at Portion 1A, 2B & 3B.
- Bored Pile at Portion 1A &3B.
- Foundation Work for the Foot Bridge at Kai Fuk Road.
- Sheet Piling Works for Audit at Area 1D3.
- Sheet Piling Works for Underpass at Portion 3B.

#### **1. BASIC PROJECT INFORMATION**

- 1.1. Central Kowloon Route (CKR) is a 4.7 km long dual 3-lane trunk road in Central Kowloon linking Yau Ma Tei Interchange in West Kowloon with the road network on Kai Tak Development and Kowloon Bay in East Kowloon.
- 1.2. The Central Kowloon Route Design and Construction Environmental Impact Assessment Report (Register No.: AEIAR-171/2013) was approved with conditions by the Environmental Protection Department (EPD) on 11 July 2013. An Environmental Permit (EP 457/2013) was issued on 9 August 2013. Variations of EP (VEP) was subsequently applied for and the latest EP (EP-457/2013/C) was issued by EPD on 16 January 2017.
- 1.3. The construction of the CKR had been divided into different sections. This Contract No. HY/2018/02 Section of Kai Tak East (KTE) covers part of the construction activities located at Kai Tak under the EP which includes:
  - Section of Kai Tak East
  - i. construction of an approximately 700m long dual 2-lane Central Kowloon Route mainline at Kai Tak, including at-grade roads and bridges;
  - ii. construction of Kai Tak Interchange, including bridges, underpass, and associated at-grade slip roads, connecting the Central Kowloon Route with the existing road network;
  - iii. construction of a footbridge, and demolition/backfill of an existing subway across Kai Fuk Road;
  - iv. realignment of existing Kai Fuk Road, Kai Cheung Road and Kai Cheung Road/Kai Fuk Road loop road;
  - v. reconstruction of an approximately 30m long existing multi-cell box culvert;
  - vi. construction of an approximately 130m long underground ventilation and E&M audit;
  - vii. construction of Ring Road Underpass, connecting Central Kowloon Route mainline and Central Kowloon Route Administration Building;
  - viii. junction improvement works at existing Wang Kwong Road/Kai Cheung Road and Wang Kwong Road/Lam Hing Street junctions;
  - ix. arrangement and implementation of cross boundary disposal of construction and demolition materials; and
  - x. associated roadworks, drainage, waterworks, landscaping works, geotechnical works, and electrical and mechanical works.

The alignment and works area for the Contract No. HY/2018/02 - are shown in Appendix A.

1.4. A summary of major construction activities provided by the Contractor in this reporting period is shown in Table 1.1. The construction programme is presented in Appendix B.

# Table 1.1 Summary of Construction Activities provided by Contractor during this Reporting Month. Construction Activities undertaken

- Ground Investigation at Portion 1A & 2B
- Bored Pile at Portion 1A
- Foundation Work for the Foot Bridge at Kai Fuk Road
- Sheet Pilling Works for Adit at Area 1D3
- Sheet Pilling Works for Underpass at Portion 3B
  - 1.5. The project organisational chart specifying management structure and contact details are shown in Appendix C.
  - 1.6. A summary of the valid permits, licences, and /or notifications on environmental protection for this Project is presented in Table 1.2

#### Table 1.2 Summary of the Status of Valid Environmental Licence,

Notification, Permit and Documentations				
<b>Permit/ Licences/ Notification</b>	Reference	Validity Period		
Environmental Permit	EP-457/2013/C	Throughout the Contract		
Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation (Form NA)	445001	Throughout the Contract		
Chemical Waste Producer Registration	WPN5113-247-A2940-01	Throughout the Contract		
Wastewater Discharge License	WT00035029-2019	17 December 2019 to 31 December 2024		
Billing Account for Disposal of Construction Waste	7034073	Throughout the Contract		
	GW-RE1086-19			
Construction Noise Permit at Kai Fuk Road	(Superseded by	10 January 2020 to 9 April 2020		
(Central Divider Removal)	GW-RE0093-20)	-		
	GW-RE0093-20	19 February 2020 to 31 March 2020		
Construction Noise Permit at Area A	GW-RE1073-19	7 January 2020 to 1 July 2020		
Construction Noise Permit at Kai Fuk Road (Tree Transplant)	GW-RE0966-19	3 December 2019 to 21 February 2020		
	GW-RE1005-19			
Construction Noise Permit at Area B & Site	(Superseded by	13 December 2019 to 3 June 2020		
Office	GW-RE0097-20)			
	GW-RE0097-20	24 February 2020 to 11 August 2020		
<b>Construction Noise Permit at Kai Fuk Road</b> (Tree Felling)	GW-RE1006-19	20 December 2019 to 14 March 2020		
<u> </u>	GW-RE0060-20			
Construction Noise Permit for Loop Road	(Superseded by	30 January 2020 to 15 February 2020		
Paving Work	GW-RE0105-20)			
	GW-RE0105-20	28 February 2020 to 16 April 2020		

#### Notification, Permit and Documentations

#### 2. ENVIRONMENTAL STATUS

2.1. Environmental permit (EP) conditions under the EIAO, submission status under the EP and implementation status of mitigation measures had been reviewed and implemented on schedule. The status of required submissions under the EP (EP-457/2013/C) as of the reporting period for the Project are summarised in Table 2.1

9

EP Condition (EP-457/2013/C)	Submission	Submission date	
Condition 1.12	Notification of Commencement Date of	26 Jul 2019	
Condition 1.12	Construction of the Project	20 Jul 2019	
Condition 2.4	Management organisation of the main	26 Jul 2019	
Condition 2.4	construction companies	20 Jul 2019	
Condition 2.5	Construction Programme and EP	26 Jul 2019	
Condition 2.5	Submission Schedule	20 Jul 2019	
Condition 2.6 Design Drawing		26 Jul 2019	
Condition 2.8 Landscape Mitigation Plan		26 Jul 2019	
Condition 3.3 Baseline Monitoring Report		21 Aug 2019	
Condition 3.4 Monthly EM&A Report (January 2020)		14 Feb 2020	

Table 2.1 Summary of Status of Required Submission for EP-457/2013/C for the Project

2.2. Details of the major construction activities provided by the Contractor in this reporting period are shown in Table 2.2.

Table 2.2 Summary of Construction Activities provided by Contractor during the Reporting Month. **Construction Activities undertaken** 

- Ground Investigation at Portion 1A & 2B
- Bored Pile at Portion 1A
- Foundation Work for the Foot Bridge at Kai Fuk Road
- Sheet Pilling Works for Adit at Area 1D3
- Sheet Pilling Works for Underpass at Portion 3B
  - 2.3. The drawing showing the project layout and the location of the monitoring station and environmental sensitive receivers are attached in Appendix A and Appendix I. Co-ordinates of the monitoring location is shown in below:

Monitoring Location	Location ID	Latitude	Longitude
Hong Kong International Trade and Exhibition Centre	E-A1	22.323912	114.203512

#### Table 2.3 Summary for the location of monitoring station

#### **3. MONITORING RESULTS**

3.1. Monitoring Parameters

#### Air Quality

- 3.1.1. The impact monitoring had been carried out in accordance with section 5.8 of the approved EM&A Manual to determine the 1-hour and 24-hour total suspended particulates (TSP) levels at the monitoring locations in the reporting month.
- 3.1.2. The sampling frequency of at least once in every 6 days, shall be strictly observed at the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least 3 times in every 6 days should be undertaken when the highest dust impact occurs.
- 3.1.3. General meteorological conditions (wind speed, direction and precipitation) and notes regarding any significant adjacent dust producing sources had also been recorded throughout the impact monitoring period.
- 3.2. Monitoring Equipment

#### **Air Quality**

- 3.2.1. 1-hour TSP levels and 24-hour TSP had been measured with direct reading dust meter and High Volume Samplers respectively. It has been demonstrated its capability in achieving comparable results with high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50).
- 3.2.2. The 1-hour TSP meter was calibrated by the manufacturer prior to purchasing. Zero response of the instrument was checked before and after each monitoring event. Operation of the 1-hour TSP meter followed manufacturer's Operation and Service Manual. The 24-hour TSP meter was calibrated against firmware 80570-8100-V1.0.4, annually. Operation of the 24-hour TSP meter followed manufacturer's Operation and Service Manual. Valid calibration certificate of dust monitoring equipment is attached in Appendix G.
- 3.2.3. A summary of the equipment that was deployed for the 24- hour averaged monitoring is shown in Table 3.1. The TSP monitoring was conducted as per the schedule presented in Appendix F.
- 3.2.4. The equipment used for 1-hour TSP and 24-hour TSP measurement and calibration are summarised in Table 3.1

Monitoring Parameter	Monitoring Equipment	Serial Number	Date of Calibration
1-hour TSP	LD-5R Digital Dust Indicator	851820	23 Aug 2019
24-hour TSP	TE-5170X High Volume	1085	29 Jan 2020,
	Sampler		14 Feb 2020
	TE-5028A Calibration Kit	3702	10 Oct 2019

Table 3.1 Construction Dust Monitoring Equipment

3.3. Monitoring Methodology and QA/QC results

#### Air Quality

- 3.3.1. The 1-hour TSP monitor, portable dust meters (Sibata Digital Dust Indicator Model LD-5R) was used for the impact monitoring. The 1-hour TSP meters provides a real time 1-hour TSP measurement based on 90° light scattering. Three 1-hour TSP level were logged per every six days.
- 3.3.2. The 24-hour TSP monitor, High Volume Samplers (Tisch TE-5170x High Volume Air Sampler) were used for the impact monitoring. The 24-hour TSP monitoring consists of the following:
  - The HVS was set at the monitoring location, with electricity supply connected and secured;
  - HVS was calibrated before commencing the 1<sup>st</sup> measurement;
  - The filter paper was weight and provided by HOKLAS lab (Acumen Laboratory and Testing Limited and ALS Technichem (HK) Pty Ltd) before and after the sampling. Certificate of HOKLAS accredited laboratory can be referred to Appendix H;
  - The airflow over time during sampling process was recorded by the HVS.
- 3.3.3. HVSs were free-standing with no obstruction. The following criteria were considered in the installation of the HVS:
  - Appropriate support to secure the samples against gusty wind needed to be provided the monitoring station;
  - A minimum of 2m separation from walls, parapets and penthouses was required for rooftop samplers;
  - No furnace or incinerator flues was nearby;
  - Airflow around the sampler was unrestricted; and
  - Permission could be obtained to set up the samplers and gain access to the monitoring station.
  - Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring
  - A secured supply of electricity is needed to operate the samplers.
- 3.3.4. Preparation of Filter Papers
  - Glass fiber filters were labelled and sufficient filters that were clean and without pinholes were selected;

- ◆ All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25°C and not varied by more than ±3°C; the relative humidity (RH)was 40%; and
- Acumen Laboratory and Testing Limited and ALS Technichem (HK) Pty Limited, as HOKLAS accredited laboratory, implemented comprehensive quality assurance and quality control programmes on the filters.

#### 3.3.5. Field Monitoring

- The power supply was checked to ensure that the HVS was working properly;
- The filter holder and area surrounding the filter were cleaned;
- The filter holder was removed by loosening the foul bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully;
- The filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter;
- The swing bolts were fastened to hold the filter holder down to the frame. The pressure applied should be sufficient to avoid air leakage at the edges;
- The shelter lid was closed and secured with an aluminum strip;
- The HVS was warmed- up for about 5 minutes to establish run- temperature conditions;
- A new flow rate record sheet was inserted into the flow recorder;
- The flow rates of the HVS was checked and adjusted to between 1.22-1.37 <sup>m<sup>3</sup>min-3</sup>, which was within the range specified in the EM&A Manual (i.e. 0.6- 1.7 <sup>m<sup>3</sup>min-3</sup>);
- The programmable timer was set for a sampling period of 24 hours ±hour, and the starting time, weather condition and filter number were recorded;
- The initial elapsed time was recorded;
- At the end of sampling, the sampled filter was removed carefully and folded in half so that only surfaces with collected particulate matter were in contact;
- The filter paper was placed in a clean plastic envelope and sealed; all monitoring information was recorded on a standard data sheet and
- The filters were sent to (Acumen Laboratory and Testing Ltd and ALS Technichem (HK) Pty Ltd) for analysis.

#### 3.3.6. Maintenance and Calibration

- The HVS and their accessories were maintained in a good working condition. For example, motor brushes were replaced routinely and electrical wiring was checked to ensure a continuous power supply; and
- The flow rate of each HVS with mass flow controller was calibrated using an orifice calibrator, Initial calibrations of the dust monitoring equipment were conducted upon installation and prior to commissioning. Five- point calibration was carried out for HVS using TE-5028A Calibration Kit. HVS is calibrated in fortnightly Intervals. The calibration records for the HVS is given in Appendix G.
- 3.3.7. Wind Data Monitoring
  - The wind speed has been recorded from Hong Kong Observatory- King's Park meteorological station, along with portable wind speed meter stand by as back up if malfunction occurred or data was not recorded from HKO

#### 3.4. Monitoring Locations

#### <u>Air Quality</u>

3.4.1. During the site visit, air monitoring station Hong Kong International Trade and Exhibition Centre had been recommended in the approved EM&A Manual and approved by IEC. A designated air monitoring location was identified and agreed with IEC and EPD. Detail of the air monitoring station is described in Table 3.2. The location plan of air quality monitoring stations is shown in Appendix I.

Air Quality Monitoring Station	Dust Monitoring Station
E-A1	Hong Kong International Trade and Exhibition Centre

- 3.5. Monitoring date, time, frequency and duration
- 3.5.1. A summary of impact monitoring duration, sampling parameter and frequency is presented in Table 3.3.

Impact Monitoring	Duration	Sampling Parameter	Frequency
Dust	1-hour continuous measurement	1-hour TSP	3 times per six days
Dust	24-hour continuous sampling	24-hour TSP	Once per six days

Table 3.3:	Summary	of Impact	Monitoring Programme
------------	---------	-----------	----------------------

3.6. Result Summary

#### Air Quality

3.6.1. According to our field observations, the major dust source identified at the designated air quality monitoring station in the reporting month are summarised in Table 3.4

	Dust Monitoring Station
Monitoring Station	Major Dust Source
E-A1	Nearby traffic

3.6.2. Air quality impact monitoring for the reporting month was carried out on 3, 8, 14, 20, 26 February 2020 at E-A1.

3.6.3. The results for 1-hour TSP and 24-hour TSP are summarized in Table 3.5 and Table 3.6. The measurement data and details of influencing factors such as weather conditions and site observation are presented in Appendix J.

	·····	0	-
Monitoring Location	Range(µg/m <sup>3</sup> )	Action Level(µg/m3)	Limit Level(µg/m3)
E-A1	36 - 63	279	500
Ta	ble 3.6 Summary of 24-h	our TSP Monitoring Result	ŝS
Monitoring Location	Range(µg/m <sup>3</sup> )	Action Level(µg/m3)	Limit Level(µg/m3)
E-A1	18-60	142	260

Table 3.5 Summary of 1-hour TSP Monitoring Results

#### Waste management

3.6.4. The waste generated from this Project includes inert C&D materials, and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes and recyclable wastes such as plastics and paper/cardboard packaging waste. Steel materials generated from the project are also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in Table 3.7. Details of cumulative waste management data are presented as a waste flow table in Appendix K.

			Ç	Juantity			
				Non-inert	C&D Material	ls	
Reporting period	Inert C&D Materials	Chemical Waste	Others, e.g. General	Metals (in '000 Kg)	Recycl	ed materia	als
period		(in'000 Kg)	Refuse disposed at Landfill		Paper/card board	Plastics (in '000	Metals (in '000
			(in 'tonnes)		(in '000 Kg)	Kg)	Kg)
Feb-2020	2110.0	0.0	20.4	12.0	0.0	0.0	0.0

Table 3.7 Quantities of waste generated from the Project

# 4. SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

4.1. The Environmental Complaint Handling Procedure is shown in below Table 4.1:

	ble 4.1 Ellivitoliillentai CC		e
Complaint Received via	Project Hotline	Complaint Received via	a 1823 or from other
		government departments	
		L	
Contractor notify ER, ET	and IEC	ER notify Contractor, ET	and IEC
Contractor notify ER, ET		ER notify Contractor, ET	
		(1 1: (1 ( 1 ) 0	
Contractor log complain	-	o the complaint database. Co	ontractor, ER and E1 to
	conduct investig	ation of complaint	
If complaint is considered	d not valid	If complaint is found valid	d
ET or ER to reply the con	nplainant if necessary	Contractor to identify an	nd implement remedial
		measures in consultation	with the IEC, ET and
		ER.	,
		The ED ET and IEC to a	novious the offectiveness
		The ER, ET and IEC to a	
		of the Contractor's reme	
		updated situation; ET t	
		monitoring and audit to	verify the situation if
		necessary, and oversee that	at circumstances leading
		to the complaint do not	t recur. ER to conduct
		further inspection as nece	ssary.
If the complaint is refer	red by the EPD, the Con	tractor to prepare interim re	port on the status of the
_	-	pulated above, including the	
	-	or already taken, for submiss	
incasures and additiona	-	•	sion to Li D within the
		igned by the EPD	
	-	ults of the investigation, sub	-
address the complaint a	and updated situation inc	luding the effectiveness of t	he remedial measures,
supported by reg	ular and additional moni	toring results in the monthly	EM&A reports

#### Table 4.1 Environmental Complaint Handling Procedure

- 4.2. Should non-compliance of the criteria occur, action in accordance with the Action Plan in Appendix D shall be carried out.
- 4.3. No exceedance of the Action and Limit Levels of 24-hour TSP and 1-hour TSP monitoring was recorded during the reporting month.
- 4.4. No complaint and non-compliance was received in the reporting month.
- 4.5. No notification of summons and successful prosecution was received in the reporting period.
- 4.6. Statistics on complaints, notifications of summons and successful prosecutions are summarized in Appendix L.

#### 5. EM&A SITE INSPECTION

- 5.1. Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, four (4) site inspections were carried out by the representative of ET, Contractor and Engineer on 5, 12, 19, 26 February 2020, along with bi-weekly inspection of the implementation of landscape and visual mitigation measures conducted on 5, 19 February 2020.
- 5.2. One joint site inspection with IEC also undertaken on 12 February 2020. Minor deficiencies were observed during weekly site inspection. Key observations during the site inspections are summarized in Table 5.1.

Date		<b>Environmental Observations</b>		Follow-up Status
5 Feb 2020	1.	Drip tray should be plugged up.	1.	The hole was plugged up.
J Feb 2020	2.	Oil stain was found.	2.	Oil stain was removed.
	1.	Oil stain was found in Portion 1A.	1.	Oil stain was removed.
	2.	Breaker should be placed on tarpaulin sheet in	2.	The breaker was wrapped by
12 Feb 2020		Portion 1A.		tarpaulin sheet.
	3.	Air leakage from the cyclone of the grout	3.	The cyclone of grout plant was
		plant in Portion 3B was observed.		repaired.
	1.	Drip tray should be plugged up at footbridge	1.	The hole was plugged up.
		near Hong Kong International Trade and		
19 Feb 2020		Exhibition Centre.	2.	Tarpaulin sheet was provided
	2.	Breaker should be placed on tarpaulin sheet at		for breaker.
		Kai Cheung Loop Road.		
	1.	Chemical containers should be placed on the	1.	Chemical containers were
26 Feb 2020		drip tray.		removed.
	2.	Drip tray should be plugged up.	2.	The hole was plugged up.

#### Table 5.1 Site Observations

- 5.3. The Contractor had rectified all observation identified during environmental site inspection in the reporting period.
- 5.4. According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents had been implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in Appendix E.

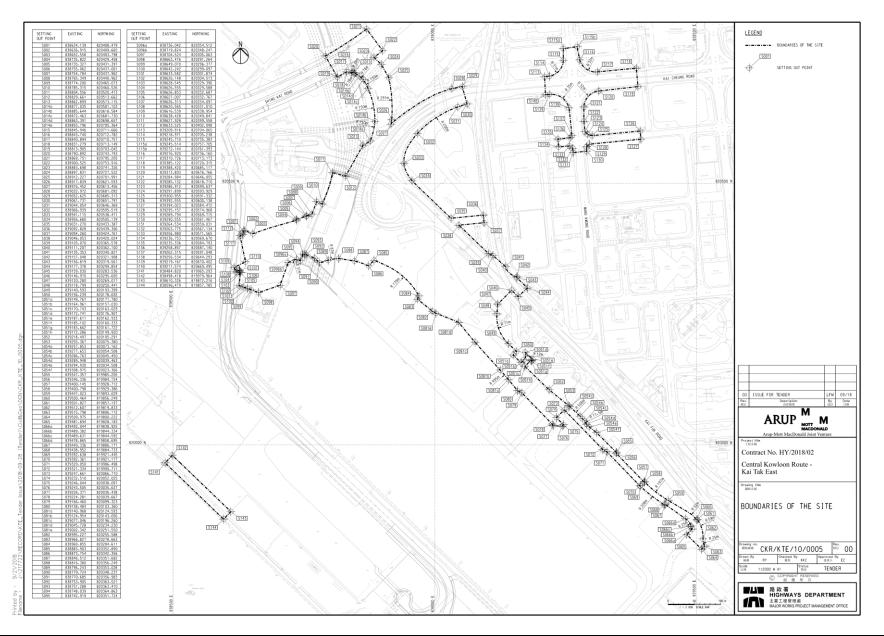
#### 6. FUTURE KEY ISSUES

- 6.1. The construction activities provided by Contractor in the next reporting month are:
- Ground Investigation at Portion 1A, 2B & 3B.
- Bored Pile at Portion 1A & 3B.
- Foundation Work for the Foot Bridge at Kai Fuk Road.
- Sheet Piling Works for Audit at Area 1D3.
- Sheet Piling Works for Underpass at Portion 3B.
- 6.2. Potential environmental impacts arising from the above construction activities are mainly associated with dust and waste management.
- 6.3. The tentative schedule of 1-hour TSP and 24-hour TSP monitoring in the next reporting period is presented in Appendix M.
- 6.4. The construction programme for the Project for the next reporting month is presented in Appendix B.

#### 7. CONCLUSION AND RECOMMENDATIONS

- 7.1. This 6<sup>th</sup> monthly EM&A Report presents the EM&A works undertaken during the period from 1 February 2020 to 29 February 2020 in accordance with the EM&A Manual and the requirement under EP- 457/2013/C.
- 7.2. Air quality (including 1-hour TSP and 24-hour TSP) was carried out in the reporting period. No exceedance of the Action and Limit Level was recorded for air quality impact monitoring during the reporting month.
- 7.3. Weekly environmental site inspections by the representative of ET, Contractor and Engineer were conducted during the reporting period. Joint site inspection with IEC were carried out on 12 February 2020. Minor deficiency was observed during site inspection and was rectified within the specified deadlines. The environmental performance of the Project was therefore considered satisfactory.
- 7.4. No complaint and non-compliance situation was received in the reporting month.
- 7.5. No notification of summons or prosecution was received since commencement of the Contract.
- 7.6. The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

# Appendix A Alignment and Works Area for the Contract No. HY/2018/02



# Appendix B Construction Programme

Data Date: 25-Feb-20 Print Date: 29-Feb-20	0 10:25						re Kow	loor	n Ro			Contract No. HY/2018/02           Centre Kowloon Route - Kai Tak East           Orig Dar         Early Start         Early Field         Test Field         Free Field										
ctivity ID	Activity Name		Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total Float		February 10	23	Ma 1	rch 1 15 22	29 05	April 12 12	19	26	03	May 13 10	17	24 31	
Central Kowlo	oon Route - Kai Tak Ea	st (Month 10 Update) (Re	288	25-Oct-19 A	16-Oct-20	04-Jan-20	19-Nov-21	321	428.50	20 02 09 10	25	01 08	10 22	20 00	12	13	20	03	10		24 31	
PRELIMINAR	RIES AND GENERAL R	EQUIREMENTS	92	25-Feb-20	18-Jun-20	03-Mar-20	10-Aug-20	43	0.00													
Salient Key D	Dates and Milestones																					
Section Subject	ect to Excision		58	03-Mar-20	30-Apr-20	03-Mar-20	30-Apr-20	0	0.00													
SE-S13	PM's Notify to execute Section 1	3 of the Works (before 3 March 2020)	0	03-Mar-20*		03-Mar-20		0				•										
SE-S15	PM's Notify to execute Section 1	5 of the Works (before 30 April 2020)	0	30-Apr-20*		30-Apr-20		0						1			•					
SE-516	PM's Notify to execute Section 1	6 of the Works (before 30 April 2020)	0	30-Apr-20*		30-Apr-20		0									•					
Utilities Sche	edule (WSD/DSD/CLP/T	G/PCCW/HKB/ATC/KT Tun	92	25-Feb-20	18-Jun-20	20-Apr-20	10-Aug-20	43	0.00													
Utilities Monthl	hly Meeting		92	25-Feb-20	18-Jun-20	20-Apr-20	10-Aug-20	43	0.00													
UU-1100	4th Utilities monthly meeting		0	25-Feb-20		20-Apr-20		43														
UU-1102	5th Utilities monthly meeting		0	22-Apr-20		13-Jun-20		43		1				1		•						
UU-1104	6th Utilities monthly meeting		0	18-Jun-20		10-Aug-20		43														
DESIGN AND	D ENGINEERING		263	26-Oct-19 A	16-Sep-20	21-Jan-20	19-Nov-21	345	0.00													
Permanent W	Works Design & Enginee	ring																				
DES - Architect	tural works for Footbridge		174	15-Nov-19 A	22-Jun-20	21-Feb-20	18-Jun-20	-3	0.00													
DES-1200	DES - Prepare preliminary propo	osal submission	60	15-Nov-19 A	28-Feb-20	21-Feb-20	25-Feb-20	-3						+								
DES-1204	DES - Prepare submission of des	sign and drawings	12	29-Feb-20	13-Mar-20	26-Feb-20	10-Mar-20	-3			, ∔											
DES-1206	DES - ICE checking and approva	ai	12	14-Mar-20	27-Mar-20	11-Mar-20	24-Mar-20	-3				-										
DES-1210	DES - Project Manager checking	and approval	24	28-Mar-20	29-Apr-20	25-Mar-20	25-Apr-20	-3							_		_					
DES-1216	DES - Prepare submission of det	tails design	12	02-May-20	15-May-20	27-Apr-20	12-May-20	-3									-		_			
DES-1218	DES - ICE checking and approva	al	8	16-May-20	25-May-20	13-May-20	21-May-20	-3														
DES-1220	DES - Project Manager checking	and approval; consent to start the works	24	26-May-20	22-Jun-20	22-May-20	18-Jun-20	-3													_	
DES - E&M Wor	orks		164	02-Dec-19 A	27-Jun-20	22-Feb-20	30-Jun-20	2	0.00		1											
DES-1202	DES - Prepare preliminary propo	osal submission	60	02-Dec-19 A	13-Mar-20	22-Feb-20	11-Mar-20	-2														
DES-1208	DES - Prepare submission of des	sign and drawings	12	14-Mar-20	27-Mar-20	12-Mar-20	25-Mar-20	-2				-										
DES-1212	DES - ICE checking and approva	al	12	28-Mar-20	15-Apr-20	26-Mar-20	09-Apr-20	-2														
DES-1214	DES - Project Manager, HyD, EN	4SD and FSD checking and approval	48	16-Apr-20	12-Jun-20	14-Apr-20	10-Jun-20	-2							_						_	
DES-1222	DES - Prepare submission of det			13-Jun-20	27-Jun-20	16-Jun-20	30-Jun-20	2														
Cost Saving D	Design & Engineering		204	14-Nov-19 A	20-Jul-20	21-Jan-20	19-Nov-21	395	0.00													
	ndation of Kai Fuk Road Fool	tbridge	0	31-Jan-20 A	31-Jan-20 A	31-Jul-20	31-Jul-20		0.00													
	ign for Kai Fuk Road Footbrid		0	31-Jan-20 A	31-Jan-20 A	31-Jul-20	31-Jul-20		0.00					+								
DES-0110	CSD-A Consent to start the work	-	0		31-Jan-20 A		31-Jul-20			•												
CSD-B for Bridg	iges at Ground		204	29-Nov-19 A	20-Jul-20	08-Feb-20	19-Nov-21	395	0.00		1											
	ign for Bridge S9 - Piles & Pile	e Caps	42	04-Jan-20 A	09-Mar-20	18-Feb-20	02-Mar-20	-6	0.00													
DES-0118	CSD-B(S9 Piles & Pile Caps) Sub	omit to PM & all relevant parties for review and		04-Jan-20 A		18-Feb-20	02-Mar-20	-6														
	approval																					
Current Mile	irk maining Work	Central	Kow				ast (Mo Illing Pr			date) (Rev4 - CSD)	Baseline: Layout: 3	D: KTE-WP04_M10 Honths Rolling Progr SK filters: 3 Months R		nission.		19 Monthly 2019 Monthly 220 Monthly 20 Submit	/ Programme L / Programme L	Update M08 Update M09 1me Rev3	वा वा वा वा वा वा वा वा	ST P ST D ST D	ય ય K	
											Page 1 of	f 14										

y ID	Activity Name	Orig Dur Early Start	Early Finish	Late Start	Late Finish	Total Float	TRA (Day)	February 10		March 11				April 12				May 13		
DES-0120	CSD-B(S9 Piles & Pile Caps) Consent to start the works	0	09-Mar-20		02-Mar-20	-6	(ady)	26 02 09 16	23 01 08	15	22	29	05	12	19	26	03	10	17	24
	gn for Bridge S9 - Piers & Deck	94 25-Feb-20	19-Jun-20	05-May-20	28-Sep-20	84	0.00													
						54	0.00				_									
DES-0122	CSD-B(S9 Piers & Deck) ICE Checking and approval	24 25-Feb-20	23-Mar-20	05-May-20	01-Jun-20															
DES-0124	CSD-B(S9 Piers & Deck) Submit to PM & all relevant parties for review and approval	70 24-Mar-20	19-Jun-20	09-Jul-20	28-Sep-20	84					-	-								
DES-0126	CSD-B(S9 Piers & Deck) Consent to start the works	0	19-Jun-20		28-Sep-20	84														
Detailed Desig	gn for Bridge S1/S9 - Piles & Pile Caps	110 18-Jan-20 A	23-Mar-20	08-Feb-20	06-Mar-20	-14	0.00													
DES-0128	CSD-B(S1/S9 Piles & Pile Caps) ICE Checking and approval	55 18-Jan-20 A	25-Feb-20 A	08-Feb-20	08-Feb-20															
DES-0130	CSD-B(S1/S9 Piles & Pile Caps) Submit to PM & all relevant parties for review	34 05-Feb-20 A	23-Mar-20	10-Feb-20	06-Mar-20	-14				-	-									
DES-0132	and approval CSD-B(S1/S9 Piles & Pile Caps) Consent to start the works	0	23-Mar-20		06-Mar-20	-14					•									
Detailed Desig	gn for Bridge S1/S9 - Piers & Deck	94 24-Mar-20	20-Jul-20	02-Jun-20	21-Sep-20	54	0.00													
DES-0134	CSD-B(S1/S9 Piers & Deck) ICE Checking and approval	24 24-Mar-20	24-Apr-20	02-Jun-20	30-Jun-20	54			-											
DES-0136	CSD-B(S1/S9 Piers & Deck) Submit to PM & all relevant parties for review and	70 25-Apr-20	20-Jul-20	02-Jul-20	21-Sep-20	54														
	approval					54														
	ridges S2, S7 & S8	20 21-Jan-20 A		06-Jun-20	06-Jun-20		0.00													
DES-0142	CSD-B Prepare ACABAS submission for ACAVAS Board review and approval	20 21-Jan-20 A	03-Feb-20 A	06-Jun-20	06-Jun-20															
Schematic Des	sign for Bridge S2, S7 & S8	21 29-Nov-19 A	04-Feb-20 A	26-Mar-20	09-Jul-21		0.00													
Bridge S2		15 06-Dec-19 A	04-Feb-20 A	11-May-20	11-May-20		0.00													
DES-0144	CSD-B(S2) Schematic Design ICE review and approval	3 06-Dec-19 A	04-Feb-20 A	11-May-20	11-May-20															
DES-0146	CSD-A(S2) Submit to PM & all relevant parties for review and approval	12 15-Jan-20 A	04-Feb-20 A	11-May-20	11-May-20															
Bridge S7		4 29-Nov-19 A	04-Feb-20 A	26-Mar-20	26-Mar-20		0.00													
DES-0148	CSD-B(S7) Schematic Design ICE review and approval	4 29-Nov-19 A	04-Feb-20 A	26-Mar-20	26-Mar-20															
		2 03-Dec-19 A		09-Jul-21	09-Jul-21		0.00													
Bridge S8							0.00													
DES-0152	CSD-B(S8) Schematic Design ICE review and approval	2 03-Dec-19 A			09-Jul-21															
Detailed Desig	gn for Bridge S2, S7 & S8 - Piles & Pile Caps	145 10-Jan-20 A	13-Jul-20	02-Apr-20	19-Nov-21	401	0.00													
Bridge S2		61 10-Jan-20 A	27-Mar-20	11-May-20	11-Jun-20	59	0.00													
DES-0156	CSD-B(S2 Piles & Pile Caps) ICE Checking and approval	13 10-Jan-20 A	24-Feb-20 A	11-May-20	11-May-20															
DES-0158	CSD-B(S2 Piles & Pile Caps) Submit to PM & all relevant parties for review and approval	48 21-Jan-20 A	27-Mar-20	11-May-20	11-Jun-20	59														
DES-0160	CSD-B(S2 Piles & Pile Caps) Consent to start the works	0	27-Mar-20		11-Jun-20	59					•									
Bridge S7		61 17-Jan-20 A	03-Apr-20	02-Apr-20	18-May-20	32	0.00													
DES-0162	CSD-B(S7 Piles & Pile Caps) ICE Checking and approval	8 17-Jan-20 A	24-Feb-20 A	02-Apr-20	02-Apr-20															
DES-0164	CSD-B(S7 Piles & Pile Caps) Submit to PM & all relevant parties for review and	53 20-Jan-20 A		02-Apr-20	18-May-20	32														
DES-0166	approval CSD-B(S7 Piles & Pile Caps) Consent to start the works	0	03-Apr-20	12.14.20	18-May-20	32														
	Corrector i nos di File Caps) curiseri i la stati u le wons			03.0								-								
Bridge S8		65 24-Apr-20	13-Jul-20	02-Sep-21	19-Nov-21	401	0.00								_			_		
DES-0168	CSD-B(S8 Piles & Pile Caps) ICE Checking and approval	13 24-Apr-20	11-May-20	02-Sep-21	16-Sep-21	401												-		
DES-0170	CSD-B(S8 Piles & Pile Caps) Submit to PM & all relevant parties for review and approval	52 12-May-20	13-Jul-20	17-Sep-21	19-Nov-21	401			4										_	_
CSD-G for Bridg	ges across Kai Tak River (3 spans to 2 Spans)	181 14-Nov-19 A	15-Jul-20	21-Jan-20	08-Oct-20	71	0.00													
Schematic Des	sign	33 14-Nov-19 A	02-Mar-20	21-Jan-20	03-Feb-20	-24	0.00													
Bridge S3		10 22-Jan-20 A	02-Mar-20	21-Jan-20	03-Feb-20	-24	0.00													
DES-0212	CSD-G(S3) Submit to PM & all relevant parties for review and approval	10 22-Jan-20 A	02-Mar-20	21-Jan-20	03-Feb-20	-24														
Current Mile	stone								Project ID: KTE-WP04_M	0				Dat 25-Nov-1		hiv Programm	Revision		Checked	Appro
Actual Work	Central	Kowloon Ro	oute - Ka	ai Tak E	ast (Mo	nth 1	0 U	date) (Rev4 - CSD)	Baseline:					24-Dec-2 5 Feb 20	019 Monti	hly Programm	e Update M08		TST	PL
Critical Remaining V		т	hree Mo	onth Ro	lling Pro	ogra	mme		Layout: 3 Months Rolling F Filter: TASK filters: 3 Mont		E - Submice	ion		11-Feb-2	0 Subm	nit CSD Progra			TST TST	DC DC
					-				THEIL FROM IIILEIS, 5 MON	is nulling, Ki	E - Gubmiss	mUTI.		25-Feb-2	0 Mont	hly Programm	e Update M10		TST	DC
									Page 2 of 14											

tivity ID	Activity Name	Orig Dur Early St	art Early Finish	Late Start	Late Finish	Total	TRA (Dav)	February 10				March 11		_		April 12				M.	iy 3	
Bridge S1, CKR	RF & CKRW	31 14-Nov-	19 A 13-Feb-20 A	03-Feb-20	03-Feb-20	rioai	0.00	26 02 09 16	23	01	08	15	22	29	05	12	19	26	03	10	17	24 3
DES-0216	CSD-G(S1,CKRE,CKRW) Submit to PM & all relevant parties for review and		19 A 13-Feb-20 A		03-Feb-20		0.00															
	approval		19 A 13-Feb-20 A		03-Feb-20		0.00				ļ							ļ				
Bridge S4							0.00															
DES-0220	CSD-G(S4) Submit to PM & all relevant parties for review and approval		19 A 13-Feb-20 A		03-Feb-20																	
	n for Bridge S1, S3, S4, CKRE & CKRW - Piles & Pile Caps	0 02-Mar		03-Feb-20	03-Feb-20		0.00															
DES-0226	CSD-G(S1,S3,S4,CKRE,CKRW Piles & Pile Caps) Consent to start the works	0	02-Mar-20		03-Feb-20	-24				•												
	In for Bridge S1, S3, S4, CKRE & CKRW - Piers & Deck	108 17-Feb-2		18-Apr-20	08-Oct-20	71				<u> </u>	<u> </u>							<u>.</u>				
Bridge S1		61 17-Feb-3			14-Sep-20	112																
DES-0228	CSD-G(S1 Piers & Deck) ICE Checking and approval	14 17-Feb-2	20 A 03-Mar-20	18-Apr-20	18-Apr-20	36	5		-	<b>-</b> `	<u>}</u>											
DES-0230	CSD-G(S1 Piers & Deck) Submit to PM & all relevant parties for review and approval	46 18-Feb-3	0 A 04-May-20	23-Jul-20	14-Sep-20	112			1		1							-	-			
DES-0232	CSD-G(S1 Piers & Deck) Consent to start the works	0	04-May-20		14-Sep-20	112													•			
Bridge S3		63 17-Apr	20 03-Jul-20	25-Jul-20	08-Oct-20	81	0.00															
DES-0234	CSD-G(S3 Piers & Deck) ICE Checking and approval	12 17-Apr	20 02-May-20	25-Jul-20	07-Aug-20	81				1	1		1			-			3			
DES-0236	CSD-G(S3 Piers & Deck) Submit to PM & all relevant parties for review and approval	51 04-May	-20 03-Jul-20	08-Aug-20	08-Oct-20	81													_			
Bridge S4	opporta	63 29-Apr	20 15-Jul-20	12-Jun-20	26-Aug-20	36	0.00															
DES-0240	CSD-G(S4 Piers & Deck) ICE Checking and approval	12 29-Apr	20 14-May-20	12-Jun-20	26-Jun-20	36	5											-		_		
DES-0242	CSD-G(S4 Piers & Deck) Submit to PM & all relevant parties for review and	51 15-May	-20 15-Jul-20	27-Jun-20	26-Aug-20	36	5													•		
Bridge CKRE &	approval & CKRW	61 17-Mar	20 02-Jun-20	13-Jul-20	21-Sep-20	93	0.00			+												
DES-0246	CSD-G(CKRE & CKRW Piers & Deck) ICE Checking and approval	14 17-Mar	20 01-Apr-20	13-Jul-20	28-Jul-20	93	6					_										
DES-0248	CSD-G(CKRE & CKRW Piers & Deck) Submit to PM & all relevant parties for	47 02-Apr	20 02-Jun-20	29-Jul-20	21-Sep-20	93	5											_				
DES-0250	review and approval CSD-G(CKRE & CKRW Piers & Deck) Consent to start the works	0	02-Jun-20		21-Sep-20	93	:															
Detailed Desig	n of Kai Tak River Modification Works	52 03-Feb-2	0 A 29-Apr-20	25-Jul-20	23-Sep-20	122	0.00															
DES-0252	CSD-G(KTR Modification works) ICE Checking and approval	14 03-Feb-2			28-Jul-20	122																
DES-0254	CSD-G(KTR Modification works) Submit to PM & all relevant parties for revie	w 49 28-Feb	20 29-Apr-20	29-Jul-20	23-Sep-20	122																
DES-0256	and approval CSD-G(KTR Modification works) Consent to start the works	0	29-Apr-20		23-Sep-20	122												•				
	esign & Engineering	252 08-Nov-	19.4 16-500-20	27-0:t-20	22-Apr-21	171	0.00															
	ruction of Box Cuvlvert	97 08-Nov-	19 A 10-Mar-20	08-Apr-21	22-Apr-21	326	0.00															
	In for Re-construction of Box Cuvlert	97 08-Nov-			22-Apr-21		0.00											ļ				
DES-0258	AD - ICE Checking and approval	48 08-Nov-			08-Apr-21	320	0.00															
									÷													
DES-0260	AD - Submit to PM & all relevant parties for review and approval	20 27-Dec-		08-Apr-21	22-Apr-21	326			1													
DES-0262	AD - Consent to start the works	0	10-Mar-20		22-Apr-21	326					•											
	ealignment through Subway KS20 across Kai Fuk Road	91 01-Jun			19-Feb-21	122																
	In for Utility Realignment through Subway KS20 across KFF				19-Feb-21	122																
DES-0264	CSD-E ICE Checking and approval	13 01-Jun			10-Nov-20	122																
DES-0266	CSD-E Submit to PM & all relevant parties for review and approval	78 16-Jun-	20 16-Sep-20	11-Nov-20	19-Feb-21	122	2															
Temporary W	/orks Design & Engineering	217 26-Od-1		08-Feb-20	23-Jun-21	267	0.00															
DES - Temporar	ry Works for Bridges	193 23-Nov-	19 A 24-Jul-20	08-Feb-20	11-Feb-21	167	0.00															
DES_T01 - Tem	mp. working platform & Watertight Cofferdam at Kai Tak Ri	81 23-Nov-	19 A 23-Mar-20	08-Feb-20	06-Mar-20	-14	0.00							<u> </u>	<u> </u>							
																Dal	e		Revision		Checked	i Approved
Current Milest		I Kowloon	Route - K	ai Tak F	ast (Mo	onth ·	10 11-	ate) (Rev4 - CSD)	Projec Basel	t ID: KTE-\ ne:	VP04_M10	0				25-Nov-1 24-Dec-2			ne Update M03 ne Update M08		TST TST	PL PL
Critical Remai	aining Work		Three M						Layou	t: 3 Months						5 Feb 20 11-Feb-2	20 Mor		ne Update M09		TST	DC
Remaining W	rvork					- g.u			Filter:	TASK filter	s: 3 Month	ns Rolling, H	TE - Subm	ssion.		25-Feb-2			ne Update M10	0	TST	DC
										3 of 14												

/ ID	Activity Name	Ori	Dur Early Sta	t Early Finish	Late Start	Late Finish	Total Float	TRA (Day)	February 10				March 11		_		April 12				M	ay 3	
DES-1308	Dro. 107 studies and ensemble		57, 22 Nov 44	A 07-Feb-20 A	08-Feb-20	08-Feb-20	Filoat	(Day)	26 02 09 16	23	01	08	15	22	29	05	12	19	26	03	10	17	24
	DES - ICE checking and approval									-													
DES-1312	DES - Project Manager checking and approval; consent to start the	vorks	24 18-Feb-20			06-Mar-20	-14																
	mp works for temp pre-grouting under Kai Tak River		95 23-Nov-19		02-Jun-20	26-Nov-20	202	0.00															
DES-1314	DES - ICE checking and approval		57 23-Nov-19	A 07-Feb-20 A	02-Jun-20	02-Jun-20																	
DES-1316	DES - Project Manager checking and approval; consent to start the pre-grouting works		24 25-Feb-2	) 23-Mar-20	30-Oct-20	26-Nov-20	202			-				-									
DES_T11 - ELS	S Design for Bridge S2 - 2F-S2		85 25-Feb-2	0 09-Jun-20	16-Apr-20	19-Sep-20	86	0.00															
DES-1342	DES - Prepare preliminary proposal submission		36 25-Feb-2	0 07-Apr-20	16-Apr-20	29-May-20	40									÷							
DES-1344	DES - ICE checking and approval		25 08-Apr-2	0 12-May-20	25-Jul-20	22-Aug-20	86										-	-	-	-	÷		
DES-1346	DES - Project Manager checking and approval; consent to start the	Norks	24 13-May-2	0 09-Jun-20	24-Aug-20	19-Sep-20	86																-
DES_T12 - ELS	S Design for Bridge S1 - 1A-S1 to 1D-S1		84 08-Apr-2	22-Jul-20	30-May-20	29-Sep-20	59	0.00							1				1				
DES-1348	DES - Prepare preliminary proposal submission		36 08-Apr-2	) 25-May-20	30-May-20	13-Jul-20	40										-			-		-	÷
DES-1350	DES - ICE checking and approval		24 26-May-2	0 22-Jun-20	05-Aug-20	01-Sep-20	59																_
DES-1352	DES - Project Manager checking and approval; consent to start the	LS works	24 23-Jun-2	) 22-Jul-20	02-Sep-20	29-Sep-20	59																
DES T13-ELS	S Design for Bridge S3, CKRE & CKRW - 3A-3D / K1-K4		84 08-Apr-2	0 22-Jul-20	30-May-20	21-Nov-20	102	0.00															
DES-1354	DES - Prepare preliminary proposal submission		36 08-Apr-2			13-Jul-20	40				+				+						ļ		
DES-1356	DES - ICE checking and approval		24 26-May-2		24-Sep-20	23-Oct-20	102																
DES-1358	DES - Project Manager checking and approval; consent to start the	I C works	24 23-Jun-2		24-Oct-20	21-Nov-20	102																-
		LS WORKS																					
	S Design for Bridge S4 - 4A-S4 to 4J-S4		36 11-Jun-2		30-Jul-20	09-Sep-20	40																
DES-1360	DES - Prepare preliminary proposal submission		36 11-Jun-2		30-Jul-20	09-Sep-20	40								ļ								
DES_T15 - ELS	S Design for Bridge S2 - 2A-S4 to 2EL-S2 & 2ER-S2		36 11-Jun-2	) 24-Jul-20	27-Aug-20	09-Oct-20	64	0.00															
DES-1366	DES - Prepare preliminary proposal submission		36 11-Jun-2	24-Jul-20	27-Aug-20	09-Oct-20	64																
DES_T18 - ELS	S Design for Bridge S1/S9 - 1E-S1/S9 to 1G-S1/S9		83 26-Mar-2	0 09-Jul-20	04-Nov-20	11-Feb-21	180	0.00															
DES-1384	DES - Prepare preliminary proposal submission		36 26-Mar-2	0 13-May-20	04-Nov-20	15-Dec-20	180									-	-	+			÷		
DES-1386	DES - ICE checking and approval		23 14-May-2	0 09-Jun-20	16-Dec-20	14-Jan-21	180														-		-
DES-1388	DES - Project Manager checking and approval; consent to start the	LS works	24 10-Jun-2	09-Jul-20	15-Jan-21	11-Feb-21	180				+				+			+				+	
DES_T27 - Ter	mporary Slope Works for Bridge S9 Foundation Works	;	24 06-Feb-20	A 20-Mar-20	31-Mar-20	29-Apr-20	30	0.00															
DES-1460	DES - Project Manager checking and approval; consent to start the	lope works	24 06-Feb-20	A 20-Mar-20	31-Mar-20	29-Apr-20	30																
DES - Tempora	ry Works for Underpasses, Adit and Roads		36 11-Jun-2	24-Jul-20	30-Jul-20	09-Sep-20	40	0.00															
	S Design for Underpass S3		36 11-Jun-2	) 24-Jul-20	30-Jul-20	09-Sep-20	40	0.00															
DES-1408	DES - Prepare preliminary proposal submission (ELS for Box Section	and	36 11-Jun-2		30-Jul-20	09-Sep-20	40			<u> </u>													
	Ramps) rry works for Kai Fuk Road Footbridge		125 26-Oct-19		11-Mar-20	14-Jul-20	83																
						14-Jul-20	89																
	mp working platform for Footbridge over Kai Fuk Road		119 26-Oct-19				69	0.00															
DES-1434	DES - ICE checking and approval		81 26-Od-19			15-Jun-20																	
DES-1436	DES - Project Manager checking and approval; consent to start the works	Portal	24 25-Feb-2		15-Jun-20	14-Jul-20	89							<b></b>									
	S Design for Kai Fuk Road Footbridge		100 25-Nov-19		11-Mar-20	18-Apr-20	13	0.00															
DES-1438	DES - Prepare preliminary proposal submission (ELS for Pilecaps & portal)	ross road	36 25-Nov-19		11-Mar-20	11-Mar-20				-													
DES-1440	DES - ICE checking and approval		20 18-Feb-20	A 02-Mar-20	11-Mar-20	17-Mar-20	13				-												
DES-1442	DES - Project Manager checking and approval; consent to start the	LS Works	24 03-Mar-2	) 30-Mar-20	18-Mar-20	18-Apr-20	13								-								
																		Date		Revision		Checke	ed Appr
Current Miles		ntral K	wloon	Route - K	ai Tak F	ast (Mo	nth 1	10 11	date) (Rev4 - CSD)	Projec Basel	t ID: KTE-V ne:	/P04_M10					25-No	/-19 Mo		me Update MC me Update MC		TST	PL PL
Critical Rema	aining Work			Three M						Layou	: 3 Months						5 Feb	2020 Mo	nthly Program	me Update MC	19	TST	DC
	Work			THEE M		ming rri	uyia						-				11-Feb	F20 ISub	amt CSD Proc	ramme Rev3		TST	DC
Remaining V						-	•			Filter:	TASK filters	: 3 Months	s Rolling, K	TE - Subr	nission.		25-Fel	≻20 Mo	nthly Program	ne Update M1	0	TST	DC

ctivity ID	Activity Name	Orig Dur Early Start	Early Finish	Late Start	Late Finish	Total Float	TRA (Dav)			Febr	uary				March 11				April 12				Ma 13		
DES - Temporan	y works for Box Culvert	40 24-Nov-19 A	27-Apr-20	23-Apr-21	23-Jun-21	339	0.00	26	02	09	16	23	01	08	15	22	29	05	12	19	26	03	10	17	24 3
	Design for Reconstruction of Box Culvert	40 24-Nov-19 A		23-Apr-21	23-Jun-21	339	0.00																		
DES-1452	DES - ICE checking and approval	23 24-Nov-19 A		23-Apr-21	23-Apr-21		0100																		
						220										_									
DES-1454	DES - Project Manager checking and approval; consent to start the ELS Works			26-May-21	23-Jun-21	339																			
	NT, MANUFACTURING & DELIVERIES	265 25-Oct-19 A	17-Sep-20	22-Feb-20	20-Mar-21		0.00		_																
Procurement o		72 14-Nov-19 A	27-Mar-20	10-Feb-21	20-Mar-21	287	0.00																		
PRO-1852	PRO - Award sub-contractor for Prestressing concrete works	72 14-Nov-19 A	27-Mar-20	10-Feb-21	20-Mar-21	287																			
Procurement of	of Lifts		28-Aug-20				0.00																		
Shop Drawings		74 25-Nov-19 A	28-Feb-20	19-Mar-20	23-Mar-20	20	0.00																		
PRO-1862	PRO - Lifts - Shop Drawings Development and Review	52 25-Nov-19 A	28-Feb-20	19-Mar-20	23-Mar-20	20																			
PRO-1864	PRO - Lifts - Obtain shop Drawings Approval	0	28-Feb-20		23-Mar-20	20						•													
Procurement / F	Fabrication	148 29-Feb-20	28-Aug-20	24-Mar-20	21-Sep-20	20	0.00										1								
PRO-1866	PRO - Issue PO for Procurement of Lifts	0 29-Feb-20		24-Mar-20		20						•													
PRO-1868	PRO - Procurement of Lifts	148 29-Feb-20	28-Aug-20	24-Mar-20	21-Sep-20	20						•													
Procurement of	of E&M System	232 25-Oct-19 A	10-Aug-20	22-Feb-20	07-Aug-20	-2	0.00																		
Shop Drawings		232 25-Od-19 A	10-Aug-20	22-Feb-20	07-Aug-20	-2	0.00																		
PRO-1870	PRO - Award Sub-contractor (Mechanical System)	72 25-Oct-19 A	13-Mar-20	22-Feb-20	11-Mar-20	-2																			
PRO-1872	PRO - Mechanical System - Shop Drawings Development and Review	48 13-Jun-20	10-Aug-20	11-Jun-20	07-Aug-20	-2																			
Procurement of	of Cladding and Glass Panels	262 29-Oct-19 A	17-Sep-20	17-Apr-20	14-Sep-20	-3	0.00																		
Shop Drawings		157 29-Oct-19 A	15-May-20	17-Apr-20	19-Jun-20	30	0.00																		
PRO-1880	PRO - Award Sub-contractor (Cladding and Glass Panels)	90 29-Oct-19 A	28-Feb-20	17-Apr-20	21-Apr-20	41																			
PRO-1882	PRO - Cladding and Glass Panels - Shop Drawings Development and Review	48 14-Mar-20	15-May-20	22-Apr-20	18-Jun-20	29																			
PRO-1884	PRO - Cladding and Glass Panels - Obtain shop Drawings Approval	0	15-May-20		19-Jun-20	30																	•		
Procurement / F	Fabrication	73 23-Jun-20	17-Sep-20	19-Jun-20	14-Sep-20	-3	0.00																		
PRO-1886	PRO - Issue PO for Procurement of Cladding and Glass Panels	0 23-Jun-20		19-Jun-20		-3																			
PRO-1888	PRO - Procurement of Cladding and Glass Panels	72 24-Jun-20	17-Sep-20	20-Jun-20	14-Sep-20	-3	_																		
	of Sleeve Pipes	72 25-Nov-19 A	19-Mar-20	08-40r-20	07-May-20	36	0.00																		
PRO-1892	PRO - Progrement of Sleeve Pipes	72 25-Nov-19 A	19-Mar-20	08-Apr-20	07-May-20	36	0100								_										
	·	285 29-Oct-19 A	16-Oct-20	04-Jan-20	19-Nov-21	321	428 50																		
CONSTRUCTIO							0.00			$\mathbf{i}$															
TTM Scheme for	rary Traffic Management Scheme	0 02-Mar-20	02-Mar-20	26-Mar-20	26-Mar-20	21	0.00																		
KFR-TTA-1					20-Mar-20		0.00																		
	TTA - Kai Fuk Road - Stage 1	0 02-Mar-20		26-Mar-20	10.11-21-	21	204.02				)		1												
	the Works of the Site, except Section 2 to 17	285 29-Oct-19 A	16-Oct-20	04+Feb-20	19-Nov-21	321	294.00																		
Sch_1 Prelimina				22-Feb-20	10-Oct-20		95.00																		
Site Establishm	ient Works			22-Feb-20	10-Oct-20		95.00			/															
Initial Works				20-Mar-20	25-Mar-20	21	6.00																		
1-2020	SE - Temporary road and drainage works for KFR TTA Stage 1			20-Mar-20	25-Mar-20	21																			
Kai Fuk Road D	Demolish Central Divider (Nightwork)	68 23-Jan-20 A	30-Mar-20	18-May-20	21-Jun-20	83	6.00																		
																				Date		Revision		Chederd	Approved
Current Milest		Kowloon Rou	ute - Kai	i Tak F	ast (Mo	nth 1	0 1 1	date)	(Rev/	- 091		Project Baselin	ID: KTE-W e:	/P04_M10					25-No	v-19 M	onthly Program onthly Program	me Update MC		TST	PL
Critical Remain	ining Work		nree Moi						(nev4	- 031		Layout:	3 Months							2020 M	ionthly Program	me Update MC		TST	DC DC
Remaining W	(ork				inng FR	gran	inne					Filter: T	ASK filters	: 3 Months	s Rolling, ł	(TE - Subn	nission.				ubmit CSD Program	<sub>Pe</sub> mme Hev3 me Update M1	0	TST	DC
												Page 5	of 14												

#### Contract No. HY/2018/02 Environmental Monitoring & Auditing

ctivity ID	Activity Name	Orig	Our Early Start	Early Finish	Late Start	Late Finish	Total	TRA		Febr	uary			Mar 1'	ch				April				May		e
	4. MR develop Control Di Mar Chara 4 (FArr) (C. 11)			15 Mar 25	10.14-1-1-1	06 1 - 25	Float	(Day)	26 02	09	0 16	23	01			22	29	05	12	19	26	03	10	17	24 31
1-2030	1 - KFR demolish Central Divider Stage 4 (50m) (Nightwork)		15 23-Jan-20 A		18-May-20	06-Jun-20	83																		
1-2032	1 - KFR demolish Central Divider Stage 5 (50m) (Nightwork)		15 16-Mar-20	30-Mar-20	07-Jun-20	21-Jun-20	83																		
	ad U-turn Section (1350 driainpipe diversion) (CE-0024	) 1	14 30-Dec-19 A	25-May-20	25-Feb-20	11-Jun-20	15	27.00																	
1350 pipes & M	Manholes (S470A & S475)																								
5A-5672	5A - Install sheetpiles for pipe trench and manholes		30 30-Dec-19 A	15-Feb-20 A	25-Feb-20	25-Feb-20		4.00		-															
5A-5674	5A - Excavation down to formation level; (indude install wailing an	d strut)	34 22-Jan-20 A	06-Mar-20	25-Feb-20	06-Mar-20	0	5.00				<del>)</del>													
5A-5680	5A - Layiing 1350 drain pipes (~57m)		10 07-Mar-20	18-Mar-20	07-Mar-20	18-Mar-20	0	5.00				1	-	-	-										
5A-5678	5A - Construct MH S470 and S475 (2 nos)		24 07-Mar-20	03-Apr-20	07-Mar-20	03-Apr-20	0	0.00					-	-		_	-								
5A-5686	5A - Baddilling and temp reinstatement		30 28-Mar-20	08-May-20	08-May-20	11-Jun-20	29	6.00								···· 🛱									
5A-5688	5A - Connection to extg Box Culvert; Change over		8 06-Apr-20	17-Apr-20	06-Apr-20	17-Apr-20	0	0.00										_	_						
5A-5690	5A - Mass filling abandon pipelines / Demolite existing MHs		18 18-Apr-20	11-May-20	18-Apr-20	11-May-20	0	3.00											÷				•		
5A-5692	5A - Completion of 1350 drainpipe		0	25-May-20		11-Jun-20	15																	•	,
			18 07-Mar-20	27-Mar-20	25-Mar-2 <u>0</u>	18-Apr-20	15	4.00				1													
5A-5682	5A - ELS for 300 drainpipes (~29m)		12 07-Mar-20	20-Mar-20	25-Mar-20	08-Apr-20	15	2.00																	
5A-5684	5A - Install 300 drain pipes(~29m) & connection		6 21-Mar-20	27-Mar-20	09-Apr-20	18-Apr-20	15	2.00							Ļ	_									
225 pipes & Ma	anhole S470B		14 28-Mar-20	25-May-20	20-405-20	11-Jun-20	15	0.00																	
5A-5702	5A - ELS for 225 pipes (~9m)		6 28-Mar-20	03-Apr-20	20-Apr-20	25-Apr-20	15	0.00				1				_									
																	_		_						
5A-5704	5A - Laying 225 pipes & bedding to 5475 (~9m)		6 06-Apr-20	15-Apr-20	27-Apr-20	05-May-20	15																		
5A-5706	5A - Baddilling and reinstatement		6 16-Apr-20	22-Apr-20	13-May-20	19-May-20	21																		
5A-5708	5A - ELS for 225 pipes (~17m) & MH S470B		12 16-Apr-20	29-Apr-20	06-May-20	19-May-20	15														-				
5A-5710	5A - Laying 225 pipes & bedding (~17m); construct Manhole S47	0B	14 02-May-20	18-May-20	20-May-20	04-Jun-20	15														<b></b>			· ·	
5A-5712	5A - Baddfilling and reinstatement		6 19-May-20	25-May-20	05-Jun-20	11-Jun-20	15																	-	
Temporary stee	el platform over Kai Tak River	1	22 29-Feb-20	29-Jul-20	22-Feb-20	10-Oct-20	61	32.00																	
1-2315	SE - Pre-drilling platform for 1D		18 29-Feb-20	20-Mar-20	22-Feb-20	13-Mar-20	-6	2.00							-										
1-2316	SE - Temp steel platform for 1D, piles		48 28-Mar-20	29-May-20	31-Mar-20	01-Jun-20	2	12.00								Ļ.	-						_	-	
1-2318	SE - Temporary steel platform for 1E, 3E, CKRE-KS piles		50 31-Mar-20	15-Jun-20	14-Mar-20	29-May-20	-14	12.00									-	_	_	_	_	_	_	_	_
1-2332	SE - Install F3 concrete block and decking for Portion 1 (S3, CKRE	& CKRW)	36 16-Jun-20	29-Jul-20	28-Aug-20	10-Oct-20	61	6.00																	
Temporary pre-	-grouting works underneath Kai Tak River base slab		6 30-May-20	05-Jun-20	02-Jun-20	08-Jun-20	2	4.00																	
1-2322	SE - Temporary pre-grouting for 1D-S1/S9-A (1 nr)		6 30-May-20	05-Jun-20	02-Jun-20	08-Jun-20	2	4.00																	
Temporary pilin	ng platfrom at KCR U-turn section		48 06-Apr-20	05-Jun-20	05-Jun-20	03-Aug-20	48	20.00																	
1-2328	1 - Construct piling platform (8A-S8 & 2F-S2) adjacent to existing H	(CR	36 06-Apr-20	22-May-20	05-Jun-20	18-Jul-20	47	10.00				1												_	
1-2330	abutment 1 - Construct piling platform (1G-S1/S9) adjacent to existing KCR a		36 23-Apr-20	05-Jun-20	20-Jun-20	03-Aug-20		10.00																	
			57 07-Jan-20 A		19-Feb-20	19-Nov-21		45.00																	
Sch_2 Ground Ir			74 21-Mar-20	22-Jun-20	24-Mar-20	05-Jun-20		2.00																	
S1 - Pre-drilling																_									
2-2108	S1 - Pre-drilling over Kai Tak River for 1D-S1/S9-A (1 nrs)		6 21-Mar-20	27-Mar-20	24-Mar-20	30-Mar-20	2																		
2-2110	S1 - Pre-drilling over Kai Tak River for 1E-S1 (1 nr)		6 16-Jun-20	22-Jun-20	30-May-20	05-Jun-20	-14	1.00			$ \rightarrow $	1													
S2 - Pre-drilling			35 08-Feb-20 A		20-May-20	20-Aug-20		14.00																	
2-2126	S2 - Predrilling for 2EL/2ER (2 nrs)		12 08-Feb-20 A	29-Feb-20	26-May-20	30-May-20	72	2.00																	
																			Date			Revision		Checked	Approved
Current Milesto     Actual Work		antral Ko	vloon Pr	uto - Kr	ai Tak E	act (Mo	nth 1	011	odate) (Rev	4 - Cer	<b>.</b>	Projec Baseli	ID: KTE-WP0	04_M10					25-Nov-19		/ Programme / Programme	Update M07		TST	PL PL
Critical Remain	ning Work					lling Pro				031	-)	Layou	: 3 Months Ro						5 Feb 2020	Monthly	Programme	Update M09		TST	DC
Remaining Wo	ork			mee wit		ining PTC	grai	me				Filter:	TASK filters: 3	Months Ro	lling, KTE ·	Submissi	on.		11-Feb-20 25-Feb-20		CSD Program Programme				DC DC
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ctivity ID	Activity Name	Orig Dur Early St	art Early Finish	Late Start	Late Finish	Total	TRA			Februa	iy				March				April				Ma	iy	
						Float		26	02	09	16	23	01	08	11 15	22	29	05	12	19	26	03	10	17	24 3
2-2116	S2 - Predrilling for 2B (2 nrs)	10 21-Mar-		20-May-20		45																			
2-2122	S2 - Predrilling for 2DL/2DR (4 nrs)	20 02-Apr-	20 29-Apr-20	01-Jun-20	23-Jun-20	45	2.00					1									-				
2-2126 118	S2 - Predrilling for 2CL/2CR (4 nrs)	20 02-May	20 25-May-20	24-Jun-20	18-Jul-20	45	3.00					1													
2-2128	S2 - Predrilling for 2F (3 nrs)	21 26-May	20 18-Jun-20	20-Jul-20	12-Aug-20	45	3.00					1													
2-2130	S2 - Predrilling for 8A (1 nr)	7 19-Jun-	20 27-Jun-20	13-Aug-20	20-Aug-20	45	2.00					1													
S3 - Pre-drillin	ng	132 20-Feb-2	0 A 30-Jun-20	19-Feb-20	12-Jun-20	-14	4.00													1	1				
2-2138	S3 - Pre-drilling for 3A-S3 (3nrs)	15 20-Feb-2	0 A 25-Mar-20	19-Feb-20	19-Mar-20	-5	3.00				-	-	-		+	<u> </u>									
2-2142	S3 - Pre-drilling over Kai Tak River for 3E-S3(1 nr)	6 23-Jun-	20 30-Jun-20	06-Jun-20	12-Jun-20	-14	1.00					4													
S7 - Pre-drillin	ng	24 09-Jan-2	0 A 14-May-20	19-May-20	20-Feb-21	228	5.00					1													
2-2162	S7 - Predrilling for 7B-S7 (1 nr)	6 09-Jan-2	0 A 07-Feb-20	19-May-20	19-May-20		2.00					1													
2-2166	S7 - Predrilling for 7D-S7 (3 nrs)	15 18-Apr	20 07-May-20	21-Jan-21	06-Feb-21	228	2.00		+	++							+			<u></u>					
2-2168	S7 - Predrilling for 7C-S7 (1 nr)	6 08-May	20 14-May-20	08-Feb-21	20-Feb-21	228	1.00																		
S8 - Pre-drillin	ng	12 15-May	20 28-May-20	06-Nov-21	19-Nov-21	438	2.00																		
2-2176	S8 - Predrilling for 8C-S8 (2 nrs)	12 15-May	20 28-May-20	06-Nov-21	19-Nov-21	438	2.00																		
S9 - Pre-drillin		58 07-Jan-2		03-Mar-20	01-Jun-20	51	5.00																		
2-2194	S9 - Predrilling for 4H/9E (6 nrs)	27 07-Jan-2			03-Mar-20		4.00		<u> </u>	+							+								
2-2196	S9 - Predrilling for 9D-A (1 nr)	5 21-Mar-				51										<u> </u>									
S1/S9 - Pre-d		121 07-Feb-2		02-Mar-20	18-Sep-20	48						N													
2-2204	S1/S9 - Predrilling for 1E (2 nrs)	10 07-Feb-2			06-Mar-20	5																			
2-2208	S1/S9 - Predrilling for 1D-B (1 nr)	5 02-Mar			03-Jul-20	94							2												
2-2206	S1/S9 - Predrilling for 1F/7A (2 nrs)	21 12-May				15								ļ											
2-2206						48						1													
	S1/S9 - Predrilling for 1G (4 nrs)	40 06-Jun-		04-Aug-20								1													
CKRW - Pre-d	-	15 25-Feb			18-Jul-20	102																			
2-2219a	CKRW - Pre-drilling for K1-CKRW (2 nrs) (Obstruction due to Uncharted Strud CE-0026)				18-Jul-20	102																			
Sch_3.1 Bridge		148 29-Oct-1		05-Mar-20	10-Aug-20		12.00																		
S1 - Piling Wo		148 29-Oct-1			-		12.00																		
	- ABUT A-1A-S1	148 29-Oct-1			10-Aug-20		12.00																		
3.1-2300	S1 - Bored Piles for ABUT A-1A-S1 (3 nrs)	108 29-Oct-1		05-Mar-20	14-Apr-20		12.00			$\leq$															
3.1-2302	S1 - ABUT A-1A-S1 Proof drilling & Piles testing	24 01-Apr-	20 05-May-20	14-Jul-20	10-Aug-20	81	0.00											1				-			
Sch_3.2 Bridge	e S2 Works	58 26-May	20 03-Aug-20	12-Jun-20	20-Aug-20	15	9.00																		
S2 - Piling Wo	orks	58 26-May	20 03-Aug-20	12-Jun-20	20-Aug-20	15	9.00										ĺ								
Piling Works -	- Pier P-2E	58 26-May	20 03-Aug-20	12-Jun-20	20-Aug-20	15	9.00					1													
3.2-2516	S2 - Bored Piles for 2EL/2ER (2 nrs)	58 26-May	20 03-Aug-20	12-Jun-20	20-Aug-20	15	9.00					1													
Sch_3.3 Bridge	e S3 Works	78 26-Mar-	20 03-Jul-20	20-Mar-20	23-Oct-20	94	9.00					1													
S3 - Piling Wo	orks	78 26-Mar-	20 03-Jul-20	20-Mar-20	23-Oct-20	94	9.00					1													
Piling Works -	- ABUT A-3A-S3	78 26-Mar-	20 03-Jul-20	20-Mar-20	23-Oct-20	94	9.00		1	+					1		1	1			1			[]	
3.3-2801	S3 - Bored Piles for ABUT A-3A-S3 (1 nrs)	18 26-Mar-	20 20-Apr-20	20-Mar-20	14-Apr-20	-5	3.00									-	-	-	-	-					
3.3-2800	S3 - Bored Piles for ABUT A-3A-S3 (2 nrs)	36 21-Apr-	20 03-Jun-20	15-Apr-20	28-May-20	-5	6.00													_	-			<u> </u>	_
								L:	13	: 1	:	1			:	:						:			
Current Mile			_			- 6							ID: KTE-W	VP04_M10	0				25-Nov			Revision ne Update M07		TST	Approved PL
Actual Work	* Centra	l Kowloon							) (Rev4	- CSD	)	Baselir Lavout	ne: : 3 Months	Rolling P	rooramme				24-Dec 5 Feb 2			ne Update M08 ne Update M09		TST	PL DC
Remaining V	Work		Three M	onth Ro	olling Pr	ogra	mme	•								KTE - Subn	nission.		11-Feb 25-Feb		amit CSD Prog nthly Programm	ramme Rev3 ne Update M10	)	TST TST	DC DC
												Page 7	of 14									Apresso Arre			1
												· ayo /	91.1.T												

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( ID	Activity Name	Orig [	ur Early Start	Early Finish	Late Start	Late Finish	Total Float	TRA (Day)		February 10					March 11		-		April 12				Ma 13	y i	
3.3-2802	S3 - ABUT A-3A-S3 Proof drilling & Piles testing		4 04-Jun-20	03-Jul-20	24-Sep-20	23-Oct-20	94	0.00	26	02 09	16	23	01	08	15	22	29	05	12	19	26	03	10	17	24 3
	- ABUT A-3D-S3		0 15-May-20	02-Jul-20	14-May-20	30-Jun-20	-1	0.00																	
3.3-2812	S3 - Bored Piles for ABUT A-3D-S3 (2 nrs)		15-May-20	02-Jul-20	14-May-20	30-Jun-20	-1	0100		·····															
			i4 28-Nov-19 A		04-Feb-20	09-Jun-21		72.00																	
Sch_3.4 Bridge																									
S4 - Piling Wo			i4 28-Nov-19 A		04-Feb-20	09-Jun-21		72.00																	
	- ABUT A-4A-S4		4 28-Nov-19 A		08-Apr-20	05-Sep-20	36	40.00																	
3.4-3000	S4 - Bored Piles for ABUT A-4A-S4 (4 nrs)			14-Feb-20 A		08-Apr-20		16.00																	
3.4-3002	S4 - Bored Piles for ABUT A-4A-S4 (1 nr)		17-Jan-20 A		05-Sep-20	05-Sep-20		4.00																	
3.4-3004	S4 - Bored Piles for ABUT A-4A-S4 (5 nrs)	1	0 17-Feb-20 A	25-Jul-20	08-Apr-20	05-Sep-20	36	20.00		-											-				
Piling Works -	- Pier P-4B-S4-A		6 21-Apr-20	22-Jul-20	02-May-20	27-Jan-21	156	8.00																	
3.4-3006	S4 - Bored Piles for 4B-S4-A (2 nr)		21-Apr-20	22-Jun-20	02-May-20	03-Jul-20	8	8.00																	-
3.4-3010	S4 - 4B-S4-A Proof drilling & Piles testing	:	4 23-Jun-20	22-Jul-20	30-Dec-20	27-Jan-21	156	0.00																	
Piling Works -	- Pier P-4B-S4-B	1.1.1	i2 23-Jun-20	24-Aug-20	04-Jul-20	02-Sep-20	8	8.00																	
3.4-3012	S4 - Bored Piles for 4B-S4-B (2 nr)		23-Jun-20	24-Aug-20	04-Jul-20	02-Sep-20	8	8.00																	
Piling Works -	- Pier P-4E-S4		1 03-Apr-20	08-Jun-20	25-Mar-20	01-Mar-21	214	4.00																	
3.4-3032	S4 - Bored Piles for 4E-S4 (1 nr)		7 03-Apr-20	11-May-20	25-Mar-20	29-Apr-20	-8	4.00												-			-		
3.4-3034	S4 - 4E-S4 Proof drilling & Piles testing		4 12-May-20	08-Jun-20	26-Jan-21	01-Mar-21	214	0.00																	
Piling Works -	- Pier P-4F-S4		i0 03-Apr-20	06-Jun-20	06-Mar-20	09-Jun-21	295	4.00												+	÷				
3.4-3036	S4 - Bored Piles for 4F-S4 (1 nr)		6 03-Apr-20	09-May-20	06-Mar-20	06-Apr-20	-24	4.00									-								
3.4-3038	S4 - 4F-S4 Proof drilling & Piles testing		4 11-May-20	06-Jun-20	12-May-21	09-Jun-21	295	0.00																	
Piling Works -	- Pier P-4G-S4		1 03-Mar-20	07-May-20	04-Feb-20	11-Aug-20	80	4.00																	
3.4-3040	S4 - Bored Piles for 4G-S4 (1 nr)		7 03-Mar-20	02-Apr-20	04-Feb-20	05-Mar-20	-24	4.00																	
3.4-3044	S4 - 4G-S4 Proof drilling & Piles testing		4 03-Apr-20	07-May-20	15-Jul-20	11-Aug-20	-24																		
				08-Jul-20		29-Mar-21	214										_								
	- Pier P-4J-S4		9 11-May-20		07-Apr-20																				
3.4-3042	S4 - Bored Piles for 43-S4 (1 nr)		5 11-May-20	08-Jun-20	07-Apr-20	11-May-20	-24	4.00																	
3.4-3046	S4 - 43-S4 Proof drilling & Piles testing		4 09-Jun-20	08-Jul-20	02-Mar-21	29-Mar-21	214	0.00																	
Sch_3.5 Bridge			6 09-Jun-20	22-Jul-20	12-May-20	22-Jun-20	-24													ļ	Į				
S7 - Piling Wo			6 09-Jun-20	22-Jul-20	12-May-20	22-Jun-20	-24																		
Piling Works -	- Pier P-7B		6 09-Jun-20	22-Jul-20	12-May-20	22-Jun-20	-24	6.00																	
3.5-3399	S7 - Mobilisation		6 09-Jun-20	15-Jun-20	12-May-20	18-May-20	-24	1.00																	
3.5-3400	S7 - Bored Piles for 7B-S7 (1 nr)		16-Jun-20	22-Jul-20	19-May-20	22-Jun-20	-24	5.00																	
Sch_3.7 Bridge	je S9 Works	1	10-Mar-20	16-Oct-20	03-Mar-20	09-Oct-20	-6	29.00																	
S9 - Piling Wo	orks	1	10-Mar-20	16-Oct-20	03-Mar-20	09-Oct-20	-6	29.00																	
Piling Works -	- Pier P-9A		0 02-Jun-20	24-Jun-20	16-May-20	08-Jun-20	-14	3.00																	
3.7-3800	S9 - Bored Piles for 9A (1 nr)		02-Jun-20	24-Jun-20	16-May-20	08-Jun-20	-14	3.00																	
Piling Works -	- Pier P-9D		i4 12-May-20	15-Jul-20	02-May-20	06-Jul-20	-8	8.00																	
3.7-3812	S9 - Bored Piles for 9D-B (1 nr)		6 12-May-20	10-Jun-20	02-May-20	01-Jun-20	-8	4.00															_		
3.7-3814	S9 - Bored Piles for 9D-A (1 nr)		8 11-Jun-20	15-Jul-20	02-Jun-20	06-Jul-20	-8	4.00												+					
Current Mile	iescone											Project	ID: KTE-W	P04 M40		. :				ate		Revision		Checked	Approved
Adual Work	ék –	Central Kov	vloon Re	oute - Ka	ai Tak E	ast (Mo	nth 1	0 Up	odate)	(Rev4 - CSD)		Baseline	e:	_					25-Nov 24-Dec	-2019 Mon	thly Programm thly Programm	e Update M08		TST TST	PL PL
Critical Rem	naining Work Work			Three Mo						. ,			3 Months I			TE - Submis	sion		5 Feb 2 11-Feb	20 Sub	thly Programm mit CSD Progr	amme Rev3		TST	DC DC
						-								. J MUTUIS	r connig, K	Jubinis	53IUII.		25-Feb		thly Programm			TST	DC
												Page 8	of 14												

ctivity ID	Activity Name		Orig Dur Ea	arly Start	Early Finish	Late Start	Late Finish	Total	TRA			Febr	uary				March		_		April 12				Ma	<u>y</u>	
Dilin - Mart	- ABUT A-4H/9E		180 10	Mar 20	16-Od-20	03-Mar-20	09-Oct-20	Float	(Day) 18.00	26	02	09	16	23	01	08	15	22	29	05	12	19	26	03	10	17	24 31
3.7-3818	S9 - Bored Piles for 4H/9E (6 nrs)		180 10		16-Oct-20	03-Mar-20	09-Oct-20		18.00							_											
	e S1/S9 Works		78 24		30-Jun-20	07-Mar-20	10-Mar-21	204																			
S1/S9 - Piling	) Works		78 24	4-Mar-20	30-Jun-20	07-Mar-20	10-Mar-21	204	8.00																		
Piling Works -	- Pier P-1E		78 24	4-Mar-20	30-Jun-20	07-Mar-20	10-Mar-21	204	8.00													[	-				
3.8-4004	S1/S9 - Bored Piles for 1E (2 nrs)		54 24	4-Mar-20	01-Jun-20	07-Mar-20	15-May-20	-14	8.00																		
3.8-4006	S1/S9 - 1E Proof drilling & Piles testing		24 02	2-Jun-20	30-Jun-20	04-Feb-21	10-Mar-21	204	0.00																		
Sch_5A Retain	ing Walls and At-grade Road Works		24 06	6-Apr-20	08-May-20	22-Aug-20	18-Sep-20	112	0.00																		
Retaining Wa	ils		24 06	6-Apr-20	08-May-20	22-Aug-20	18-Sep-20	112	0.00																		
RW-S1			24 06	6-Apr-20	08-May-20	22-Aug-20	18-Sep-20	112	0.00	+																	
Advance Wo	rks		24 06	6-Apr-20	08-May-20	22-Aug-20	18-Sep-20		0.00																		
5A-5026	RW-S1 - Initial site formation works for A-1G-S1/S9		24 06	6-Apr-20	08-May-20	22-Aug-20	18-Sep-20	112												_							
	nstruction of Existing Box Culvert		44 13		04-Jul-20	05-Jun-21	28-Jul-21	313	9.00																		
				3-May-20	04-Jul-20		28-Jul-21	313																			
	e-construction Works					05-Jun-21																	ļ				
Stage 1				3-May-20	10-Jun-20	05-Jun-21	06-Jul-21	313	4.00																		
6B-5700	BC - Commence Box Culvert re-construction works			3-May-20		05-Jun-21		313																	•		
6B-5714	BC- Excavate to expose the top slab of the existing bo	ox culvert	6 14	1-May-20	20-May-20	07-Jun-21	12-Jun-21	313	1.00																	-	
6B-5716	BC - Remove top slab ( increase drainage cross section space limitation)	nal area, avoid confined	18 21	L-May-20	10-Jun-20	15-Jun-21	06-Jul-21	313	3.00																		
Stage 2			29 30	)-May-20	04-Jul-20	24-Jun-21	28-Jul-21	313	5.00																		
6B-5718	BC - Construct temp drainage channel and expose o	uter walls of the existing	24 30	)-May-20	27-Jun-20	24-Jun-21	22-Jul-21	313	3.00																		
6B-5720	BC - Demolish the existing walls of the End Portions a	at Upstream and	14 17	7-Jun-20	04-Jul-20	13-Jul-21	28-Jul-21	313	2.00																		
Section 3 - W	Downstream Jang Kwong Road Junction Improver	ment Works	138 14	-Jan-20 A	08-Jul-20	24-Jan-20	05-Jun-20	-26	18.50																		
	Kwong Road Junction Improvement Work		138 14	-Jan-20 A	08-Jul-20	24-Jan-20	05-Jun-20	-26	18.50																		
TTM Stage 2a	-2c (WKR/LHS Junction - Kellett School)		82 14	-Jan-20 A	29-Apr-20	18-Feb-20	22-Apr-20	-6	4.00																		
5D-5956	WKR-Stage2-1 - Draw pit installation and duct laying	for E&M / ATC	12 14	-Jan-20 A	07-Feb-20 A	18-Feb-20	18-Feb-20		0.50																		
5D-5958	WKR-Stage2-1 - Realignment works for street lighting				18 <del>-Feb-</del> 20 A	24-Mar-20	24-Mar-20		0.50	-																	
5D-5960	WKR-Stage2-1 - Street lighting relocation				18-Feb-20 A	24-Mar-20	24-Mar-20		0.50																		
5D-5962		and a GD			06-Apr-20	18-Feb-20	28-Mar-20	-6																			
	WKR-Stage 2-1 - UU parties draw pit and cable realign			-Feb-20 A																							
5D-5964	WKR-Stage 2-1 - UU parties draw pit and cable realign			-Feb-20 A	06-Apr-20	18-Feb-20	28-Mar-20	-6																			
5D-5966	WKR-Stage 2-1 - UU parties draw pit and cable realign	nment works - WTT		-Feb-20 A	06-Apr-20	18-Feb-20	28-Mar-20	-6	0.00																		
5D-5968	WKR-Stage 2-1 - UU parties draw pit and cable realign	nment works - HGC	18 08-	-Feb-20 A	06-Apr-20	18-Feb-20	28-Mar-20	-6	0.00		•																
5D-5970	WKR-Stage 2-1 - UU parties draw pit and cable realign	nment works - NWT	18 08	-Feb-20 A	06-Apr-20	18-Feb-20	28-Mar-20	-6	0.00		•	t t					-			-							
5D-5972	WKR-Stage2-1 - Relocation of Gully		12 21	1-Mar-20	03-Apr-20	24-Mar-20	07-Apr-20	2	0.50								1										
5D-5974	WKR-Stage2-1 - Road kerb installation		12 07	7-Apr-20	23-Apr-20	30-Mar-20	16-Apr-20	-6	0.50											_	-						
5D-5976	WKR-Stage2-1 - Traffic light / Sign post installation		6 18	8-Apr-20	24-Apr-20	08-Apr-20	17-Apr-20	-6	0.50												•						
5D-5978	WKR-Stage2-1 - Road reinstatement		6 18	8-Apr-20	24-Apr-20	08-Apr-20	17-Apr-20	-6	0.50												•						
5D-5980	WKR-Stage2-1 - Railing installation		10 18	8-Apr-20	29-Apr-20	08-Apr-20	22-Apr-20	-6	0.50												•		-				
5D-5982	WKR-Stage2-1 - Completion of TTA Stage 2-1		0		29-Apr-20		22-Apr-20	-6															•				
														1									:				i
Current Mile	k	Central I	Kowloc								(Rev4	- CSI	<b>)</b> )	Baseline	ID: KTE-W e: 3 Months	-					25-Nov- 24-Dec-2 5 Feb 20	19 Mon 2019 Mon	thly Programm thly Programm thly Programm	ie Update M08		Checked TST TST TST	Approved PL PL DC
Remaining	-			Tł	nree Mo	onth Ro	Iling Pr	ograr	nme									TE - Submi	ssion.		11-Feb-2 25-Feb-2	10 Subr	mit CSD Progr thiv Programm	amme Rev3		TST	DC
														Page 0	of 14						201 802	Iwou	any Envyral III	~ opulate MIN	,	101	100
													Page 9	01 14													

Activity ID	Activity Name	Orig Dur Early Sta	Early Finish	Late Start	Late Finish	Total Float	TRA (Day)	February 10		March 11				April 12				May 13	/	e 4
TTM Stage C	rossroad Ducts	67 07-Feb-20	A 19-May-20	24-Jan-20	22-Apr-20	-21	3.00	26 02 09 16	23 01 0	8 15	22	29	05	12	19	26	03	10	17	24 31
5D-6000	WKR-Stage 10-4 - TTA implementation for E&M crossroad ducting (4 lanes)	0 07-Feb-20	A	24-Jan-20				•												
5D-6002	between F5 & KS (WKR SB & NB) (Day Time 10-4) WKR-Stage10-4 - Trench excavation / crossroad ducting laying / Temp. road	12 07-Feb-20	A 20-Feb-20 A	24-Jan-20	24-Jan-20		0.00													
5D-6004	reinstatement WKR-Stage 10-4 - TTA implementation for E&M crossroad ducting between	0 26-Feb-2	)	01-Feb-20		-21			•											
5D-6006	Golden & Sino (WKR SB & NB) (Day Time 10-4) WKR-Stage10-4 - Trench excavation / crossroad ducting laying / Temp. road	12 26-Feb-2	0 10-Mar-20	01-Feb-20	14-Feb-20	-21	0.50													
5D-6008	reinstatement WKR-Stage 10-4 - TTA implementation for E&M crossroad ducting between KS			15-Feb-20		-21				,										
5D-6010	& BD (LHS EB & WB) (Day Time 10-4) WKR-Stage10-4 - Trench excavation / crossroad ducting laying / Temp. road	6 11-Mar-2		15-Feb-20	21-Feb-20	-21	0.50	·····												
5D-6012	reinstatement WKR-Stage 10-4 - TTA implementation for E&M crossroad ducting between FS			22-Feb-20	211020	-21	0.50													
5D-6012 5D-6014	& WO (LHS EB) (Day Time 10-4)			22-Feb-20	06-Mar-20		0.50													
	WKR-Stage10-4 - Trench excavation / crossroad ducting laying / Temp. road reinstatement	12 18-Mar-2			06-Mar-20	-21	0.50													
5D-6016	WKR-Stage 10-4 - TTA implementation for E&M crossroad ducting between BD & WO (WKR SB & NB) (Day Time 10-4)	0 01-Apr-2		07-Mar-20		-21														
5D-6018	WKR-Stage10-4 - Trench excavation / crossroad ducting laying / Temp. road reinstatement	12 01-Apr-2	18-Apr-20	07-Mar-20	20-Mar-20	-21	0.50					_								
5D-6020	WKR-Stage 10-4 - TTA implementation for E&M crossroad ducting between KS & Golden (KCR EB & WB) (Day Time 10-4)	0 20-Apr-2	)	21-Mar-20		-21									•					
5D-6022	WKR-Stage10-4 - Trench excavation / crossroad ducting laying / Temp. road reinstatement	18 20-Apr-2	) 12-May-20	21-Mar-20	15-Apr-20	-21	0.50								_			-		
5D-6024	WKR-Stage 10-4 - TTA implementation for E&M crossroad ducting between KS & Golden (KCR to WKR SR) (Day Time 10-4)	0 13-May-2	)	16-Apr-20		-21												•		
5D-6026	WKR-Stage10-4 - Trench excavation / crossroad ducting laying / Temp. road reinstatement	6 13-May-2	0 19-May-20	16-Apr-20	22-Apr-20	-21	0.50											_	-	
TTM Stage 20	d (WKR/KCR Junction - Kellett School)	57 13-Mar-2	25-May-20	12-Feb-20	22-Apr-20	-26	5.50													
5D-6028	WKR-Stage2d - Implement TTA Stage 2d	0 13-Mar-20	*	12-Feb-20		-26				•										
5D-6030	WKR-Stage2d - Tree Felling and transplanting	6 13-Mar-2	) 19-Mar-20	12-Feb-20	18-Feb-20	-26	0.00			-										
5D-6032	WKR-Stage2d - Planter removal	6 20-Mar-2	26-Mar-20	19-Feb-20	25-Feb-20	-26	0.50				÷									
5D-6034	WKR-Stage2d - Trench excavation	12 27-Mar-2	) 14-Apr-20	26-Feb-20	10-Mar-20	-26	0.50							_						
5D-6036	WKR-Stage2d - Fire Hydrant relocation	12 03-Apr-2	21-Apr-20	04-Mar-20	17-Mar-20	-26	0.50								_					
5D-6038	WKR-Stage2d - UU parties draw pit and cable realignment works - CLP	12 03-Apr-2	) 21-Apr-20	04-Mar-20	17-Mar-20	-26	0.50													
5D-6040	WKR-Stage2d - Pillar box relocation	6 15-Apr-2	) 21-Apr-20	11-Mar-20	17-Mar-20	-26	0.00							_	_					
5D-6042	WKR-Stage2d - Draw pit installation and duct laying for PL	12 15-Apr-2		11-Mar-20	24-Mar-20	-26	0.50													
5D-6044	WKR-Stage2d - Street lighting relocation	6 29-Apr-2			31-Mar-20	-26	0.50													
5D-6046	WKR-Stage2d - Steecing noing relocation WKR-Stage2d - Relocation of Gully					-20	0.50												_	
		15 29-Apr-2			15-Apr-20															
5D-6048	WKR-Stage2d - Kerb installation	6 12-May-2			15-Apr-20	-26	0.50													
5D-6052	WKR-Stage2d - Railing installaiton	12 12-May-2			22-Apr-20	-26	1.00												_	-
5D-6050	WKR-Stage2d - Road reinstatement	6 12-May-2		06-Apr-20	15-Apr-20	-26	0.50													
5D-6054	WKR-Stage2d - Completion of TTA Stage 2d	0	25-May-20		22-Apr-20	-26														•
TTM Stage 3	(WKR/LHS Junction - Bus Depot) [CE-0033]	36 26-May-2	) 08-Jul-20	23-Apr-20	05-Jun-20	-26	6.00													
5D-6056	WKR-Stage3 - Implement TTA Stage 3	0 26-May-2	)	23-Apr-20		-26														•
5D-6058	WKR-Stage3 - Trench excavation	12 26-May-2	08-Jun-20	23-Apr-20	08-May-20	-26	1.00													_
5D-6060	WKR-Stage3 - Draw pit installation and duct laying for E&M / ATC	6 02-Jun-2	0 08-Jun-20	02-May-20	08-May-20	-26	0.50													
5D-6062	WKR-Stage3 - Fire Hydrant water valve relocation	6 09-Jun-2	) 15-Jun-20	09-May-20	15-May-20	-26	0.50													
5D-6064	WKR-Stage3 - Relocation of Gully	6 09-Jun-2	) 15-Jun-20	09-May-20	15-May-20	-26	0.50													
5D-6066	WKR-Stage3 - Kerb installation	6 09-Jun-2	) 15-Jun-20	09-May-20	15-May-20	-26	0.50													
5D-6068	WKR-Stage3 - Traffic light installation	6 16-Jun-2	22-Jun-20	16-May-20	22-May-20	-26	0.50													
												:	:	: 1			:			
<ul> <li>Quirrent M</li> </ul>									Project ID: KTE-WP04_	M10				Dat 25-Nov-1		hly Programm	Revision e Update M07	,	Checked	Approved PL
Actual Wo	maining Work Central	Kowloon F			•			odate) (Rev4 - CSD)	Baseline:	a Broara				24-Dec-2 5 Feb 20	019 Month	hly Programme hly Programme	e Update M08	1	TST	PL DC
Remaining	-		Three M	onth Ro	olling Pro	ograr	nme	ł.	Layout: 3 Months Rollin Filter: TASK filters: 3 M			mission.		11-Feb-20 25-Feb-2	0 Subm	nit CSD Progra hiv Programme	amme Rev3		TST	DC DC DC
														20-160-2	o Internet	ny rogrammi	e opdate M10	,	1101	100
									Page 10 of 14											

Activity ID	Activity Name	Orig Du	r Early Start	Early Finish	Late Start	Late Finish	Total	TRA	February			Mar	ch			April				Ма	Ÿ.	
							Float	(Day)	10 26 02 09 16	23	01	08	15 2	29	05	12	19	26	03	10	17	24 31
5D-6070	WKR-Stage3 - Sign Post installation		6 16-Jun-20	22-Jun-20	16-May-20	22-May-20	-26	0.50														
5D-6072	WKR-Stage3 - Road Reinstatement and block paving	12	2 16-Jun-20	30-Jun-20	16-May-20	29-May-20	-26	1.00														
5D-6074	WKR-Stage3 - Ralling installation	12	2 23-Jun-20	08-Jul-20	23-May-20	05-Jun-20	-26	1.00														
Section 8 - V	entilation and E&M adit and Ring Road Underpass	162	2 30-Dec-19 A	22-Jul-20	10-Feb-20	07-Jul-20	-13	29.00														
Sch_6A Ventila	ation and E&M Adit Works	162	2 30-Dec-19 A	22-Jul-20	10-Feb-20	07-Jul-20	-13	20.00														
Area Part 1D1	l, 1D3, 1B1 & 1B2	162	2 30-Dec-19 A	22-Jul-20	10-Feb-20	07-Jul-20	-13	20.00	/													
VA - ELS Worl	ks	162	2 30-Dec-19 A	22-Jul-20	10-Feb-20	07-Jul-20	-13	20.00														
VA - ELS Stag	ge 1	141	1 30-Dec-19 A	26-Jun-20	10-Feb-20	06-Jul-20		17.00														
64-6518	VA - Install Cofferdam, Stage 1	48	8 30-Dec-19 A	20-Mar-20	10-Feb-20	05-Mar-20	-13	3.00					_									
6A-6520	VA - Excavation Down to 1st Wailing & Strut; Install Wailing & Strut, 1D1&1D	3 13	3 21-Mar-20	06-Apr-20	30-Mar-20	17-Apr-20	7	2.00					_		-							
6A-6522	VA - Excavation Down to 2nd Wailing & Strut; Install Wailing & Strut;		0 07-Apr-20	05-May-20	18-Apr-20	13-May-20	7	4.00														
	1D1&1D3																					
6A-6524	VA - Excavation Down to 3rd Wailing & Strut; Install Wailing & Strut, 1D1&1D3		2 06-May-20	30-May-20	14-May-20	08-Jun-20	7	4.00														
6A-6525	VA - Excavation Down to 4th Walling & Strut; Install Walling & Strut, 1D1&1D3	22	2 01-Jun-20	26-Jun-20	09-Jun-20	06-Jul-20	7	4.00														
6A-6530	VA - Install Cofferdam, Stage 3	59	9 13-May-20	22-Jul-20	25-Apr-20	07-Jul-20	-13	3.00														_
Sch_4.1 Ring I	Road Underpass	77	7 21-Mar-20	26-Jun-20	06-Mar-20	03-Jul-20	5	9.00														
RR - Part 1D1	, 1D2, 1D3, 1D4, 1B1 & 1B2	77	7 21-Mar-20	26-Jun-20	06-Mar-20	03-Jul-20	5	9.00														
RR - ELS Wor	ks	77	7 21-Mar-20	26-Jun-20	06-Mar-20	03-Jul-20	5	9.00														
RR - ELS Stag	ge 2		7 21-Mar-20	26-Jun-20	06-Mar-20	03-Jul-20		9.00			1											
4-6718	RR - Install Cofferdam - Stage 2	39	9 21-Mar-20	12-May-20	06-Mar-20	24-Apr-20	-13	3.00					-		-	-						
4-6720	RR - Excavation Down to 1st Waiing & Strut; Install Waiing & Strut, 1D1-1D4	1	5 13-May-20	29-May-20	19-May-20	04-Jun-20	5	2.00														
4-6722	RR - Excavation Down to 2nd Wailing & Strut; Install Wailing & Strut;1D1-1D4	4 23	3 30-May-20	26-Jun-20	05-Jun-20	03-Jul-20	5	4.00														
Section 10 - I	Footbridge, E&M Installation and Miscellaneous Wo		7 14-Dec-19 A	03-Jul-20	10-Feb-20	30-Sep-20	76	48.00														
Sch_7 FB - Pili		139	9 14-Dec-19 A	10-Jun-20	10-Feb-20	27-May-20	-12	9.00		-/												
	orks (Main Span)		9 14-Dec-19 A		10-Feb-20	21-Feb-20	-13			/												
PW Stage 1 -			8 14-Dec-19 A		10-Feb-20	12-Feb-20	-13															
	FB - Install SHP For LB-FB1 (4 nos.)																					
7-7018			8 14-Dec-19 A		10-Feb-20	12-Feb-20	-13															
PW Stage 1 -			4 24-Dec-19 A			10-Feb-20		2.00	ļ													
7-7022	FB - Install SHP For PIER P-FB1 (2 nos.)		4 24-Dec-19 A			10-Feb-20		2.00														
PW Stage 1 -			1 07-Feb-20 A		10-Feb-20	21-Feb-20	-13				$\sim$											
7-7024	FB - Install SHP For PIER P-FB2 (4 nos.)	31	1 07-Feb-20 A	07-Mar-20	10-Feb-20	21-Feb-20	-13															
FB - Piling Wo	orks (KITEC Portion)	49	9 27-Dec-19 A	09-Apr-20	02-Mar-20	18-Apr-20	5	0.00														
PW Stage 1 -	LA-FB3	28	8 27-Dec-19 A	09-Apr-20	02-Mar-20	18-Apr-20	5	0.00														
7-7020	FB - Install SHP For LA-FB3 (4 nos.)	28	8 27-Dec-19 A	09-Apr-20	02-Mar-20	18-Apr-20	5	0.00														
PW Stage 1 -	Pier P-FB3	21	1 14-Feb-20 A	09-Apr-20	02-Mar-20	18-Apr-20	5	0.00														
7-7016	FB - Install SHP For PIER P-FB3 (3 nos.)	21	1 14-Feb-20 A	09-Apr-20	02-Mar-20	18-Apr-20	5	0.00							-							
FB - Piling Wo	orks (Span D)	75	5 09-Mar-20	10-Jun-20	22-Feb-20	27-May-20	-12	0.00														
PW Stage 2 -	LC-FB2	28	8 09-Mar-20	14-Apr-20	22-Feb-20	25-Mar-20	-13	0.00														
										: 1		: :		:	:	: Dat			Bevision		i i	Annuard
Current Mile     Adual Work		Karr	deen Pr		ai Tak F	a at /14-	- 44	۰.L.	data) (David CCD)		t ID: KTE-W	/P04_M10				25-Nov-1	19 Mont	thly Programm	e Update M07		TST	Approved PL Di
Critical Rem	naining Work Central	KOW							odate) (Rev4 - CSD)	Basel Layou		Rolling Progra	mme			24-Dec-2 5 Feb 20	20 Mont	thly Programme	e Update M08 e Update M09		TST TST	PL DC
Remaining	Work		Т	nree M	onth Ro	ning Pr	ograr	nme				: 3 Months Ro		ubmission.		11-Feb-2 25-Feb-2	10 Subr 20 Mont	mit CSD Progra thly Programme	amme Rev3 e Update M10		TST TST	DC DC
										Pane	11 of 14						1.000		,			
	I									1 490												

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Activity ID	Activity Name	Orig Dur Early Star	Early Finish	Late Start	Late Finish	Total Float	TRA	February				March			April				May	
							(Day)	26 02 09	16 23	01	08	11	22	29 0	12 6 12	19	26	03	13	17 24 31
7-7032	FB - Install SHP For LC-FB2 (4 nos.)	28 09-Mar-20	14-Apr-20	22-Feb-20	25-Mar-20	-13	0.00													
PW Stage 2 - P	vier P-FD2	21 15-Apr-20	11-May-20	26-Mar-20	23-Apr-20	-13	0.00													
7-7030	FB - Install SHP For PIER P-FD2 (2 nos.) (+1 reaction pile	or testing) 21 15-Apr-20	11-May-20	26-Mar-20	23-Apr-20	-13	0.00								-				•	
PW Stage 2 - F	Pier P-FD1	14 12-May-20	27-May-20	24-Apr-20	12-May-20	-13	0.00													
7-7028	FB - Install SHP For PIER P-FD1 (2 nos.)	14 12-May-20	27-May-20	24-Apr-20	12-May-20	-13	0.00												-	_
PW - Pile Testi	ng	47 15-Apr-20	10-Jun-20	13-May-20	27-May-20	-12	0.00													
7-7026	FB- SHP Loading Test - Compression Test	12 15-Apr-20	28-Apr-20	14-May-20	27-May-20	23	0.00								-		÷			
7-7038	FB- SHP Loading Test - Tension Test	12 28-May-20	10-Jun-20	13-May-20	26-May-20	-13	0.00													_
Sch_7 FB - Mair	n Span, Staricase A & B	75 30-Mar-20	03-Jul-20	20-Apr-20	30-Sep-20	76	39.00													
FB - Abutment	ts, Pilecaps & Piers	75 30-Mar-20	03-Jul-20	20-Apr-20	30-Sep-20	76	37.00													
FB - KITEC Por	rtion	62 14-Apr-20	27-Jun-20	20-Apr-20	30-Sep-20	80	15.00						·····							
PIER P-FB3		62 14-Apr-20	27-Jun-20	20-Apr-20	04-Jul-20		6.00													
7-7050	P-FB3 - Install Sheetpiles	11 14-Apr-20	25-Apr-20	20-Apr-20	04-May-20	5	2.00													
7-7052	P-FB3 - Excavation; prepare Pile Head (3 nos.)	5 12-May-20		29-May-20	03-Jun-20		1.00													
7-7054	P-FB3 - Construct Pile Cap for PIER P-FB3	9 29-May-20		04-Jun-20	13-Jun-20		1.00													
7-7056	P-FB3 - Construct Pier P-FB3	16 09-Jun-20		15-Jun-20	04-Jul-20		2.00													
		37 27-Apr-20	10.300.20	05.Mm 20	11-Aug-20	51														
LIFT LA-FB3 7-7060	FB3-L- Install Sheetpiles		10-500-20	OF May-20																
		11 27-Apr-20		05-May-20	16-May-20		2.00													
7-7062	FB3-L- Excavation; prepare Pile Head (4 nos.)	6 12-May-20		18-May-20	23-May-20		1.00													
7-7064	FB3-L- Construct Pile Cap for FB3-L	9 19-May-20		25-May-20	03-Jun-20	5														
7-7066	FB3-L- Construct Lift Base FB3-L	9 29-May-20		30-Jul-20	08-Aug-20		1.00													-
7-7068	FB3-L- Badkfiling	2 09-Jun-20	10-Jun-20	10-Aug-20	11-Aug-20	51	0.00													
ABUT A-SA2		5 17-Jun-20	22-Jun-20	25-Sep-20	30-Sep-20	84	2.00													
7-7093	FT-SA2 - Install sheetpile	5 17-Jun-20	22-Jun-20	25-Sep-20	30-Sep-20	84	2.00													
PIER P-SA1		5 11-Jun-20	16-Jun-20	19-Sep-20	24-Sep-20	84	2.00													
7-7085	P-SA1 - Instali sheetpile	5 11-Jun-20	16-Jun-20	19-Sep-20	24-Sep-20	84	2.00				1									
FB - Main Spar	n Portion	75 30-Mar-20	03-Jul-20	22-Apr-20	08-Sep-20	57	22.00													
PIER P-FB2		75 30-Mar-20	03-Jul-20	22-Apr-20	16-Jun-20		6.00													
7-7040	P-FB2 - Install Sheetpiles	11 30-Mar-20	15-Apr-20	22-Apr-20	06-May-20	16	2.00						ı,	_						
7-7042	P-FB2 - Excavation; prepare Pile Head (4 nos.)	6 16-Apr-20	22-Apr-20	07-May-20	13-May-20	16	1.00									-				
7-7044	P-FB2 - Construct Pile Cap for PIER P-FB2	9 03-Jun-20	12-Jun-20	19-May-20	28-May-20	-13	1.00													
7-7046	P-FB2 - Construct Pier P-FB2	16 13-Jun-20	03-Jul-20	29-May-20	16-Jun-20	-13	2.00													
PIER P-FB1		31 23-Apr-20	30-May-20	14-May-20	18-Jun-20	16	4.00													
7-7070	P-FB1 - Excavation; prepare Pile Head (2 nos.)	4 23-Apr-20	27-Apr-20	14-May-20	18-May-20	16	1.00										-			
7-7072	P-FB1 - Construct Pile Cap for PIER P-FB1	9 28-Apr-20		19-May-20	28-May-20	16	1.00													
7-7074	P-FB1 - Construct Pier P-FB1	16 11-May-20		29-May-20	16-Jun-20	16														
7-7076	P-FB1 - Baddilling	2 29-May-20		17-Jun-20	18-Jun-20	16														
LIFT LB-FB1				28-May-20	04-10-20	23														
		31 29-Apr-20	0550020	2011/ay-20	04-54-20	- 23	4.00													
	Construct Meetone     Adual Web     Construct Meetone Double Visit Talk East (Meetable 10 Underte) (Double CO									WP04_M10				25-N		nthly Programm		1	Checked Approved ST PL	
Critical Rema	Central Kowloon Route - Kal Tak East (Month To Update) (Rev4 - CSD)					5 Fei	2020 Mo	nthly Programme nthly Programme	e Update M09	1	ST PL ST DC									
Remaining W	Vork		inree Mo	onin Ro	ning Pro	gran	nme			Project ID: KTE-WP04_M10 Baseline: Layout: 3 Months Rolling Programme Filter: TASK filters: 3 Months Rolling, KTE - Submission.			11-Fe 25-Fe		omit CSD Progra nthly Programma			ST DC ST DC		
									Pag	e 12 of 14										

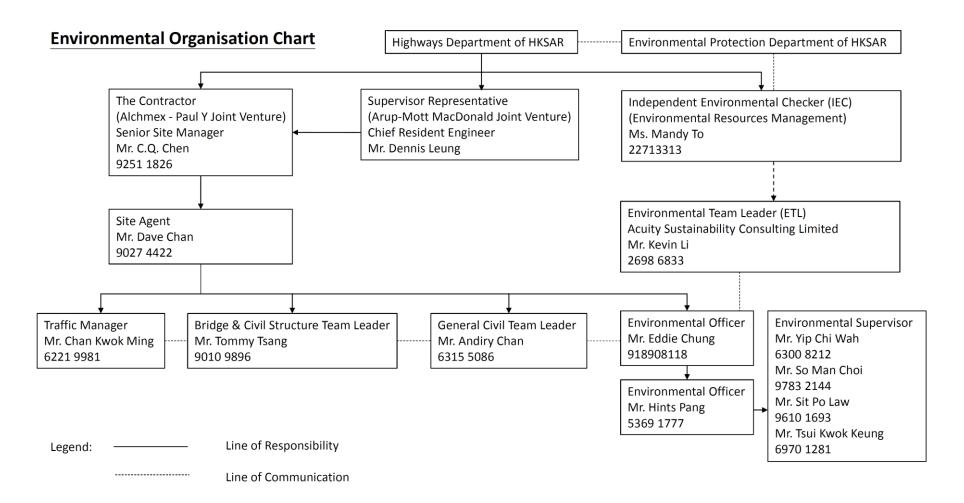
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ctivity ID	Activity Name	Orig Dur Early	Start Early Finish	Late Start	Late Finish	Total Float	TRA		Feb	uary				March		_		April				Ma	iy	
7-7078	FB1-L - Excavation; prepare Pile Head (4 nos.)	7 29-A	pr-20 08-May-20	28-May-20	04-Jun-20	Float 23	(Day) 1.00	26 02	09	16	23	01	08	11	22	29	05	12	19	26	03	10	3	24 31
				,,																				
7-7080	FB1-L- Construct Pile Cap for FB1-L	9 09-M		05-Jun-20	15-Jun-20		1.00																	
7-7082	FB1-L- Construct Lift Base FB1-L	13 20-M		16-Jun-20	02-Jul-20		2.00																	
7-7084	FB1-L- Backfilling	2 04-Ju	un-20 05-Jun-20	03-Jul-20	04-Jul-20		0.00																	
ABUT A-SB2							5.00																	
7-7110	FT-SB2 - Excavation down to formation level	3 29-A	pr-20 04-May-20	31-Jul-20	03-Aug-20	76	1.00																	
7-7111	FT-SB2 - Plate load test and report	14 05-M	ay-20 20-May-20	04-Aug-20	19-Aug-20	76	2.00																-	
7-7112	FT-SB2 - Construct Pile Cap for ABUT A-SB2	7 21-M	ay-20 28-May-20	21-Aug-20	28-Aug-20	77	1.00																	_
7-7114	A-SB2 - Construct Abutment A-SB2	7 29-M	ay-20 05-Jun-20	29-Aug-20	05-Sep-20	77	1.00																	-
7-7116	A-SB2 - Badkfilling	2 06-Ju	in-20 08-Jun-20	07-Sep-20	08-Sep-20	77	0.00																	
PIER P-SB1		17 06-Ju	ın-20 26-Jun-20	20-Aug-20	08-Sep-20	62	3.00																	
7-7102	P-SB1 - Excavation down to formation level	3 06-Ju	in-20 09-Jun-20	20-Aug-20	22-Aug-20	62	1.00																	
7-7104	P-SB1 - Construct Pile Cap for PIER P-SB1	7 10-3	in-20 17-Jun-20	24-Aug-20	31-Aug-20	62	1.00						1											
7-7106	P-SB1 - Construct Pier P-SB1	7 18-Ju	un-20 26-Jun-20	01-Sep-20	08-Sep-20	62	1.00																	
FB - Superstr	uctures	12 31-M	lar-20 17-Apr-20	22-Jun-20	07-Jul-20	65	2.00																	
FB - Main Spa	an (FB2 - FB3)	12 31-M	lar-20 17-Apr-20	22-Jun-20	07-Jul-20	65	2.00																	
FB - Main Sp	an (Mid Support to FB3)	12 31-M	lar-20 17-Apr-20	22-Jun-20	07-Jul-20		2.00																	
7-7338	MB - Construction mid support footing (night work)	12 31-M	ar-20 17-Apr-20	22-Jun-20	07-Jul-20	65	2.00				J							_						
Section 11 -	Structure of Bridge CKRE	129 10-Fe	b-20 A 24-Jul-20	02-Mar-20	25-Jul-20	1	18.00				1													
Sch_2 CKRE -	Pre-drilling	103 10-Fe	b-20 A 22-Jun-20	22-Apr-20	25-Jul-20	27	12.00																	
2-7406	CKRE - Pre-drilling for K1-CKRE (2 nrs)	15 10-Fe	b-20 A 19-Mar-20	22-Apr-20	11-May-20	39	5.00		-		<b>-</b>		-											
2-7406a	CKRE - Pre-drilling for K1-CKRE (2 nrs) (Uncharted struct CE-0	026) 15 20-M	ar-20 07-Apr-20	12-May-20	28-May-20	39	5.00										-							
2-7410	CKRE - Pre-drilling over Kal Tak River for K5-CKRE-2 (1 nr)	6 16-Ја	un-20 22-Jun-20	20-Jul-20	25-Jul-20	27	2.00																	
Sch_3.10 Brid	ge CKRE Works	129 19-Fe	b-20 A 24-Jul-20	02-Mar-20	18-Jul-20	-5	6.00																	
CKRE - Piling	Works	129 19-Fe	b-20 A 24-Jul-20	02-Mar-20	18-Jul-20	-5	6.00																	
Piling Works	- ABUT A-K1-CKRE	42 04-Ju	un-20 24-Jul-20	29-May-20	18-Jul-20	-5	6.00																	
3.10-7500	CKRE - Bored Piles for ABUT A-K1-CKRE (2 nrs)	42 04-Ju	in-20 24-Jul-20	29-May-20	18-Jul-20	-5	6.00				J													
Piling Works	- ABUT A-K4-CKRE	57 19 <del>.Fe</del>	b-20 A 14-May-20	02-Mar-20	13-May-20	-1	0.00																	
3.10-7522	CKRE - Bored Piles for ABUT A-K4-CKRE (3 nrs)	57 19 <del>.Fe</del>	b-20 A 14-May-20	02-Mar-20	13-May-20	-1					<b>-</b>								_					
Section <u>12 -</u>	Underpass S21	148 27-De	x-19 A 03-Jul-20	22-Jan-20	08-Jun-20	-20	14.00		/															
	load Underpass S21	148 27-De	x-19 A 03-Jul-20	22-Jan-20	08-Jun-20	-20	14.00		/															
S21 - ELS Wo		148 27-De	c-19 A 03-Jul-20	22-Jan-20	08-Jun-20	-20	13.00																	
S21 - U-Troug	gh Sections - South (CH009.376 to CH143.981)	109 19 <del>.Fe</del>	b-20 A 16-Jun-20	07-Feb-20	23-May-20	-20	11.00		/															
4-7710	S21 - Install Sheetpile	29 19 <del>.F</del> e	b-20 A 31-Mar-20	07-Feb-20	07-Mar-20	-20	1.00				-					_								
4-7714	S21 - Excavation Down to 1st Wailing & Strut; Install Wailing	& Strut 17 01-A	pr-20 24-Apr-20	09-Mar-20	27-Mar-20	-20	3.00									_			_					
4-7716	S21 - Excavation Down to 2nd Wailing & Strut; Install Wailing	g & Strut 25 25-A	pr-20 26-May-20	28-Mar-20	02-May-20	-20	4.00																	_
4-7720	S21 - Excavation Down to Final Formation Level	18 27-M	ay-20 16-Jun-20	04-May-20	23-May-20	-20	3.00																	
S21 - Box Sec	ction (CH143.981 to CH205.700)	148 27-De		22-Jan-20	08-Jun-20	-20	2.00				1		+											
																							<u> </u>	i
<ul> <li>Current Mile</li> </ul>	estone										Project	ID: KTE-W	VP04_M10					25-Nov-1		hly Programm	Revision	,	Checked	Approved PL
Adual Wor	k naining Work	Central Kowloor						date) (Rev	v4 - CSI	))	Baselin	ie:						24-Dec-20 5 Feb 200	019 Month	hly Programme hly Programme	e Update MD8	3	TST	PL
Remaining			Three M	onth Ro	lling Pro	ogran	nme					: 3 Months FASK filters		ogramme Rolling, K	FE - Submis	ssion.		11-Feb-20 25-Feb-20	) Subm	nit CSD Progra	mme Rev3		TST	DC
														-				25-1-60-20	y [Month	hly Programm	e update M10	,	181	DC
										Page 13 of 14														

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Activi	tv ID	Activity Name		Orig Dur	Early Start	Early Finish	Late Start	Late Finish	Total	TRA			Febru	Jary			,	March				April				May		e
									Float	(Day)	26	02	10	16	23	01	08	11 15	22	29	05	12	19	26	03	13	17	24 31
	4-7922	S21 - Install Sheetpile		26	27-Dec-19 A	29-Feb-20	22-Jan-20	03-Feb-20	-23	0.00		<																
	4-7924	S21 - Excavation down to 1st wailing & strut; Install Wa	alling & strut	13	17-Jun-20	03-Jul-20	25-May-20	08-Jun-20	-20	2.00					4													
ľ	S21 - RC Struct	ure		8	17-Jun-20	26-Jun-20	25-May-20	02-Jun-20	-20	1.00																		
	S21 - U-Trough	Sections - South (CH009.376 to CH143.981)		8	17-Jun-20	26-Jun-20	25-May-20	02-Jun-20	-20	1.00																		
	S21 - Bay B1 -	U-Trough Type III (CH143.981 to 130)			17-Jun-20	26-Jun-20	25-May-20	02-Jun-20		1.00					-													
	4-7764	S21-B1 - U3S Construct Base slab		8	17-Jun-20	26-Jun-20	25-May-20	02-Jun-20	-20	1.00																		
	Section 13 - Cr	oss-boundary disposal		96	03-Mar-20	30-Jun-20	03-Mar-20	30-Jun-20	0	0.00																		
		tory work for Cross-Boundary disposal of in	ert C&D Materia	96	03-Mar-20	30-Jun-20	03-Mar-20	30-Jun-20	0	0.00																		
	9A-8000	CBD - Prepare proposal for cross-boundary disposal of in		24	03-Mar-20	30-Mar-20	03-Mar-20	30-Mar-20	0	0.00										-								
	9A-8002	CBD - PM's review and approval			31-Mar-20	04-May-20	02-Jun-20	30-Jun-20	48	0.00																		
	9A-8004	CBD - Liaision with related authority and grant the requi	red permit and/or		31-Mar-20	30-Jun-20	31-Mar-20	30-Jun-20		0.00																		
		licenses				26 Jun 20	04.300.20		42	7.00																		
		eeve pipes for District Cooling System	n (Subject to		29-Feb-20 29-Feb-20	26-Jun-20	04.1= 20	07-May-20	-42	7.00																		
		ipes for DCS (Kai Tak River West)	10052			20-301-20	04-Jan-20	07-May-20		7.00					Ι_													
	10-8417	DCS - On Hold until further notice from AMMJV/HyD CE	WN-0052		29-Feb-20*		04-Jan-20		-42																			
	10-8418	DCS - Install sheetpipes			02-Mar-20	23-Apr-20	06-Jan-20	29-Feb-20	-42																			
	10-8420	DCS - Excavation down to formation level +1.4mPD		52	24-Apr-20	26-Jun-20	02-Mar-20	07-May-20	-42	7.00																-		
•	Current Miesto	ing Work	Central H	Cowl	oon Ro Ti	ute - Ka hree Mo	ai Tak E onth Ro	ast (Mo lling Pro	nth 1( ogram	0 Up nme	date)	(Rev4	- CSE	))	Baselin Layout:	3 Months F ASK filters:	Rolling Prop		FE - Submis	sion.			9 Month 019 Month 20 Month 0 Subm	ily Programme ily Programme ily Programme it CSD Progra	Revision e Update M07 e Update M08 e Update M09 imme Rev3 e Update M10		TST TST TST TST	Approved PL PL DC DC DC
															rage 1	+ 01 14						-						

# Appendix C Project Organization Chart





# Appendix D Dust Event-Action Plan (EAP)

	ACTION			
EVENT	ET	IEC	ER	CONTRACTOR
ACTION LEV	EL			
1.Exceedance for one sample	<ol> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Inform IEC and ER;</li> <li>Repeat measurement to confirm finding;</li> <li>Increase monitoring frequency to daily.</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method.</li> </ol>	1. Notify Contractor.	<ol> <li>Rectify any unacceptable practice;</li> <li>Amend working methods if appropriate.</li> </ol>
2.Exceedance for two or more consecutive samples	<ol> <li>Identify source;</li> <li>Inform IEC and ER;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>Repeat measurements to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Discuss with IEC and Contractor on remedial actions required;</li> <li>If exceedance continues, arrange meeting with IEC and ER;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ET on the effectiveness of the proposed remedial measures;</li> <li>Supervise Implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures properly implemented.</li> </ol>	<ol> <li>Submit proposals for remedial to ER within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Amend proposal if appropriate.</li> </ol>
LIMIT LEVEL				
1.Exceedance for one sample	<ol> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Inform ER, Contractor and</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC</li> </ol>

	ACTION			
EVENT	ET	IEC	ER	CONTRACTOR
	<ul> <li>EPD;</li> <li>3. Repeat measurement to confirm finding;</li> <li>4. Increase monitoring frequency to daily;</li> <li>5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> </ul>	<ol> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>Supervise implementation of remedial measures.</li> </ol>	3. Ensure remedial measures properly implemented.	<ul> <li>within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>4. Amend proposal if appropriate.</li> </ul>
2.Exceedance for two or more consecutive samples	<ol> <li>Notify IEC, ER, Contractor and EPD;</li> <li>Identify source;</li> <li>Repeat measurement to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>Arrange meeting with IEC and ER to discuss the remedial actions to be taken;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol> <li>Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>Ensure remedial measures properly implemented;</li> <li>If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Resubmit proposals if problem still not under control;</li> <li>Stop the relevant portion of works as determined by the ER until the exceedance is abated.</li> </ol>

Note:

ET – Environmental Team

ER – Engineer's Representative

IEC – Independent Environmental Checker

Acuity Sustainability Consulting Ltd.

# Appendix E Environmental Mitigation Implementation Schedule (EMIS)

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
			Constru	ction Dust Impact				
\$4.3.10	D1	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	<ul> <li>APCO</li> <li>To control the dust impact To meet HKAQO and TM-EIA criteria</li> </ul>	Implemented
\$4.3.10	D2	<ul> <li>Mitigation measures in form of regular watering under a good site practice should be adopted. Watering once per hour on exposed worksites and haul road should be conducted to achieve dust removal efficiencies of 91.7%. While the above watering frequencies are to be followed, the extent of watering may vary depending on actual site conditions but should be sufficient to maintain an equivalent intensity of no less than 1.3 L/m<sup>2</sup> to achieve the dust removal efficiency.</li> </ul>	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	<ul> <li>APCO</li> <li>To control the dust impact To meet HKAQO and TM-EIA criteria</li> </ul>	Implemented
\$4.3.10	D3	<ul> <li>Proper watering at exposed spoil should be undertaken throughout the construction phase;</li> <li>Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading;</li> <li>Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;</li> <li>A stockpile of dusty material should not be</li> </ul>	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	<ul> <li>APCO</li> <li>To control the dust impact To meet HKAQO and TM-EIA criteria</li> </ul>	<ul> <li>Implemented and rectified after observation.</li> </ul>

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		<ul> <li>extended beyond the pedestrian barriers, fencing or traffic cones;</li> <li>The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.</li> <li>Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores;</li> <li>When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided and properly maintained as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period;</li> <li>The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials;</li> <li>Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical</li> </ul>						

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\$4.3.10		<ul> <li>continuously;</li> <li>Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet;</li> <li>Any skip hoist for material transport should be totally enclosed by impervious sheeting;</li> <li>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;</li> <li>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</li> <li>Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabilizer within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies.</li> <li>Implement regular dust monitoring under EM&amp;A programme during the construction stage.</li> </ul>	Monitoring of dust impact	Contractor	Selected rep. dust monitoring station	Construction stage	• TM-EIA	• Implemented
			Construct	tion Noise (Airborn	e)			

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S5.4.1	N1	<ul> <li>Implement the following good site practices:</li> <li>Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme;</li> <li>Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;</li> <li>Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs;</li> <li>Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works;</li> <li>Mobile plant should be sited as far away from NSRs as possible and practicable;</li> <li>Material stockpiles, mobile container site office and other structures should be effectively utilized, where practicable, to screen noise from on-site construction activities.</li> </ul>	Control construction airborne noise	Contractor	All construction sites	Construction stage	• Annex 5, TM-EIAO	• Implemented
S5.4.1	N2	Install temporary hoarding located on the site boundaries between noisy construction activities and NSRs. The conditions of hoardings shall be properly maintained throughout the construction period.	Reduce the construction noise levels at low-level zone of NSRs through partial screening	Contractor	All construction sites	Construction stage	• Annex 5, TM-EIAO	Implemented
S5.4.1	N3	Install movable noise barriers (typical design is wooden framed barrier with a small-cantilevered on a skid footing with 25mm thick internal sound absorptive lining), acoustic mat or full enclosure, screen the noisy	Sreen the noisy plant items to be used at all construction	Contractor	All construction sites where practicable	Construction stage	• Annex 5, TM-EIAO	Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		plants including air compressors, generators and handheld breakers, etc.	sites					
S5.4.1	N4	Use 'Quiet plant'	Reduce the noise levels of plant items	Contractor	All construction sites where practicable	Construction stage	• Annex 5, TM-EIAO	Implemented
S5.4.1	N5	Loading/ unloading activities should be carried out inside the full enclosure of mucking out points.	Reduce the noise levels of loading/ unloading activities	Contractor	Mucking out locations	Construction stage	• Annex 5, TM-EIAO	Implemented
\$5.4.1	N6	Sequencing operation of construction plants where practicable.	Operate sequentially within the same work site to reduce the construction airborne noise	Contractor	All construction sites where practicable	Construction stage	• Annex 5, TM-EIAO	Implemented
S5.4.1	N7	Implement a noise monitoring programme under EM&A programme.	Monitor the construction noise levels at the selected representative locations	Contractor	Selected rep. noise monitoring station	Construction stage	• TM-EIAO	Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
\$6.9.1.1	W1	<ul> <li>In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 1994 (ProPECC PN1/94), construction phase mitigation measures shall include the following:</li> <li>Construction Runoff <ul> <li>At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities. The design of the temporary on-site drainage system will be undertaken by the contractor prior to the commencement of construction;</li> <li>The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/ sediment trap. The sediment/ silt traps should be incorporated in the permanent drainage channels to enhance deposition rates;</li> <li>The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94, which states that the retention time for silt/ sand traps should be 5 minutes under</li> </ul> </li> </ul>	To minimize water quality impact from the construction site runoff and general construction activities	Contractor	All construction sites where practicable	Construction stage	<ul> <li>Water Pollution Control Ordinance</li> <li>ProPECC PN 1/94</li> <li>TM-EIAO</li> <li>TM-DSS</li> </ul>	• Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		<ul> <li>maximum flow conditions. Sizes may vary depending upon the flow rate, but for a flow rate of 0.1 m3/s a sedimentation basin of 30 m3 would be required and for a flow rate of 0.5 m3/s the basin would be 150 m3. The detailed design of the sand/ silt traps shall be undertaken by the contractor prior to the commencement of construction;</li> <li>All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. Exposed slope surfaces should be covered by tarpaulin or other means;</li> <li>The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water flows, and all traffic areas and access roads protected by coarse stone ballast. An additional advantage accruing from the use of crushed stone is the positive traction gained during prolonged periods of inclement weather and the reduction of surface sheet flows;</li> <li>All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas;</li> <li>Measures should be taken to minimize the ingress</li> </ul>						

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		<ul> <li>of site drainage into excavations. If the excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities;</li> <li>Open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50m3 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;</li> <li>Manholes 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;</li> <li>Precautions be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes;</li> <li>All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and site wheel washing</li> </ul>						

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		<ul> <li>facilities should be provided at every construction site exit where practicable. 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;</li> <li>Oil interceptors should be provided in the drainage system downstream of any oil/ fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain;</li> <li>Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts;</li> <li>All fuel tanks and storage areas should be provided with locks and 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 water sensitive receivers nearby;</li> <li>Adopt best management practices;</li> <li>All earth works should be conducted sequentially to limit the amount of construction runoff generated from exposed areas during the wet</li> </ul>						

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		season (April to September) as far as practicable.						
S6.9.1.2	W2	<ul> <li>Tunneling Works and Underground Works</li> <li>Cut-&amp;-cover tunneling work should be conducted sequentially to limit the amount of construction runoff generated from exposed areas during the wet season (April to September) as far as practicable.</li> <li>Uncontaminated discharge should pass through sedimentation tanks prior to off-site discharge;</li> <li>The wastewater with a high concentration of SS should be treated (e.g. by sedimentation tanks with sufficient retention time) before discharge. Oil interceptors would also be required to remove the oil, lubricants and grease from the wastewater;</li> <li>Direct discharge of the bentonite slurry (as a result of D-wall) is not allowed. It should be reconditioned and reused wherever practicable. Temporary storage locations (typically a properly closed warehouse) should be provided on site for any unused bentonite that needs to be transported away after all the related construction activities area completed. The requirements in ProPECC PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.</li> </ul>	To minimize construction water quality impact from tunneling works	Contractor	All tunneling portion	Construction stage	<ul> <li>Water Pollution Control Ordinance</li> <li>ProPECC PN 1/94</li> <li>TM-DSS</li> <li>TM-EIAO</li> </ul>	• Implemented

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\$6.9. <b>1</b> .3	W3	<ul> <li>Sewage Effluent</li> <li>Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.</li> </ul>	To minimize water quality from sewage effluent	Contractor	All construction sites where practicable	Construction stage	<ul> <li>Water Pollution Control Ordinance</li> <li>TM-DSS</li> </ul>	Implemented
S6.9.1.5	W4	<ul> <li>Groundwater from Potential Contaminated Area:</li> <li>No direct discharge of groundwater from contaminated areas should be adopted.</li> <li>A discharge license under the WPCO through the Regional Office of EPD for groundwater discharge should be applied. Prior to the excavation works within these potentially contaminated areas, the groundwater quality should be reviewed during the process of discharge license application. The compliance to the Technical Memorandum on Standards for Effluents Discharged into Drainage on Sewerage Systems, Inland and Coastal Waters (TM-DSS) and the existence of prohibited substance should be confirmed. If the review results indicated that the groundwater to be generated from the excavation works would be contaminated, the contaminated groundwater should be either properly treated in compliance with the requirements of the TM-DSS or properly</li> </ul>	To minimize groundwater quality impact from contaminated area	Contractor	Excavation areas where contamination is found	Construction stage	<ul> <li>Water Pollution Control Ordinance</li> <li>TM-DSS</li> <li>TM-EIAO</li> </ul>	• Implemented

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		<ul> <li>If wastewater treatment is deployed, the wastewater treatment unit shall deploy suitable treatment process (e.g. oil interceptor / activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (e.g. TPH) to undetectable range. All treated effluent from wastewater treatment plant shall meet the requirements as stated in TM-DSS and should be discharged into the foul sewers.</li> <li>If groundwater recharging wells are deployed, recharging wells should be installed as appropriate for recharging the contaminated groundwater back into the ground. The recharging wells should be selected at places where the groundwater quality will not be affected by the recharge operation as indicated in the Section 2.3 of TM-DSS. The baseline groundwater quality shall be determined prior to the selection of the recharge wells, and submit a working plan (including the laboratory analytical results showing the quality of groundwater at the proposed recharge location(s) as well as the pollutant levels of groundwater at the recharge well. Prior to recharge, any prohibited substances such as TPH products should be removed as necessary by installing the petrol</li> </ul>						

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		interceptor.						
\$6.9.1.6	W6	<ul> <li>Accidental Spillage</li> <li>In order to prevent accidental spillage of chemicals, the following is recommended:</li> <li>All the tanks, containers, storage area should be bunded and the locations should be locked as far as possible from the sensitive watercourse and stormwater drains;</li> <li>The Contractor should register as a chemical waste producer if chemical wastes would be generated. Storage of chemical waste arising from the construction activities should be stored with suitable labels and warnings.</li> <li>Disposal of chemical wastes should be conducted in compliance with the requirements as stated in the Waste Disposal (Chemical Waste) (General) Regulation.</li> </ul>	To minimize water quality impact from accidental spillage	Contractor	All construction site where practicable	Construction stage	<ul> <li>Water Pollution Control Ordinance</li> <li>ProPECC PN 1/94</li> <li>TM-EIAO</li> <li>TM-DSS</li> </ul>	• Implemented
			Waste Manage	ement (Construction	Waste)			
\$7.4.1	WM1	<ul> <li>On-site sorting of C&amp;D material</li> <li>Geological assessment should be carried out by competent persons on site during excavation to identify materials which are not suitable to use as aggregate in structural concrete (e.g. volcanic rock, Aplite dyke rock, etc.). Volcanic rock and Aplite dyke rock should be separated at the source sites as far as practicable and stored at designated</li> </ul>	Separation of unsuitable rock from ending up at concrete batching plants and be turned into concrete for structural use	Contractor	All construction sites	Construction stage	• DEVB (W) No. 6/2010	Implemented

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		stockpile area preventing them from delivering to crushing facilities. The crushing plant operator should also be reminded to set up measures to prevent unsuitable rock from ending up at concrete batching plants and be turned into concrete for structural use. Details regarding control measures at source site and crushing facilities should be submitted by the Contractor for the Engineer to review and agree. In addition, site records should also be kept for the types of rock materials excavated and the traceability of delivery will be ensured with the implementation of Trip Ticket System and enforced by site supervisory staff as stipulated under DEVB TC(W) No. 6/2010 for tracking of the correct delivery to the rock crushing facilities for processing into aggregates. Alternative disposal option for the reuse of volcanic rock and Aplite Dyke rock, etc. should be explored.						
\$7.5.1	WM2	<ul> <li><u>Construction and Demolition Material</u></li> <li>Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement;</li> <li>Carry out on-site sorting;</li> <li>Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate;</li> <li>Adopt 'selective demolition' technique to demolish the existing structures and facilities with a view to recovering broken concrete effectively for recycling purpose, where possible;</li> </ul>	Good site practice to minimize the waste generation and recycle the C&D materials as far as practicable so as to reduce the amount for final disposal	Contractor	All construction sites	Construction stage	<ul> <li>Land (Miscellaneous Provisions) Ordinance</li> <li>Waste Disposal Ordinance</li> <li>ETWB TCW No. 19/2005</li> </ul>	• Implemented

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		<ul> <li>Implement a trip-ticket system for each works contract to ensure that the disposal of C&amp;D materials are properly documented and verified; and</li> <li>Implement an enhanced Waste Management Plan similar to ETWBTC (Works) No. 19/2005 – "Environmental Management on Construction Sites" to encourage on-site sorting of C&amp;D materials and to minimize their generation during the course of construction.</li> </ul>						
\$7.5.1	WM3	<ul> <li><u>C&amp;D Waste</u></li> <li>Standard formwork or pre-fabrication should be used as far as practicable in order to minimize the arising of C&amp;D materials. The use of more durable formwork or plastic facing for the construction works should be considered. Use of wooden hoardings should not be used, as in other projects. Metal hoarding should be used to enhance the possibility of recycling. The purchasing of construction materials will be carefully planned in order to avoid over ordering and wastage;</li> <li>The Contractor should recycle as much of the C&amp;D materials as possible on-site. Public fill and C&amp;D waste should be segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal. Where practicable, concrete and masonry can be crushed and used as fill. Steel reinforcement bar can be used by scrap steel mills. Different areas of the</li> </ul>	generation and recycle the C&D materials as far as practicable so as to reduce the	Contractor	All construction sites	Construction stage	<ul> <li>Land (Miscellaneous Provisions) Ordinance</li> <li>Waste Disposal Ordinance</li> <li>ETWB TCW No. 19/2005</li> </ul>	• Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		sites should be considered for such segregation and storage.						
S7.5.1	WM4	<ul> <li><u>Excavated Contaminated Soils</u></li> <li>Details of the mitigation measures on handling of the contaminated soil shall be referred to Section on Land Contamination below.</li> </ul>	The contaminated soil will be excavated for on-site reuse	Contractor	РВН4	Prior to commencement of construction works within the contaminated area	<ul> <li>Practice Guide (PG) for Investigation and Remediation of Contaminated Land</li> <li>GN/GM for land contamination</li> </ul>	Implemented
\$7.5.1	WM5	<ul> <li>Land-based Sediment</li> <li>All construction plant and equipment shall be designed and maintained to minimize the risk of silt, sediments, contaminants or other pollutants being released into the water column or deposited in the locations other than designated location;</li> <li>All vessels shall be sized such that adequate draft is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash;</li> <li>Before moving the vessels which are used for transporting dredged material, excess material shall be cleaned from the decks and exposed fittings of vessels and the excess materials shall never be dumped into the sea except at the</li> </ul>	To control pollution due to marine sediment	Contractor	Along CKR alignment	Construction stage	• ETWB TCW No. 34/2002	• Implemented

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		<ul> <li>approved locations;</li> <li>Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action.</li> <li>The Contractors shall monitor all vessels transporting material to ensure that no dumping outside the approved location takes place. The Contractor shall keep and produce logs and other records to demonstrate compliance and that journeys are consistent with designated locations and copies of such records shall be submitted to the engineers;</li> <li>The Contractors shall comply with the conditions in the dumping licence.</li> <li>All bottom dumping vessels (Hopper barges) shall be fitted with tight fittings seals to their bottom openings to prevent leakage of material;</li> <li>The material shall be placed into the disposal pit by bottom dumping;</li> <li>Contaminated marine mud shall be transported by spit barge of not less than 750m3 capacity and capable of rapid opening and discharge at the disposal site;</li> <li>Discharge shall be undertaken rapidly and the hoppers shall be closed immediately. Material adhering to the sides of the hopper shall not be washed out of the hopper and the hopper shall remain closed until the barge returns to the disposal site.</li> <li>For Type 3 special disposal treatment, sealing of</li> </ul>						

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		contaminant with geosynthetic containment before dropping designated mud pit would be a possible arrangement. A geosynthetic containment method is a method whereby the sediments are sealed in geosynthetic containers and, the containers would be dropped into the designated contaminated mud pit where they would be covered by further mud disposal and later by the mud pit capping at the disposal site, thereby fulfilling the requirements for fully confined mud disposal.						
\$7.5.1	WM6	<ul> <li><u>Chemical Waste</u></li> <li><u>Chemical waste</u> that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes;</li> <li>Containers used for the storage of chemical wastes should be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed, have a capacity of less than 450 L unless the specification has been approved by EPD, and display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the regulation;</li> <li>The storage area for chemical wastes should be clearly labelled and used solely for the storage of chemical waste, enclosed on at least 3 sides, have an impermeable floor and bunding of sufficient</li> </ul>	Control the chemical waste and ensure proper storage, handling and disposal	Contractor	All construction sites	Construction stage	<ul> <li>Waste Disposal (Chemical Waste) (General) Regulation</li> <li>Code of Practice on the Packaging, Labelling and Storage of Chemical Waste</li> </ul>	Implemented, rectified after observation.

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
\$7.5.1	WM7	<ul> <li>capacity to accommodate 110% of the volume of the largest container or 20% of the total volume of waste stored in that area, whichever is the greatest, have adequate ventilation, covered to prevent rainfall entering, and arranged so that incompatible materials are adequately separated;</li> <li>Disposal of chemical waste should be via a licensed waste collector, be to a facility licensed to receive chemical waste, such as the Chemical Waste Treatment Centre which also offers a chemical waste collection service and can supply the necessary storage containers, or be to a reuser of the waste, under approval from EPD.</li> <li>General Refuse</li> <li>General refuse generated on-site should be stored in enclosed bins or compaction units separately from construction and chemical wastes;</li> <li>A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimize odour, pest and litter impacts. Burning of refuse on construction sites is prohibited by law.</li> <li>Aluminum cans are often recovered from the waste stream by individual collectors if they are segregated and made easily accessible. Separate labelled bins for their deposit should be provided if feasible;</li> <li>Office wastes can be reduced through the recycling of paper if volumes are large enough to warrant</li> </ul>	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	All construction sites	Construction stage	• Waste Disposal Ordinance	• Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		collection. Participation in a local collection scheme should be considered by the Contractor.						
	•		Land Contamir	nation				
S8.9 & Appendix 8.4	LC2	<ul> <li>Excavation of the Contaminated Soil</li> <li>Prior to commencement of the excavation works at the contamination zone, the zone should be clearly marked out on site and the surface levels recorded. Excavation of contaminated material should be undertaken using dedicated earth-moving plant.</li> <li>The excavated contaminated soils would be stockpiled at designated area on site and covered by sheet to prevent dispersion of contamination during stockpiling.</li> <li>The Contractor should pay attention to the selection of suitable groundwater lowering schemes and discharge points if the groundwater table is higher than the contaminated soils during excavation. The Contractor should also obtain a valid Water Pollution Control Ordinance (WPCO) discharge licence from EPD where applicable.</li> </ul>	The contaminated soil will be excavated for on-site reuse	Contractor	PBH4	Prior to commencement of construction works within the contaminated area	<ul> <li>Practice Guide (PG) for Investigation and Remediation of Contaminated Land</li> <li>Guidance Notes for Contaminated Land Assessment and Remediation</li> <li>Guidance Manual for Use of Risk-Based</li> </ul>	• Implemented
S8.9 & Appendix 8.4	LC3	• Following completion of the excavation to the specified depth, at least one sample from the base of the excavation and four samples evenly distributed along the boundary of the excavation shall be taken for a closure assessment testing. The acceptance criterion is shown below:					Remediation Goals (RBRGs) for Contaminated Land Management	Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures		Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status	
		Locations	Testing	Acceptance						
			requirement	Criteria						
		PBH4	PCBs	RBRGs (Public						
				Park)						
		• If the results of analysis below the RBRGs (Public Park), no further excavation will be required.								
		noncompliance excavation sh vertically an location(s) of acceptance of conducted for excavation, sampling and all contamina	ce of the acceptar hall be carried out id/or horizontally the sample(s) whi criteria. Further sar or compliance testing	of contamination (i.e. nce criteria), further in 0.5m increment depending on the ch has exceeded the npling shall also be ing. The process of should continue until moved and should be on Specialist.						
Appendix 8.4	LC4	A Remediation clean-up shat endorsement construction, construction,	on Report (RR) to de ill be prepared and t prior to the con /development work:	emonstrate adequate submitted to EPD for nmencement of any s within the sites. No s shall be carried out						Implemented
	·	•			·	Hazard to Life		•	•	
S9.18	H8	healthy, expo records. Th	erienced and have e driver should ho	should be physically e good safe driving old a proper driving ort truck. Dedicated		Contractor	Works areas at which explosives would be	Construction stage	-	Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		training programme and regular road safety briefing sessions/ workshops should be provided to enhance their safe driving attitude and practice. Smoking should be strictly prohibited.			used			
\$9.18 	H9	Emergency response plans in case of road accident should be prepared and implemented. The driver and his assistant should be familiar with the emergency procedures including evacuation, and proper communication/ fire-fighting equipment should be provided to the driver and his assistant.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
			Lan	dscape & Visual				
S10.10.1 Table 10.11	LV3	<ul> <li><u>Good Site Management</u></li> <li>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.</li> <li>Construction plant and building material shall be orderly and carefully stored in order to create a neat and tidy visual appearance.</li> </ul>	Minimize visual impact	Contractor	Within Project site	Construction stage	-	Implemented
S10.10.1 Table 10.11	LV4	<ul> <li><u>Screen Hoarding</u></li> <li>Decorative screen hoarding should be erected to screen the public from the construction area. It should be designed to be compatible with the existing urban context.</li> </ul>	Minimize visual impact	Contractor	Within Project site	Construction stage	-	Implemented
S10.10.1 Table 10.11	LV5	Lighting Control during Construction • All lighting in the construction site shall be carefully controlled to minimize light pollution and night-time glare to nearby residencies and GIC.	Minimize visual impact	Contractor	Within Project site	Construction stage	-	• N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		The Contractor shall consider other security measures, which shall minimize the visual impacts.						
S10.10.1 Table 10.11	LV6	<ul> <li>Erosion Control</li> <li>The potential for soil erosion shall be reduced by minimizing the extent of vegetation disturbance on site and by providing a protective cover over newly exposed soil.</li> </ul>	Minimize landscape impact	Contractor	Within Project site	Construction stage	-	• N/A
S10.10.1 Table 10.11	LV7	Tree Protection & Preservation • Carefully protected during construction. Tree protection measures will be detailed at the Tree Removal Application stage and plans submitted to the relevant Government Department for approval in due course in accordance with ETWB TC no. 3/2006.	Minimize landscape and visual impact	Contractor	Within Project site	Construction stage	<ul> <li>'Guidelines for Tree Risk Management and Assessment Arrangement on an Area Basis and on a Tree Basis', Greening, Landscape and Tree Management (GLTM) Section, DEVB</li> <li>Latest recommended horticultural practices from GLTM Section, DEVB</li> </ul>	• Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
\$10.10.1 Table 10.11	LV8	<u>Tree Transplantation</u> • For trees unavoidably affected by the Project that have to be removed, where practical transplantation will be chosen as the top priority method of removal. If this is not possible or practical compensatory planting will be provided for trees unavoidably felled (See LV10). For trees unavoidably affected by the Project works that are transplanted, transplantation must be carried out in accordance with ETWB TCW 2/2004 and 3/2006.	Minimize landscape and visual impact	Contractor	Within Project site and designated off-site locations	Prior to Construction stage	<ul> <li>ETWB TCW 3/2006</li> <li>Latest recommended horticultural practices from Greening, Landscape and Tree Management (GLTM) Section, DEVB</li> <li>ETWB TCW 2/2004</li> </ul>	• N/A
S10.10.1 Table 10.11	LV9	<ul> <li><u>Compensatory Planting</u></li> <li>For trees unavoidably affected by the Project that have to be removed, where practical transportation will be chosen as the top priority method of removal but if this is not possible or practical compensatory planting will be provided for trees unavoidably felled. All felled trees shall be compensated for by planting trees to the satisfaction of relevant Government projects. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process under ETWBTC 3/2006.</li> <li>Compensatory tree planting may be incorporated into public open spaces and along roadside amenity areas affected by the construction works</li> </ul>	Minimize visual impact and also enhance landscape	Contractor	Within Project site	Construction stage	<ul> <li>ETWB TCW 3/2006</li> <li>Latest recommended horticultural practices from Greening, Landscape and Tree Management (GLTM) Section, DEVB</li> <li>ETWB TCW 2/2004</li> </ul>	• N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		and therefore be part of the bigger wider planting plans. Onsite compensation planting is preferred but if necessary, additional receptor sites outside the Works Area shall be agreed separately with Government during the Tree Felling Application process.						
\$10.10.1 Table 10.11	LV10	<ul> <li>Screen Planting</li> <li>Tall screen/buffer trees, shrubs and climbers should be planted, in so far as is possible, to soften and screen proposed structures such as roads and central strip, vertical edges and buildings and to enhance streetscape greening effect where appropriate. Indiscriminate use of trees for screening must be avoided and the principle of 'right tree for the right place' must be followed. This detail will be provided at the Detailed Design stage. This measure may additionally form part of the compensatory planting and will improve and create a pleasant pedestrian environment.</li> </ul>	Minimize visual impact and also enhance landscape.	Contractor	Within Project Site	Construction Phase	<ul> <li>Guidelines on Greening of Noise Barriers, issued April 2012, GLTMS, DevB</li> <li>ETWB TCW 2/2004</li> </ul>	• N/A
S10.10.1 Table 10.11	LV12	Reinstatement • All works areas, excavated areas and disturbed areas for tunnel construction and temporary road diversion or any other proposed works shall be reinstated to former conditions or better, with reasonable landscape treatment and to the satisfaction of the relevant Government departments. (Specific mitigation for disturbance to public open space is detailed separately under LV14)	Minimize landscape impact	Contractor	Within Project Site	Construction Phase	• N/A	• N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
			Cultural Heritage	Impact (Construct	ion Phase)			
S11.4.4	CH1	The contractor should be alerted during the construction on the possibility of locating archaeological remains and as a precautionary measure, AMO shall be informed immediately in case of discovery of antiquities or supposed antiquities in the subject sites.	To preserve any cultural heritage items which may be removed and damaged by the excavation	Contractor	During construction works for cut and cover tunnels	Construction stage	AMOs requirements	Implemented
				EM&A Project				
S13.2	EM1	An Independent Environmental Checker needs to be employed as per the EM&A Manual	Control EM&A Performance	Highways Department	All construction sites	Construction stage	<ul> <li>EIAO Guidance Note No. 4/2010</li> <li>TM-EIAO</li> </ul>	Implemented
S13.2-13.4	EM2	<ul> <li>An Environmental Team needs to be employed as per the EM&amp;A Manual;</li> <li>Prepare a systematic Environmental Management Plan to ensure effective implementation of the mitigation measures;</li> <li>An environmental impact monitoring needs to be implemented by the Environmental Team to ensure all the requirements given in the EM&amp;A Manual are fully complied with.</li> </ul>	Perform environmental monitoring & auditing	Highways Department/ Contractor	All construction sites	Construction stage	<ul> <li>EIAO Guidance Note No. 4/2010</li> <li>TM-EIAO</li> </ul>	Implemented

# Appendix F Monitoring Schedule of the Reporting Month

# February 2020

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
26	27	28	29	30	31	1
2	3 Impact Dust monitoring (E-A1	4	5	6	7	8 Impact Dust monitoring (E-A1)
9	10	11	12	13	14 Impact Dust monitoring (E-A	15
16	17	18	19	20 Impact Dust monitoring (E-A:	21	22
23	24	25	26 Impact Dust monitoring (E-A1)	27	28	29

1 2

## Appendix G Calibration Certificates (Air Monitoring)



SIBATA SCIENTIFIC TECHNOLOGY LTD. 1-1-62, Nakane, Soka, Saitama, 340-0005 Japan TEL: 048-933-1582 FAX: 048-933-1591

#### **CALIBRATION CERTIFICATE**

Date: August 28th, 2019

Equipment Name	: Digital Dust Indicator, Model LD-5R
Code No.	: 080000-72
Quantity	: 1 unit
Serial No.	: 851820
Sensitivity	: 0.001 mg/m3
Sensitivity Adjustment	: 640
Scale Setting	: August 23rd, 2019

We hereby certify that the above mentioned instrument has been calibrated satisfactory.

Sincerely

#### SIBATA SCIENTIFIC TECHNOLOGY LTD.

long Zhang

Tong Zhang Overseas & New Business Group Overseas Sales Department



							DU	LIBRATIO
							Octo	ber 10, 2020
nvir	onm	ent	al	-	C			
	Ce	rtifi	cate	of	Cal	libri	rtion	
		С	alibration (	Certificati	ion Inform	ation		
Cal. Date:	October 1	0, 2019	Roots	meter S/N:	438320	Ta:	296	°K
Operator:	Jim Tisch					Pat	748.03	mm Hg
		TE 50304	C-III		2702	ru.	740.05	inin ng
Calibration	wodel #:	TE-5028A	Calit	orator S/N:	5702			
		Vol. Init	Vol. Final	ΔVol.	ΔTime	ΔΡ	ΔΗ	1
	Run	(m3)	(m3)	(m3)	(min)	(mm Hg)	(in H2O)	
	1		2	1	1.3100	4.1	1.50	
	2	3	4	1	1.0240	6.7	2.50	1
	3	5	6	1	0.9260	8.0	3.00	1
	4	7	8	1	0.8620	9.4	3.50	]
	5 9 10		1	0.6540	16.2	6.00	]	
				Data Tabulation				1
	<u> </u>							
			√∆H( <u>Pa</u> Pstd	<u>)(Tstd</u> ) Ta			$\sqrt{\Delta H(Ta/Pa)}$	
	Vstd	Qstd				Qa	Y Y /	
	(m3)	(x-axis)	(y-axi		Va	(x-axis)	(y-axis)	
	0.9855		1.219		0.9945	0.7592	0.7704	
	0.9803		1.573		0.9910	1.0684	1.0895	
	0.9784		1.862		0.9874	1.1455	1.1768	
	0.9694	1.4823	2.438		0.9783	1.4959	1.5409	
		m=	1.667	23		m=	1.04399	
	QSTD	b=	-0.032	281	QA	b=	-0.02074	
		r=	0.999	91			0.99991	
				Calculatio	ns			1
	Vstd=	ΔVol((Pa-ΔP)	/Pstd)(Tstd/Ta			ΔVol((Pa-Δl	P)/Pa)	
		Vstd/ATime		,		Va/ATime	,,, _,	
			For subsequ	ent flow ra	te calculation			
	Qstd=	1/m (( \\ \[ \] \( H (	Pa (Tstd Pstd Ta	)-b)	Qa=	1/m ((√∆H	l(Ta/Pa))-b)	
	Standard	Conditions						
Tstd:	a second s			1		RECA	LIBRATION	
Pstd		mm Hg					2	
		Кеу					nnual recalibratio	
ΔH: calibrat	or manome	ter reading (i	n H2O)				Regulations Part !	
		eter reading perature (°K)					Reference Meth	
		ressure (mm					ended Particulat	
					the	Atmosphe	re, 9.2.17, page 3	50.
b: intercept								I

Tisch Environmental, Inc. 145 South Miami Avenue Village of Cleves, OH 45002

www.tisch-env.com TOLL FREE: (877)263-7610 FAX: (513)467-9009

1

### InnoTech Instrumentation Co. Ltd.

創新科儀有限公司

	DL SAMPLER		Information	DATAS	HEET (TSP)																						
Location	Emer		mormation	Deter	20 1-2 2020																						
Location:	Emax	Site ID:		Date:	29-Jan-2020																						
Serial No:	1085	Model:	TE-5170X	Operator:	Polar Chan																						
		Ambie	nt Conditio	n	1																						
Corrected Pres	sure (mm Hg):	765.3	Temperature	(deg K):	291.0																						
		Calibr	ation Orifice	Ð																							
Model:		TE	-5028A	Slope:	1.66723																						
Serial No.:			3702	Intercept:	-0.03281																						
Calibration Due	Date:	10	-Oct-20	Corr. Coeff:	0.99991																						
		Calib	ration Data																								
Plate or	In,H2O	Qa	, X-Axis	I, CFM	IC, Y-Axis																						
Test #	(in)		3/min)	(chart)	(corrected)																						
1	1.68		0.809	30.5	30.97																						
2	2.22	(	).927	32.1	32.60																						
3	2.41	0.965		32.6	33.10																						
4	2.76	1.032		33.5	34.02																						
5	3.24	:	1.116	34.6	35.14																						
Sampler Calibtati	on Relationship (Qa on x-	axis, IC on	y-axis)																								
m=	13.5805	b=	19.9948	_	Corr. Coeff= 1.0000																						
Sample	r set point(SSP)	36	CFM	_																							
		Ca	Iculations																								
Qstd = 1/m[Sqrt(H2	O(Pa/Pstd)(Tstd/Ta))-b]		m = sampler slo	pe																							
IC = I[Sqrt(Pa/Pstd)(			a/Pstd)(Tstd/Ta)]		t(Pa/Pstd)(Tstd/Ta)]		t(Pa/Pstd)(Tstd/Ta)]		Pa/Pstd)(Tstd/Ta)]		a/Pstd)(Tstd/Ta)]		Pa/Pstd)(Tstd/Ta)]		a/Pstd)(Tstd/Ta)]		a/Pstd)(Tstd/Ta)]		Pa/Pstd)(Tstd/Ta)]						b = sampler inter	rcept	
		I = chart response																									
Qstd = standard flow	rate	Tav = average temperature																									
IC = corrected chart i	response		Pav = average pre	ssure																							
I = actual chart respo	nse																										
m = calibrator Qstd	slope																										
b = calibrator Qstd is	-																										
-	re during calibration (deg K)																										
	during calibration (mm Hg)																										
Tstd = 298 deg K																											
Pstd = 760 mm Hg																											
For subsequent colcu	lation of sampler flow: 8/Tav)(Pav/760)]																										
(1.21*m+b)/[Sqrt(29																											
-	6																										

Acuity Sustainability Consulting Ltd.

### InnoTech Instrumentation Co. Ltd.

創新科儀有限公司

### HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information					
Location:	Emax	Site ID:		Date:	14-Feb-2020
Serial No:	1085	Model:	TE-5170X	Operator:	Polar Chan

#### Ambient Condition

Corrected Pressure (mm Hg):	763.5	Temperature (deg K):	293.6
-----------------------------	-------	----------------------	-------

#### **Calibration Orifice**

Model:	TE-5028A	Slope:	1.66723
Serial No.:	3702	Intercept:	-0.03281
Calibration Due Date:	10-Oct-20	Corr. Coeff:	0.99991

#### **Calibration Data**

Plate or	In,H2O	Qa, X-Axis	I, CFM	IC, Y-Axis
Test #	(in)	(m3/min)	(chart)	(corrected)
1	1.75	0.821	30.8	31.10
2	2.10	0.897	31.8	32.11
3	2.30	0.938	32.3	32.62
4	2.50	0.977	32.8	33.12
5	3.00	1.069	34.0	34.33

#### Sampler Calibtation Relationship (Qa on x-axis, IC on y-axis)

m=	13.0020	b=	20.4279	Corr. Coeff=	0.9999
Sampl	er set point(SSP)	36	CFM		
		C	Calculations		
Qstd = 1/m[Sqrt(H)]	2O(Pa/Pstd)(Tstd/Ta))-b]		m = sampler slope		
IC = I[Sqrt(Pa/Pstd	)(Tstd/Ta)]		b = sampler intercept		
			I = chart response		
Qstd = standard flo	w rate		Tav = average temperature		
IC = corrected chart	response		Pav = average pressure		
I = actual chart resp	onse				
m = calibrator Qsto	l slope				
b = calibrator Qstd	intercept				
Ta = actual tempera	ture during calibration (deg K)				
Pa = actual pressure	e during calibration (mm Hg)				
Tstd = 298 deg K					
Pstd = 760 mm Hg					
For subsequent calc	ulation of sampler flow:				
(1.21*m+b)/[Sqrt(2	.98/Tav)(Pav/760)]				
Checked by:	62.		Date:	14-Fe	b-20

## Appendix H The Certification of Laboratory with HOKLAS Accredited Analytical Tests



Hong Kong Accreditation Service 香港認可處

#### Certificate of Accreditation 認可證書

This is to certify that 特此證明

#### ACUMEN LABORATORY AND TESTING LIMITED

浩科檢測中心有限公司

Lot 12, Tam Kon Shan Road, North Tsing Yi, New Territories, Hong Kong 香港新界青衣北担杆山路12路段

has been accepted by the HKAS Executive, on the recommendation of the Accreditation Advisory Board, as a 在認可諮詢委員會的建議下獲香港認可處執行機關接受為

> HOKLAS Accredited Laboratory 「香港實驗所認可計劃」認可實驗所

This laboratory meets the requirements of ISO/IEC 17025:2005 and it has been accredited for performing specific tests or calibrations as listed in the scope of accreditation within the test category of

**Environmental Testing** 

此實驗所符合ISO/IEC 17025:2005所訂的要求 並獲認可進行載於認可範圍內下述測試類別中的指定測試或校正工作

#### 環境測試

This accreditation to ISO/IEC 17025:2005 demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (see joint IAF-ILAC-ISO Communiqué). 此項 ISO/IEC 17025:2005 的認可資格證明此實驗所具備指定範疇內所須的技術能力並 實施一套實驗所質量管理體系(見國際認可論壇、國際實驗所認可合作組織及國際標準化組織的聯合公報)。

The common seal of the Hong Kong Accreditation Service is affixed hereto by the authority of the HKAS Executive 現經香港認可處執行機關授權在此蓋上香港認可處的印章

WONG Wang-wan, Executive Administrator 執行幹事 黃宏華 Issue Date : 16 July 2014 簽發日期 : 二零一四年七月十六日

Registration Number : HOKLAS 241 註冊號碼:

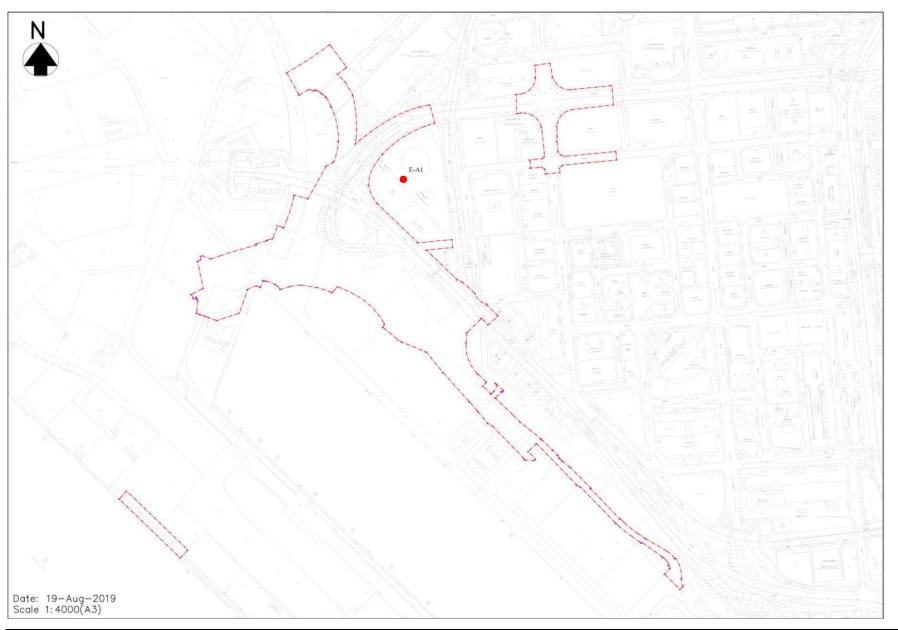
This certificate is issued subject to the terms and conditions laid down by HKAS 本證書按照言港認可處訂立的條款及條件發出



Date of First Registration : 16 July 2014 首次註冊日期:二零一四年七月十六日

L001195

## Appendix I Location Plan of Air Quality Monitoring Station



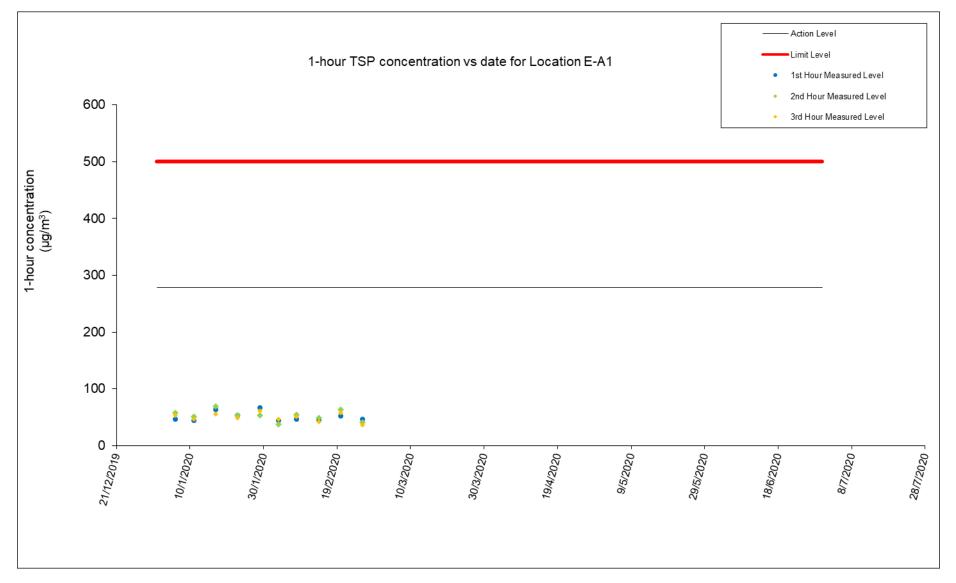
Acuity Sustainability Consulting Ltd.

### Appendix J Monitoring Data (Air Monitoring)

Location:	Hong Kong International Trade and Exhibition Centre (E-A1)
Monitoring date:	3, 8, 14, 20, 26 February 2020
Parameter:	TSP 1-hour
Other Factors:	Nearby traffic

			1-hour TSP (µ	$(m^3)$	
Date	Weather	Start Time	1 <sup>st</sup> Hour (μg/m <sup>3</sup> )	2 <sup>nd</sup> Hour (μg/m <sup>3</sup> )	3 <sup>rd</sup> Hour (μg/m <sup>3</sup> )
03/02/2020	Fine	11:16	44	38	47
08/02/2020	Sunny	11:20	47	55	51
14/02/2020	Cloudy	11:20	46	49	42
20/02/2020	Sunny	11:18	52	63	58
26/02/2020	Sunny	11:18	47	41	36

Figure 1: Graphical Illustration of Measured 1-hour TSP ( $\mu g/m^3$ ) Levels at E-A1



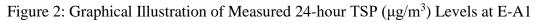
Location:	Hong Kong International Trade and Exhibition Centre (E-A1)
Monitoring date:	3, 8, 14, 20, 26 February 2020
Parameter:	TSP 24-hour

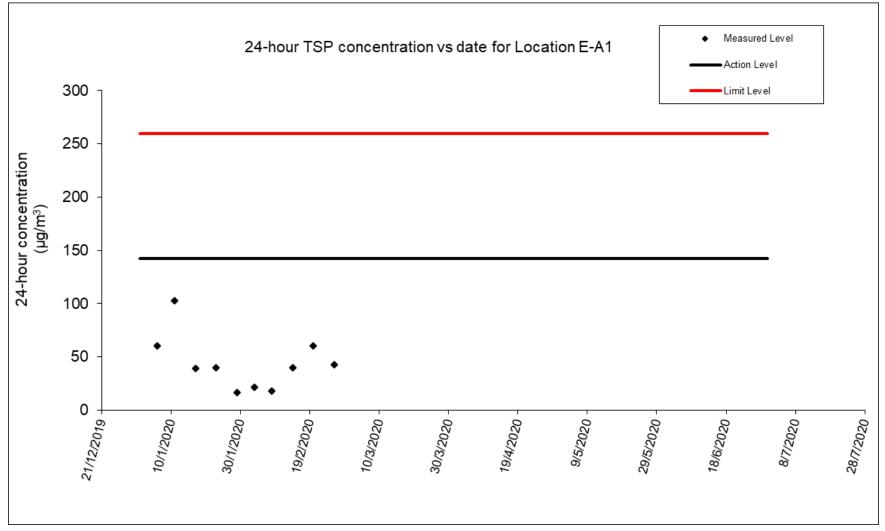
Other Factors:

Nearby traffic

											f Calibration: ion due date:			Slop = Intercept =	
											f Calibration:			Slop =	
										Calibrat	ion due date:	28-Feb-20		Intercept =	20.4279
Start Date	Weather	Elapse Time		Chart Reading		Avg Air Temp Avg Atmospheric Pressure		Flow Rate Standard Volume		Filter Weigh	ght (g) Particulate weight		Conc.		
	Condition	Initial	Final	Actual (min)	Min	Max	Avg	(°C)	(mm hPa)	(m <sup>3</sup> /min)	(m <sup>3</sup> )	Initial	Final	(g)	(µg/m <sup>3</sup> )
3/2/2020	Fine	1007.91	1031.91	1440.00	36	37	36.5	18.1	1020.3	1.26	1820	2.7235	2.762	0.0385	21
8/2/2020	Sunny	1031.92	1055.92	1440.00	35	36	35.5	17.8	1024.0	1.20	1728	2.7209	2.7512	0.0303	18
14/2/2020	Cloudy	1056.33	1080.33	1440.00	37	37	37.0	10.4	1013.8	1.35	1939	2.7258	2.8036	0.0778	40
20/2/2020	Sunny	1080.35	1104.35	1440.00	36	37	36.5	17.7	1024.9	1.30	1874	2.7377	2.8509	0.1132	60

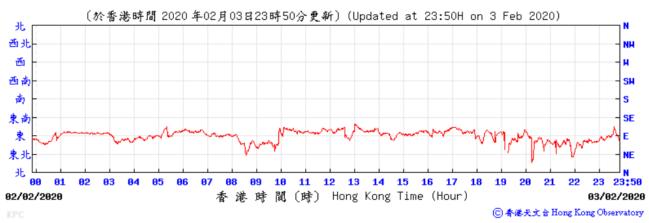
#### Contract No. HY/2018/02 Environmental Monitoring & Auditing





#### WIND DIRECTION DATA FOR 3, 4, 8, 9, 14, 15, 20, 21, 26, 27 FEBRUARY 2020

Wind Direction:

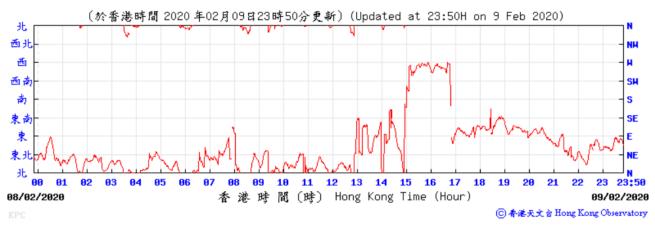


Wind Direction:

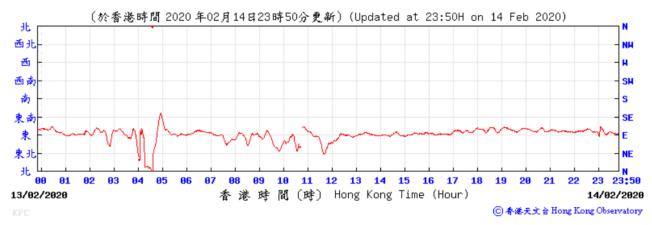


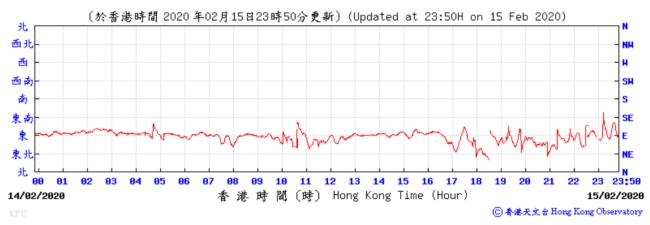


Wind Direction:

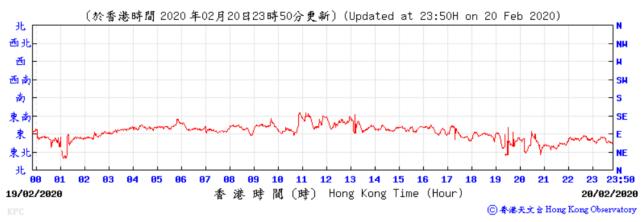


Wind Direction:

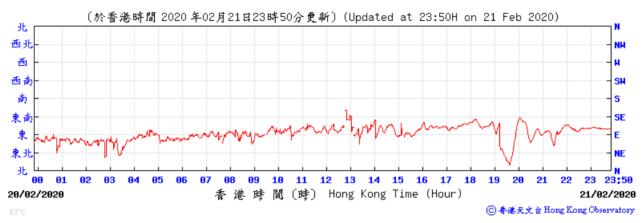


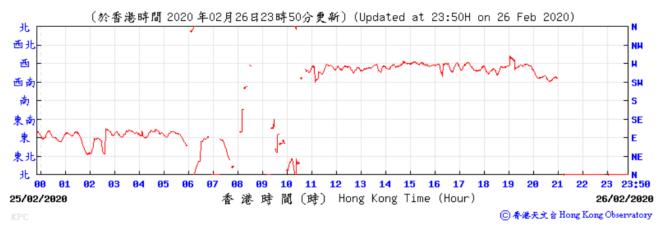


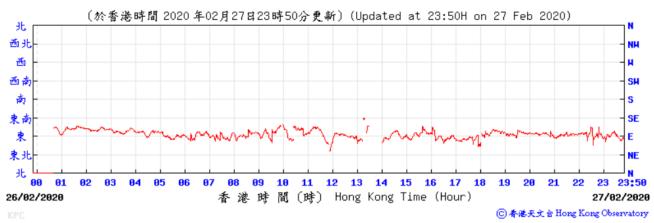
Wind Direction:



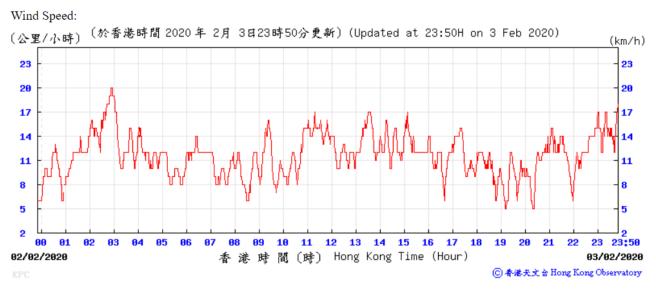
Wind Direction:



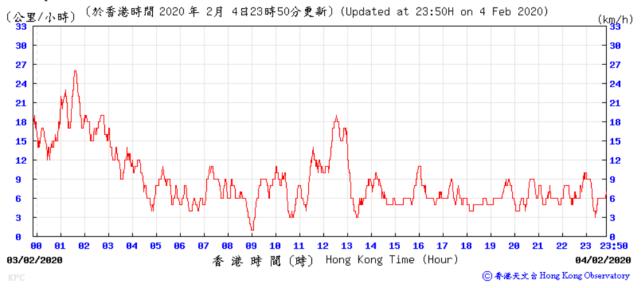




#### WIND SPEED DATA FOR 3, 4, 8, 9, 14, 15, 20, 21, 26, 27 FEBRUARY 2020



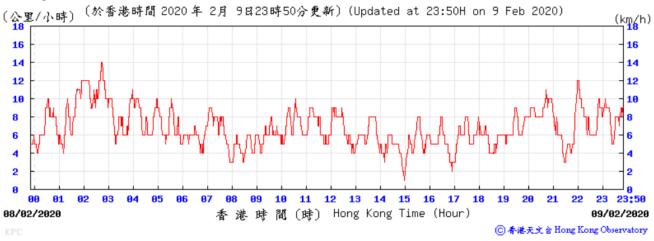
Wind Speed:



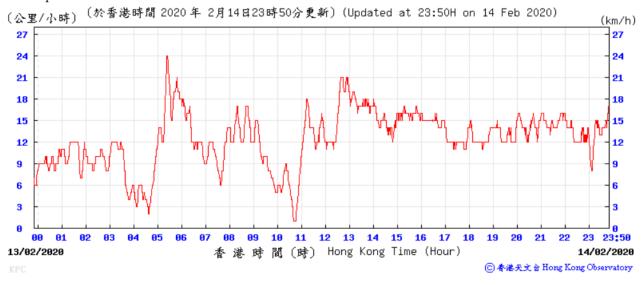


#### Contract No. HY/2018/02 Environmental Monitoring & Auditing

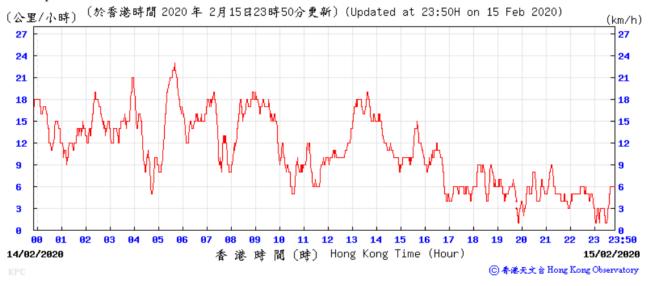
#### Wind Speed:



Wind Speed:

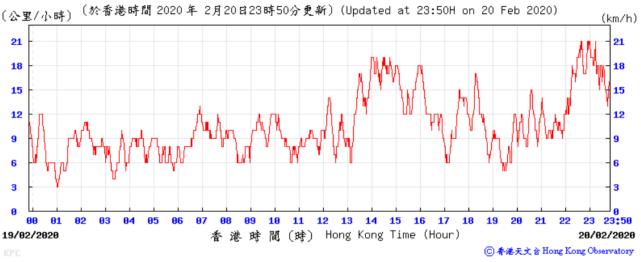


Wind Speed:

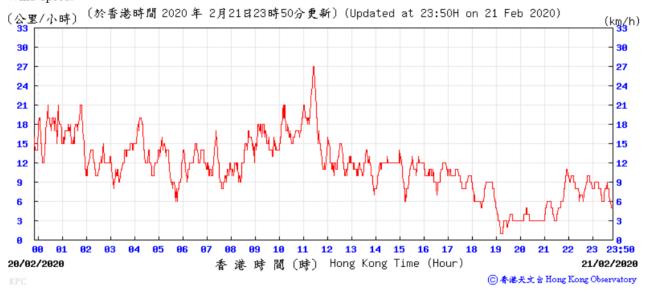


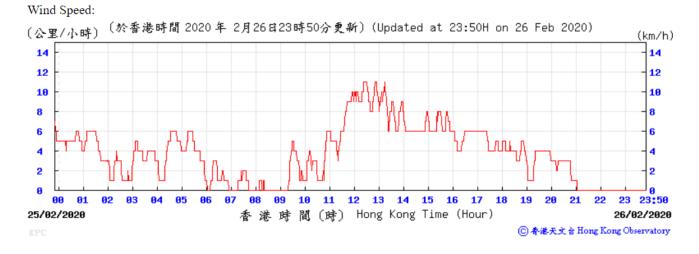
#### Contract No. HY/2018/02 Environmental Monitoring & Auditing



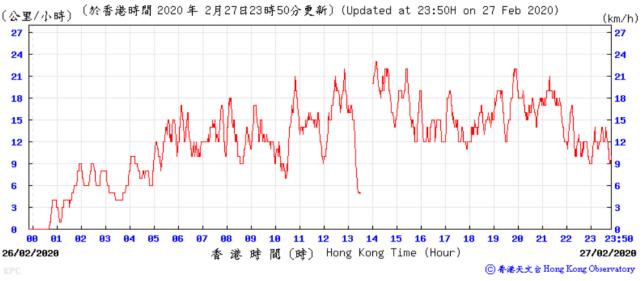


Wind Speed:









### Appendix K Waste Flow Table

#### Monthly Summary Waste Flow Table

### Contract No. / Works Order No.: <u>HY/2018/02</u>

**Highways Department** Name of Department:

Monthly Summary Waste Flow Table for February 2020 [to be submitted not later than the 15<sup>th</sup> day of each month following reporting month] (All quantities shall be rounded off to 1 decimal place.)

		Actual Quantities of <u>Inert</u> Construction Waste Generated Monthly						
Month		(b) Hard Rock and Large Broken Concrete	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed of as Public Fill	(f) Imported Fill		
	(in 'tonnes)	(in 'tonnes)	(in 'tonnes)	(in 'tonnes)	(in 'tonnes)	(in 'tonnes)		
2019	7773.8	340.0	140.0	0.0	6793.7	0.0		
Jan-20	1634.6	0.0	0.0	0.0	1600.0	0.0		
Feb-20	2142.4	0.0	0.0	0.0	2110.0	0.0		
Mar-20	0.0	0.0	0.0	0.0	0.0	0.0		
Apr-20	0.0	0.0	0.0	0.0	0.0	0.0		
May-20	0.0	0.0	0.0	0.0	0.0	0.0		
Jun-20	0.0	0.0	0.0	0.0	0.0	0.0		
Sub-total	3777.0	0.0	0.0	0.0	3710	0.0		
Jul-20	0.0	0.0	0.0	0.0	0.0	0.0		
Aug-20	0.0	0.0	0.0	0.0	0.0	0.0		
Sep-20	0.0	0.0	0.0	0.0	0.0	0.0		
Oct-20	0.0	0.0	0.0	0.0	0.0	0.0		
Nov-20	0.0	0.0	0.0	0.0	0.0	0.0		
Dec-20	0.0	0.0	0.0	0.0	0.0	0.0		
Total	3777.0	00	0.0	0.0	3710	0.0		

		Actual Quantities of <u>Non-inert</u> Construction Waste Generated Monthly									
Month	(g) Metals		(h) Paper/ cardboard packaging			(i) Plastics		(j) al Waste	(k) Others, e.g. General Refuse disposed at Landfill (in 'tonnes)		
	(in '0	00kg)	(in '000kg)		(in '000kg)		(in '000kg)				
	generated	recycled	generated	recycled	generated	recycled	generated	recycled	generated		
2019	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	500.0		
Jan-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.6		
Feb-20	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.4		
Mar-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Apr-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
May-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Jun-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sub-total	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0		
Jul-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Aug-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sep-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Oct-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Nov-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Dec-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0		

Remark: Waste record for January 2020 has been updated.

## Appendix L Statistics on Complaint, Notifications of Summons and Successful Prosecutions

Statistical Summary of Exceedances								
	Air Quality							
Location	Action Level	Limit Level	Total					
E-A1	0	0	0					

#### Statistical Summary of Environmental Complaints

Donorting Doriod	Environmental Complaint Statistics						
<b>Reporting Period</b>	Frequency	Cumulative	Complaint Nature				
1 February 2020- 29 February 2020	0	0	N/A				

#### Statistical Summary of Environmental Non-compliance

Donorting Daried	Environmental Non-compliance Statistics						
<b>Reporting Period</b>	Frequency	Cumulative	Details				
1 February 2020- 29 February 2020	0	0	N/A				

#### Statistical Summary of Environmental Summons

Donorting Doriod	Environmental Summons Statistics						
<b>Reporting Period</b>	Frequency	Cumulative	Details				
1 February 2020- 29 February 2020	0	0	N/A				

#### Statistical Summary of Environmental Prosecution

Donorting Doriod	Environmental Prosecution Statistics						
<b>Reporting Period</b>	Frequency	Cumulative	Details				
1 February 2020- 29 February 2020	0	0	N/A				

## Appendix M Monitoring Schedule of the Coming Month

# March 2020

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3 Impact	4	5	6	7
		Dust monitoring (E-A1	)			
8	9 Impact	10	11	12	13	14 Impact
	Dust monitoring (E-A1	L)				Dust monitoring (E-A1)
15	16	17	18	19	20 Impact	21
					Dust monitoring (E-A	1)
22	23	24	25	26 Impact	27	28
				Dust monitoring (E-A1	.)	
29	30	31	1	2	3	4