

Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2

Monthly EM&A Report

September 2018

Submitted to

Prepared By

Environmental Protection Department

Meinhardt Infrastructure and Environment Ltd

Meinhardt Infrastructure and Environment Limited

Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2

Monthly EM&A Report

(September 2018)

		Ih.
Certified by:	M Fredrick Leong	V
,		

Position: <u>Environmental Team Leader</u>

Date: <u>11 October 2018</u>

M MOTT MACDONALD

Hyder-Arup-Black & Veatch Joint Venture c/o Arcadis 17/F, Two Harbour Square, 180 Wai Yip Street, Kwun Tong, Hong Kong Attn: Mr. James Penny

Your Reference

Our Reference JFP/EC/ST/pl/T329380/22 .05/L-0233

3/F Mapletree Bay Point 348 Kwun Tong Road Kowloon Hong Kong

T +852 2828 5757 F +852 2827 1823 mottmac.hk Environmental Monitoring and Audit (EM&A) for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling Stage 2 (between Tai Hang to Wo Hop Shek Interchange) – Entrusted Works Environmental Permit No. EP-324/2008/E Condition 3.3 – Submission of Monthly EM&A Report – September 2018 for the portion of Stage 2 works entrusted to Civil Engineering and Development Department (CEDD) under Contract No. CV/2012/09

10 October 2018 By Fax (2805 5028) & Hand

We refer to the revised Monthly EM&A Report – September 2018 received on 08 October 2018 submitted by the Environmental Team via email. Pursuant to Environmental Permit Condition 3.3, I hereby verify the Monthly EM&A Report – September 2018 (Rev. 0) for the portion of works under Stage 2 of the captioned Project which is entrusted to CEDD under Contract No. CV/2012/09.

Yours faithfully for MOTT MACDONALD HONG KONG LIMITED

Steven Tang Independent Environmental Checker

c.c. HyD CEDD/BCP AECOM Meinhardt

Mr. Chung Lok Chin Mr. Lu Pei Yu Mr. Alan Lee Mr. Fredrick Leong

By Fax (2714 5198) By Fax (3547 1659) By Fax (3922 9797) By Fax (2559 1613)



Date	Revision	Prepared By	Checked By	Approved By
11 Oct 2018	0	WK CHIU BoBo HUI	Fredrick LEONG	
		Pett	- Mm	pr



Contents

			Page
EXE	CUTIVE	SUMMARY	i
1	INTRO	DUCTION	1
	1.2	Purpose of the Report	1
	1.3	Report Structure	1
2	PROJE	CT INFORMATION	2
	2.1	Background	2
	2.2	Site Description	3
	2.3	Construction Programme and Activities	3
	2.4	Project Organisation	3
3	STATU	S OF ENVIRONMENTAL LICENSES, NOTIFICATION AND PERMITS	5
4	AIR QU	ALITY MONITORING	7
	4.1	Monitoring Requirement	7
	4.2	Monitoring Equipment	7
	4.3	Monitoring Location	7
	4.4	Monitoring Parameters, Frequency and Duration	7
	4.5	Monitoring Methodology	8
	4.6	Monitoring Schedule for the Reporting month	8
	4.7	Monitoring Results	8
5	NOISE	MONITORING	10
	5.1	Monitoring Requirements	10
	5.2	Monitoring Equipment	10
	5.3	Monitoring Locations	10
	5.4	Monitoring Parameters, Frequency and Duration	10
	5.5	Monitoring Methodology	11
	5.6	Monitoring Schedule for the Reporting Month	11
	5.7	Monitoring Results	11
6	WATEF	R MONITORING	13
7	WASTE	MANAGEMENT	14
8	ENVIR	ONMENTAL SITE INSPECTION AND AUDIT	15
	8.1	Site Inspection	15
9	IMPLE	MENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES	16
10	SUMM	ARY OF EP SUBMISSION IN THE REPORTING MONTH	17
11	ENVIR	ONMENTAL NON-CONFORMANCE	18
	11.1	Summary of Monitoring Exceedances	18



	11.2	Summary of Environmental Non-Compliance	18
	11.3	Summary of Environmental Complaints	18
	11.4	Summary of Environmental Summon and Successful Prosecutions	18
12	FUTUR	E KEY ISSUES	19
	12.1	Construction Programme for the Next Month	19
	12.2	Key Issues for the Coming Month	19
	12.3	Monitoring Schedule for the Next Month	19
13	CONCL	USIONS AND RECOMMENDATIONS	20
	13.1	Conclusions	20
	13.2	Recommendations	20

List of Tables

- Table 2.1 Contact Information of Key Personnel
- Table 3.1 Status of Environmental Licenses, Notifications and Permits
- Table 4.1 Air Quality Monitoring Equipment
- Location of Air Quality Monitoring Table 4.2
- Air Quality Monitoring Parameters, Frequency and Duration Table 4.3
- Table 4.4 Summary of 1-hr TSP Monitoring Results
- Table 4.5 Summary of 24-hr TSP Monitoring Results
- Table 5.1 Noise Monitoring Equipment
- Table 5.2 Location of Noise Monitoring
- Table 5.3 Noise Monitoring Parameters, Frequency and Duration
- Table 5.4 Summary of Noise Monitoring Results
- Observations and Recommendations of Site Audit Table 8.1
- Table 10.1 Status of Required Submission under Environmental Permit

List of Figures

- Demarcation of Entrusted Portion of Widening of Tolo Highway / Fanling Highway Figure 1 between Island House Interchange and Fanling - Stage 2
- Figure 2 Air and Noise Monitoring Locations

List of Appendices

Appendix A Construction Programme

- Appendix B Project Organization Structure
- Appendix C Calibration Certificates of Monitoring Equipment
- Appendix D EM&A Monitoring Schedules
- Appendix E Meteorological Data Extracted from Hong Kong Observatory
- Appendix F Air Quality Monitoring Results and their Graphical Presentation
- Appendix G Summary of Event and Action Plan
- Appendix H Noise Monitoring Results and their Graphical Presentation
- Appendix I Not Used
- Appendix J Not Used
- Appendix K Waste Flow Table
- Appendix L Implementation Schedule of Environmental Mitigation Measures (EMIS)
- Appendix M Not Used
- Appendix N Statistics on Complaints, Notifications of Summons and Successful Prosecutions



EXECUTIVE SUMMARY

The Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2 (hereafter called "the Project") covers part of the construction of the widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling which aimed to widen Tolo Highway and Fanling Highway to dual 4-lane carriageway in order to alleviate the current traffic congestion problems and to cope with the increasing transport demands to and from the urban areas and also cross boundary traffic. The Project covers construction activities at Yuen Leng along the existing Fanling Highway.

The impact EM&A for the Project includes air quality, noise and water quality monitoring. The EM&A programme commenced on 5 November 2013.

This report documents the findings of EM&A works conducted in September 2018. As informed by the Contractor, the major activities in the reporting month were:

- Cable detection and trial trenches;
- Remaining works on new Footbridge;
- Noise barrier construction;
- Road pavement works;
- Water main laying works (on Grade and on bridge deck);
- Installation of Noise barrier steel column & panel, and sign gantry (on Grade and on bridge deck);
- Road Drainage Works;
- Waterproofing works on bridge deck;
- Bitumen paving on bridge deck;
- Installation of movement joint on the bridge;
- Construction of retaining wall; and
- Landscaping works.

Breach of Action and Limit Levels for Air Quality

No exceedance of Action and Limit Level was recorded for 24-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.

No exceedance of Action and Limit Level was recorded for 1-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.

Breach of Action and Limit Levels for Noise

No noise complaint was received in the reporting month, so no Action Level exceedance was recorded. Also, no Limit Level exceedance of noise monitoring was recorded in the reporting month.



Breach of Action and Limit Levels for Water Quality

The box culvert works have been completed in the end of March 2017. The 4-week post construction water quality monitoring has been completed in the end of April 2017 in the same manner as the impact monitoring.

Complaint, Notification of Summons and Successful Prosecution

No complaint, notification of summons and successful prosecution was received in the reporting month.

Future Key Issues

The major construction works in the coming reporting month are anticipated to include:

- Cable detection and trial trenches;
- Remaining works on new Footbridge;
- Noise barrier construction;
- Road pavement works;
- Water main laying works (on Grade and on bridge deck);
- Installation of Noise barrier steel column & panel, and sign gantry (on Grade and on bridge deck);
- Road Drainage Works;
- Construction of retaining wall; and
- Landscaping works.

Potential environmental impacts arising from the above construction activities are anticipated to be mainly associated with construction dust, noise, water quality and waste management.



1 INTRODUCTION

1.1.1 Chun Wo Construction & Engineering Co Ltd (Chun Wo) was commissioned by the Civil Engineering and Development Department (CEDD) as the Civil Contractor for the Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2. Meinhardt Infrastructure & Environment Ltd (MIEL) has been appointed by Chun Wo as the Environmental Team (ET) to fulfill the corresponding EM&A requirements pursuant to Environmental Permit No. EP-324/2008/E in accordance with the Updated EM&A Manual (dated October 2013) for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling Stage 2. The EM&A programme commenced on 5 November 2013.

1.2 Purpose of the Report

1.2.1 This is the monthly EM&A Report which summaries the impact monitoring results and audit findings for the Project during the reporting month of September 2018.

1.3 Report Structure

1.3.1 This monthly EM&A Report comprises the following sections:

Section 1: Introduction

Section 2: Project Information

Section 3: Status of Environmental Licenses, Notifications and Permits

Section 4: Air Quality Monitoring

Section 5: Noise Monitoring

Section 6: Water Monitoring

- Section 7: Waste Management
- Section 8: Environmental Site Inspection and Audit
- Section 9: Implementation Status of Environmental Mitigation Measures

Section 10: Summary of EP Submission in the Reporting Month

Section 11: Environmental Non-Conformance

Section 12: Future Key Issues

Section 13: Conclusions and Recommendations



2 **PROJECT INFORMATION**

2.1 Background

- 2.1.1 Tolo Highway and Fanling Highway are expressways in the North East New Territories connecting Sha Tin, Tai Po and Fanling. These highways form a vital part of the strategic Route 1, which links Hong Kong Island to Shenzhen. At present, this section of Route 1 is a dual 3-lane carriageway. However, at several major interchanges along this section of Route 1, the highway is only dual-2 lane. Severe congestion is a frequent occurrence during peak periods, particularly in the Kowloon bound direction.
- 2.1.2 The objective of the Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling is to widen Tolo Highway and Fanling Highway to dual 4-lane carriageway in order to alleviate the current traffic congestion problems and to cope with the increasing transport demands to and from the urban areas and also cross boundary traffic.
- 2.1.3 The construction works for the Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling are to be delivered in 2 stages:

Stage 1 – Construction works between Island House Interchange and Tai Hang; and

Stage 2 – Construction works between Tai Hang and Wo Hop Shek Interchange.

- 2.1.4 The construction works of Stage 1 under the EP commenced in November 2009 and was planned to be completed in December 2013 tentatively. The works of Stage 2 was planned to commence in November 2013 and complete by end of 2016. Hyder-Arup-Black and Veatch Joint Venture (HABVJV) was appointed by the Highways Department (HyD) as the consultants for the design and construction assignment for the Project. Mott MacDonald Hong Kong Ltd is the Independent Environmental Checker (IEC) of both Stage 1 and Stage 2 works.
- 2.1.5 A portion of Stage 2 works of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling (hereafter called "the Project") is entrusted to the contractor of Contract No. CV/2012/09 Liantang / Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works Contract 3, i.e. Chun Wo. AECOM Asia Co Ltd was appointed by the CEDD as the consultant for the design and construction assignment for the Liantang development.
- 2.1.6 The Project is a Designated Project under the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499). An Environmental Impact Assessment (EIA) Report together with an Environmental Monitoring and Audit (EM&A) Manual were approved on 14 July 2000 (Register Number: EIA-043/2000). The Project is governed by an Environmental Permit (EP) (EP-324/2008) which was granted on 23 December 2008. A variation of EP (VEP) was applied and the VEP (EP-324/2008/A) was subsequently granted on 31 January 2012. An additional VEP has been applied on 24 February 2014 and the VEP (EP-324/2008/B) was subsequently granted on 17 March 2014. Furthermore, an additional VEP has been applied on 9 March 2015 and the VEP (EP-324/2008/C) was subsequently granted on 27 March 2015. The previous VEP (EP-324/2008/D) was granted on 27 August 2015. The current VEP (EP-324/2008/E) was granted on 26 January 2017.



2.2 Site Description

2.2.1 The major construction activities under the Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2 include:

At-Grade Road Works – Temporary and permanent road formation, pipe laying, road drainage, footpath and noise barrier construction;

Demolition of existing Kiu Tau Footbridge and Footbridge Reprovision; and

Box Culvert Extension – Flow diversion of existing stream, excavation, sub-base and blinding, base, wall and top slab construction.

2.2.2 **Figure 1** shows the works areas for the Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2.

2.3 Construction Programme and Activities

- 2.3.1 The major construction activities undertaken in the reporting month are summarized below:
 - Cable detection and trial trenches;
 - Remaining works on new Footbridge;
 - Noise barrier construction;
 - Road pavement works;
 - Water main laying works (on Grade and on bridge deck);
 - Installation of Noise barrier steel column & panel, and sign gantry (on Grade and on bridge deck);
 - Road Drainage Works;
 - Waterproofing works on bridge deck;
 - Bitumen paving on bridge deck;
 - Installation of movement joint on the bridge;
 - Construction of retaining wall; and
 - Landscaping works.
- 2.3.2 The construction programme is presented in **Appendix A**.

2.4 **Project Organisation**

2.4.1 The project organization structure is shown in **Appendix B**. The key personnel contact names and numbers for the Project are summarised in **Table 2.1**.



Party	Role	Position	Name	Telephone	Fax	
A 500M	Engineer's	Senior Resident Engineer	Mr. Alan Lee	2171 3303	0474 0400	
AECOM Representative	U U	Resident Engineer (Environmental)	Mr. Perry Yam	2171 3350 2171 349		
Mott MacDonald	Independent Environmental Checker (IEC)	IEC	Mr. Steven Tang	2828 5920	2827 1823	
Chun Wo Contractor		Site Agent	Mr. Daniel Ho	2638 6144		
	Contractor	Environmental Officer	ТВА	N/A	2638 7077	
		Environmental Supervisor	Mr. Franki Leung	2638 7005]	
Meinhardt	Environmental Team (ET)	ET Leader	Mr. Fredrick Leong	2859 1739	2540 1580	

Table 2.1 Contact Information of Key Personnel

3 STATUS OF ENVIRONMENTAL LICENSES, NOTIFICATION AND PERMITS

3.1.1 The relevant environmental licenses, permits and/or notifications on environmental protection for this Project and valid in the reporting month are summarized in **Table 3.1**.

Permit / License	Valid Period		Status	Demode
No. / Notification / Reference No.	From	То	Status	Remarks
Environmental Pern	nit		1	
EP-324/2008/E	26 Jan 2017		Granted on 26 Jan 2017	
Construction Noise	Permit	1	1	
GW-RN0123-18	28 Mar 2018	5 Sep 2018	Valid	For general works at the southward of site office
GW-RM0259-18	19 Jun 2018	17 Dec 2018	Valid	For lane shifting work of Fanling Highway both bound
GW-RN305-18	22 Jun 2018	17 Dec 2018	Valid	For road diversion and maintenance of Fanling Highway both bound
GW-RN366-18	9 Jul 2018	18 Dec 2018	Valid	For connection of DN600 Watermain near Kau Lung Hang
GW-RN361-18	15 Jul 2018	18 Dec 2018	Valid	For loading and unloading along Fanling Highway both bounds
GW-RN0388-18	25 Aug 2018	24 Feb 2019	Valid	For general works at the northward of site office
GW-RN0424-18	01 Sep 2018	21 Feb 2019	Valid	Parapet installation works and remedial works on Tai Wo Service Road East, Fanling Highway.
GW-RN0425-18	22 Aug 2018	21 Feb 2019	Valid	For traverse stitch joints and installation of longitudinal stitch panel over Fanling Highway and MTRC's East Rail line.

Table 3.1 Status of Environmental Licenses, Notifications and Permits



Permit / License No. / Notification /	Valid	Period	Status	Remarks	
Reference No.	From	То		Relliarks	
GW-RN0454-18	06 Sep 2018	05 Mar 2018	Valid	For general works at the southward of site office.	
Wastewater Dischal	rge License				
WT00032188-2018	20 Sep 2018	31 Aug 2023	Valid		
Chemical Waste Pro	oducer Registra	tion	L		
5113-634-C3817- 01	7 Oct 2013		Valid		
Billing Account for	Construction W	/aste Disposal			
7017914	2 Aug 2013		Account Active		
Notification Under	Notification Under Air Pollution Control (Construction Dust) Regulation				
	31 Jul 2013	30 Jul 2019	Notified		



4 AIR QUALITY MONITORING

4.1 Monitoring Requirement

4.1.1 In accordance with the Updated EM&A Manual, 1-hr and 24-hr total suspended particulate (TSP) levels at the designated air quality monitoring station are required. Impact 24-hour TSP monitoring should be carried out for at least once every 6 days. For the 1-hr TSP impact monitoring, the sampling frequency of at least three times in every 6 days should be undertaken when the highest dust impact occurs.

4.2 Monitoring Equipment

4.2.1 The 1hr- TSP and 24-hr TSP air quality monitoring were performed using a High Volume Sampler (HVS), of which its location and operation satisfy, as far as practicable, all the requirements as specified in the Updated EM&A Manual. The brand and model of the equipment are given in **Table 4.1**.

 Table 4.1
 Air Quality Monitoring Equipment

Equipment	Brand and Model	Quantity	Serial Number
High Volume	Tisch Total Suspended Particulate		
Sampler	Mass Flow Controlled High Volume	1	2359
(1-hr TSP and	Air Sampler (Model No. TE-5170	1	2009
24-hr TSP)	MFC)		

- 4.2.2 The HVS and its accessories were maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.
- 4.2.3 Calibration of the HVS (five point calibration) using Calibration Kit was carried out every two months. The HVS calibration orifice will be calibrated annually. Calibration certificate of the TE-5025A Calibration Kit and the HVS are provided in **Appendix C**.

4.3 Monitoring Location

4.3.1 Air quality monitoring was conducted at the location specified in the Updated EM&A Manual. **Table 4.2** describes the details of the air quality monitoring station with its location as shown in **Figure 2**.

 Table 4.2
 Location of Air Quality Monitoring

Air Monitoring Station ID	Monitoring Location	Description
AM1(SR77) *	Yuen Leng 2 *	Residential, Ground floor

Remark:

Location and Station / ASR ID as identified in Updated EM&A Manual / EIA Report for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

4.4 Monitoring Parameters, Frequency and Duration

4.4.1 **Table 4.3** summarizes the monitoring parameters, frequency and duration of impact TSP monitoring.



Parameter	Frequency and Duration
1-hour TSP	At least three times in every 6 days should be undertaken when the highest dust impact occur
24-hour TSP	Once every 6 days

4.5 Monitoring Methodology

1-hr and 24-hr TSP Monitoring

- 4.5.1 With the consideration of criteria stated in the Updated EM&A Manual, the HVS was installed in the vicinity of the air sensitive receivers.
- 4.5.2 The relevant data including temperature, pressure, weather conditions, elapsed-time meter reading for the start and stop of the sampler, identification and weight of the filter paper, and any special phenomena observed were recorded. The weather information was referenced from Hong Kong Observatory (http://www.weather.gov.hk/wxinfo/pastwx/extractc.htm).
- 4.5.3 A HOKLAS accredited laboratory with constant temperature and humidity control, and equipped with necessary measuring and conditioning instruments, to handle the 24-hr TSP samples, was employed for sample analysis.
- 4.5.4 Filter papers of size 8"x10" were labelled before sampling. They were inspected to be clean with no pin holes and conditioned in a humidity controlled chamber for over 24-hr and were pre-weighed before use for the sampling.
- 4.5.5 The 24-hr TSP levels were measured by following the standard high volume sampling method for TSP as set out in the Title 40 of the United States Code of Federal Regulations, Chapter 1 (Part 50), Appendix B. TSP was sampled by drawing air through a conditioned, pre-weighted filter paper inside the HVS at a controlled air flow rate. After 24-hr sampling, the filter papers loaded with dust were kept in a clean and tightly sealed plastic bag, and then returned to the laboratory for reconditioning in the humidity controlled chamber followed by accurate weighing by an electronic balance with a readout down to 0.1 mg.
- 4.5.6 All the collected samples were kept in a good condition for 6 months before disposal.
- 4.5.7 For 1-hr TSP monitoring, monitoring methodology is the same as 24-hr TSP monitoring which has been presented in **Section 4.5.1** to **Section 4.5.6**, but with sampling period changed to 1 hour.

4.6 Monitoring Schedule for the Reporting month

4.6.1 The schedule for environmental monitoring for the reporting month is provided in **Appendix D**. Meteorological data extracted from Hong Kong Observatory for the reporting month is provided in **Appendix E**.

4.7 Monitoring Results

4.7.1 The monitoring results for 1-hr and 24-hr TSP are summarised in **Table 4.4** and **Table 4.5** respectively. Detailed air quality monitoring results and the graphical presentation



of air quality monitoring data for the current and past three reporting months are presented in **Appendix F**.

Table 4.4 Summary of 1-hr TSP Monitoring Results

ASR ID	Average (μg/m³)	Range (μg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)
AM1(SR77) *	110.5	73.9-150.0	292.7	500

Remark:

Station / ASR ID as identified in Updated EM&A Manual / EIA Report for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

Table 4.5 Summary of 24-hr TSP Monitoring Result	able 4.5	f 24-hr TSP Monitoring Results
--	----------	--------------------------------

ASR ID	Average (μg/m³)	Range (µg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)
AM1(SR77) *	63.2	19.7 – 100.6	170.3	260

Remark:

Station / ASR ID as identified in Updated EM&A Manual / EIA Report for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

- 4.7.2 No exceedance of Action and Limit Level was recorded for 24-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.
- 4.7.3 No exceedance of Action and Limit Level was recorded for 1-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.
- 4.7.4 The Event and Action Plan for the occurrence of non-compliance of the air quality criteria is annexed in **Appendix G**.
- 4.7.5 No exceedance of Action and Limit Level was recorded for 1-hour TSP monitoring the monitoring location AM1(SR77) in the reporting month.



5 NOISE MONITORING

5.1 Monitoring Requirements

5.1.1 In accordance with the Updated EM&A Manual, the impact noise monitoring frequency shall depend on the scale of the construction activities. An initial guide on the regular monitoring frequency should be at least once per week when noise generating activities are underway.

5.2 Monitoring Equipment

5.2.1 Noise monitoring was performed using a sound level meter at the monitoring station. The sound level meter deployed complies with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. An acoustic calibrator was deployed to check the sound level meter at a known sound pressure level. The brand and model of the equipment is given in **Table 5.1**.

 Table 5.1
 Noise Monitoring Equipment

Equipment	Brand and Model	Quantity	Serial Number
Sound Level Calibrator	Rion (Model No. NC-74)	2	34857296 & 34678506
Sound Level Meter	Rion (Model No. NL-52)	2	00821072 & 01143484

5.2.2 The sound level calibrator and sound level meter were verified by a certified laboratory every year. Calibration certificates of the sound level meter and acoustic calibrator are provided in **Appendix C**.

5.3 Monitoring Locations

5.3.1 Impact noise monitoring was conducted at the location specified in the Updated EM&A Manual. **Table 5.2** describes the details of the noise monitoring station with its location as shown in **Figure 2**.

Table 5.2 Location of Noise Monitoring

NSR ID	Monitoring Location	Description
M1(SR77) *	Yuen Leng 2 *	Residential, Ground floor

Remark:

Location and Station / NSR ID as identified in Updated EM&A Manual / EIA Report for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

5.4 Monitoring Parameters, Frequency and Duration

5.4.1 **Table 5.3** summarizes the monitoring parameters, frequency and duration of impact noise monitoring.



Table 5.3 Noise Monitoring Parameters, Frequency and Duration

Parameter and Duration	Frequency
30-mins measurement at between 0700 and 1900 on nor weekdays. Leq, L10 and L90 would be recorded.	rmal At least once per week

5.5 Monitoring Methodology

- 5.5.1 The monitoring procedures are summarised as follows:
 - The sound level meter was set on a tripod at a height of 1.2 m above the ground for free-field measurements at monitoring station SR77;
 - The battery condition was checked to ensure good functioning of the meter;
 - Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
 - Frequency weighting: A
 - Time weighting: Fast
 - Parameters: Leq, L10 and L90
 - Time measurement: Leq(30-minutes) during non-restricted hours i.e. 07:00 19:00 hrs on normal weekdays
 - Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator for 94dB(A) at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after recalibration or repair of the equipment.
 - At the end of the monitoring period, the Leq, L10 and L90 were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
 - A façade correction of +3dB (A) shall be made to the noise parameter obtained by free field measurement.

5.6 Monitoring Schedule for the Reporting Month

5.6.1 The schedule for environmental monitoring for the reporting month is provided in **Appendix D**. Meteorological data extracted from Hong Kong Observatory for the reporting month is provided in **Appendix E**.

5.7 Monitoring Results

5.7.1 The monitoring results for noise are summarized in **Table 5.4** and the monitoring results and the graphical presentation of noise level for the current and past three reporting months are presented in **Appendix H**.



Table 5.4	Summary of Noise	Monitoring Results
-----------	------------------	---------------------------

Noise Monitoring Station ID	Average, dB(A), Leq (30min) ⁽²⁾	Range, dB(A), Leq (30min) ⁽²⁾	Action Level	Limit Level, dB(A)
M1(SR77) ⁽¹⁾	73.1	70.5 – 74.5	When one documented valid complaint is received	75

Remark:

(1) Station / NSR ID as identified in Updated EM&A Manual / EIA Report for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

(2) +3dB(A) façade correction included

- 5.7.2 Major noise sources during the noise monitoring included construction activities of the Project and that along Tai Wo Service Road East, and nearby traffic noise.
- 5.7.3 No noise complaint was received in the reporting month, so no Action Level exceedance was recorded. Also, no Limit Level exceedance of noise monitoring was recorded in the reporting month.
- 5.7.4 The Event and Action Plan for the occurrence of non-compliance of the noise criteria is annexed in **Appendix G**.



6 WATER MONITORING

6.1.1 The box culvert works had been completed in March 2017. The 4-week postconstruction water quality monitoring at I5 was completed in 28 April 2017.



7 WASTE MANAGEMENT

- 7.1.1 The Contractor has registered as a chemical waste producer of the Project. The C&D materials and waste sorting were carried out on-site. Receptacles were provided for general refuse collection.
- 7.1.2 As advised by the Contractor, a total of 1709m³ of excavated material has been generated. 967m³ of inert C&D materials was disposed of at public fill to Tuen Mun Area 38. 381m³ inert C&D materials were reused on site. 150m³ of general refuse was disposed of at North East New Territories (NENT) Landfill. No plastic was collected by recycling contractor in the reporting month. No paper/cardboard packaging was collected by recycling contractor in the reporting month. No metal was collected by recycling contractor in the reporting month. No metal was collected by licensed contractor in the reporting period. Details of the waste management data are presented in **Appendix K**.

- 14 -



8 ENVIRONMENTAL SITE INSPECTION AND AUDIT

8.1 Site Inspection

- 8.1.1 Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. A summary of the site inspection is provided in **Appendix L**.
- 8.1.2 In the reporting month, 4 site inspections were carried out on 6, 13, 19 and 27 September 2018. The one held on 27 September 2018 was a joint inspection with the IEC, ER, ET and Contractor. No site inspection was conducted by the EPD during the reporting month. No non-compliance was recorded during the site inspection. A summary of the reminders and observations recorded during the site inspections are presented in **Table 8.1**.

Parameters	Date	Observations and Recommendations	Follow-up
Air Quality	19 September 2018	Reminder: The contractor was reminded to cover the slope (under footbridge) with impervious sheeting entirely.	Slope has been covered with impervious sheeting entirely on 20 Sep 2018. (item closed)
Noise	N/A	N/A	N/A
Water Quality	27 September 2018 27 September 2018	Observation: Muddy water was observed at the site entrance SA2 flow to public road. The contractor was advised to remove the water and enhance the mitigation measure to prevent the muddy water flow to public. Reminder: The contractor was reminded to remove the stagnant water at Tau Pass tunnel works area.	Muddy water has been removed from public road on 27 Sep 2018 and the mitigation measures will be reviewed in the next environmental site inspection. (item closed) The follow up action will be reviewed in the next environmental inspection.
Waste/ Chemical Management	N/A	N/A	N/A
Landscape & Visual	N/A	N/A	N/A
Permits / Licenses	N/A	N/A	N/A

Table 8.1 Observations and Recommendations of Site Audit



9 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

9.1.1 The Contractor has implemented the relevant environmental mitigation measures as specified in the EIA Reports, EPs and updated EM&A Manual. The implementation status of environmental mitigation measures during the reporting period is summarized in **Appendix L**.



10 SUMMARY OF EP SUBMISSION IN THE REPORTING MONTH

10.1.1 The status of the required submission under the EP during the reporting period is summarized in **Table 10.1**.

Table 10.1 Status of Required Submission under Environmental Permit

EP Condition	Submission	Submission Date
Condition 3.3	Monthly EM&A Report for August 2018	11 Sep 2018



11 ENVIRONMENTAL NON-CONFORMANCE

11.1 Summary of Monitoring Exceedances

- 11.1.1 No exceedance of Action and Limit Level were recorded for 24-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.
- 11.1.2 No exceedance of Action and Limit Level was recorded for 1-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.
- 11.1.3 No noise complaint was received in the reporting month, so no Action Level exceedance was recorded. Also, no Limit Level exceedance of noise monitoring was recorded in the reporting month.
- 11.1.4 The 4-week post-construction water quality monitoring at I5 was completed in April 2017.

11.2 Summary of Environmental Non-Compliance

11.2.1 No environmental non-compliance was recorded in the reporting month. The cumulative statistics are provided in **Appendix N**.

11.3 Summary of Environmental Complaints

11.3.1 No environmental complaints were received in the reporting month. The cumulative statistics are provided in **Appendix N**.

11.4 Summary of Environmental Summon and Successful Prosecutions

11.4.1 No environmental related prosecution or notification of summons was received in the reporting month. The cumulative statistics are provided in **Appendix N**.



12 FUTURE KEY ISSUES

12.1 Construction Programme for the Next Month

- 12.1.1 The major construction works in the coming reporting month are anticipated to include:
 - Cable detection and trial trenches;
 - Remaining works on new Footbridge;
 - Noise barrier construction;
 - Road pavement works;
 - Water main laying works (on Grade and on bridge deck);
 - Installation of Noise barrier steel column & panel, and sign gantry (on Grade and on bridge deck);
 - Road Drainage Works;
 - Construction of retaining wall; and
 - Landscaping works.

12.2 Key Issues for the Coming Month

- 12.2.1 Key issues to be considered in the coming month are anticipated to include:
 - Properly maintain all drainage facilities and wheel washing facilities on site;
 - Expose slopes and dusty stockpile should be covered up properly if no work will be conducted;
 - Good housekeeping should be maintained and general refuse should be removed regularly; and
 - Watering shall be enhanced over the construction site.

12.3 Monitoring Schedule for the Next Month

12.3.1 The tentative schedule for environmental monitoring for the coming month is provided in **Appendix D**.



13 CONCLUSIONS AND RECOMMENDATIONS

13.1 Conclusions

- 13.1.1 The construction phase EM&A programme of the Project commenced on 5 November 2013.
- 13.1.2 The 1-hr TSP, 24-hr TSP, noise and water quality monitoring were carried out in the reporting period.
- 13.1.3 No exceedance of Action and Limit Level was recorded for 24-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.
- 13.1.4 No exceedance of Action and Limit Level was recorded for 1-hour TSP monitoring at the monitoring location AM1(SR77) in the reporting month.
- 13.1.5 No noise complaint was received in the reporting month, so no Action Level exceedance was recorded. Also, no Limit Level exceedance of noise monitoring was recorded in the reporting month.
- 13.1.6 The 4-week post-construction water quality monitoring at I5 was completed in April 2017.
- 13.1.7 Four (4) environmental site inspections were carried out in the reporting month. Recommendations on remedial actions were given to the Contractors for the deficiencies identified during the site audit.

13.2 Recommendations

13.2.1 According to the environmental site inspections performed in the reporting month, the following recommendation was provided:

<u>Air Quality</u>

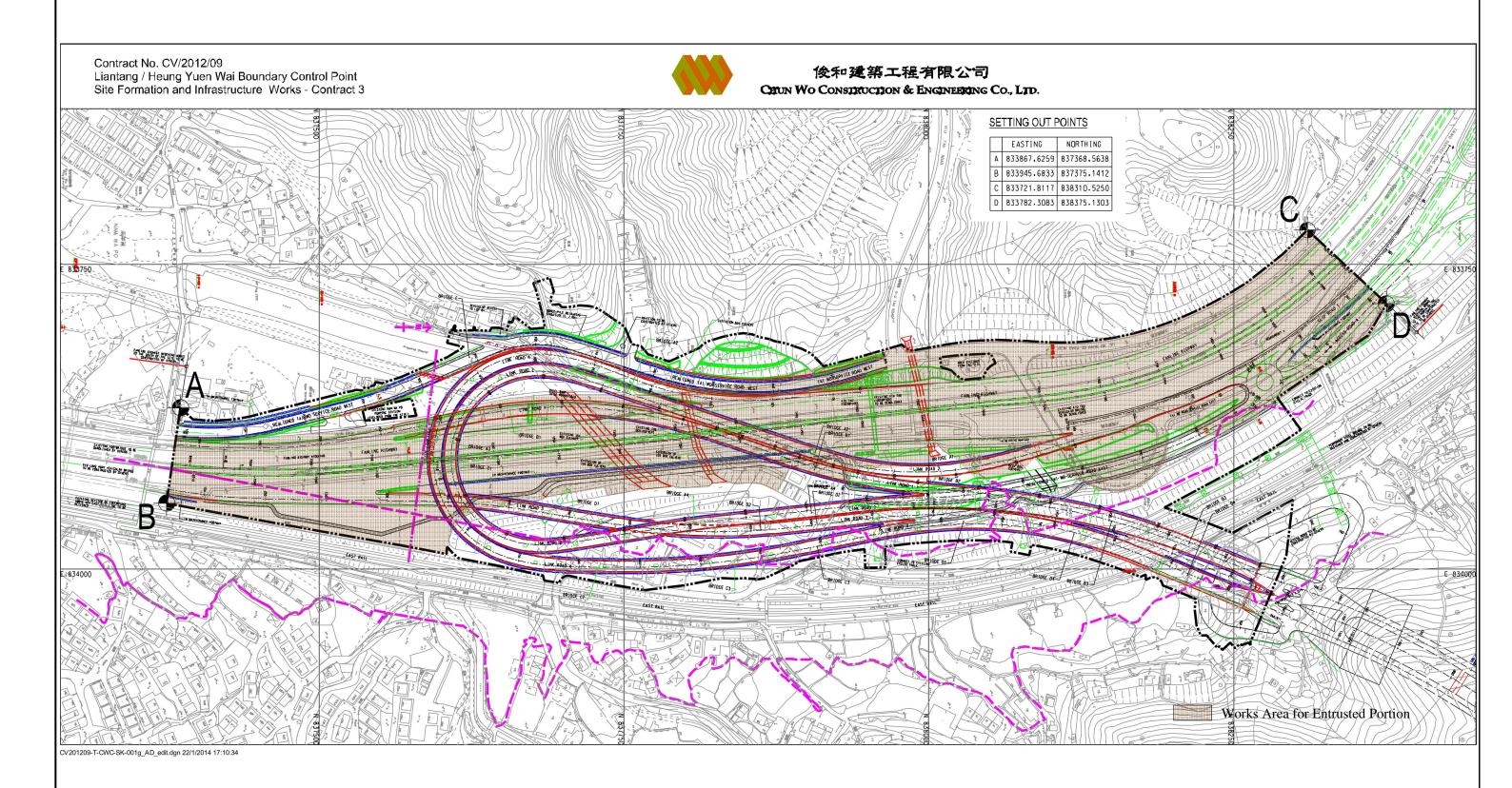
• Slope and stockpile of dusty material shall be covered by impervious sheeting entirely.

Water Quality

- Trapped Water shall be pumped to avoid site runoff overflow to public.
- Rainwater and wastewater from construction site shall be treated properly before discharge.



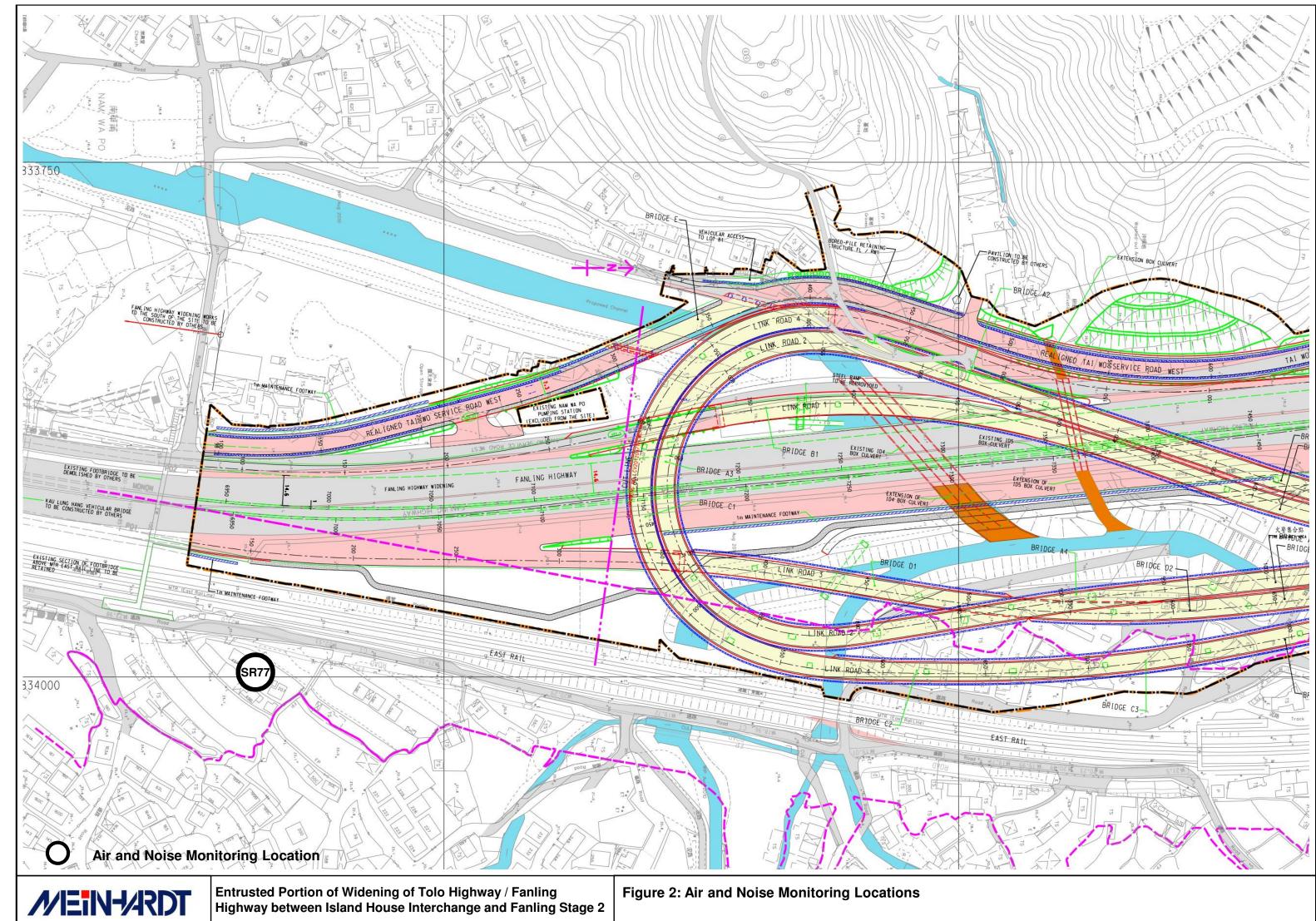
Figure





Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2

Figure 1: Demarcation of Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling – Stage 2





Appendix A Construction Programme

	Activity Name	00		Sidii	rinsn		Aug Sep	2018 Oct		Nov	Dec	2019 Jan
B-Month Rolli	ng Programme 2018-8-21 (Based on (UMP06C)	-	<u> </u>		1							
Key Dates (Co	ntractual)											
KD-0100b	KD1: Section 1A - all HyDs works in Zone 3 & SBZ2 exd. Landscape Works (Potential EOT by Claim 63 & Inclement Weather)	0	0		18-Oct-18*	0		♦ KD	1: Section 1A	all HyD's works in Zone3 & SBZ2 exd.	Landscape Works (Potential EOT	by Claim 63 & I
KD-0200	KD2: Section 18 - all HyDs entrustment works in NBZ1 (Potential EOT by Inclement Weather)	0	0		18-Oct-18*	0		♦ KE	2: Section 1B	- all HyD's entrustment works in NBZ1	Potential EOT by Inclement Weat	ner)
KD-0300a	KD3: Section 2 - the remainder of the Works (Preliminary EOT by Claim No.56 & 58,	0	0		06-Nov-18*	0				KD3: Section 2 - the remainded	ar of the Works (Preliminary EOT by	Claim No.56 &
KD-0400a	Inclement Weather) KD4: Section 3 - Remainder of Landscape Softworks not included in Section 3A (Prel.	0	0		18-Oct-18*	0		♦ KE	4: Section 3	Remainder of Landscape Softworks no	ot included in Section 3A (Prel. EO	Tby Claim 56, 5
KD-0500	EOT by Claim 56, 58) KD4A: Section 3A - Landscape Softworks in NBZ1 (Potential EOT by Inclement	0	0		18-Oct-18*	0		♦ KE	4A: Section 3	A - Landscape Softworks in NBZ1 (Pote	ential EOT by Inclement Weather)	
KD-0800	Weather) KD6: Section 5 - Preservation and Protection of Tiees (Potential EOT by Inclement	0	0		18-Oct-18*	0		♦ КЕ	6: Section 5	Preservation and Protection of Trees (Potential EOT by Inclement Weath	er)
Key Dates (Fo	veather) recast)											
KD-0105	KD1: Section 1A - all HyDs entrustment works in Zone3 and SBZ2 excluding	0	0		27-Feb-19	-133						
KD-0205	Landscape Softworks and Establishment Works KD2: Section 1B - all HyD's entrustment works in NBZ1 excluding Landscape	0	0		11-Dec-18	-54					♦ KD2: Section 1B	all HyD/s entru
KD-0305	Softworks and Establishment Works KD3: Section 2 - the remainder of the Works	0	0		07-Jan-19	-62						
KD-0405			0			-62					♦ KD4: S	ection 3 - Rema
	KD4: Section 3 - Remainder of Landscape Softworks not included in Section 3A	0			19-Dec-18							Section 3A - La
KD-0505	KD4A: Section 3A - Landscape Softworks in NBZ1	0	0		19-Dec-18	-62					▼ ND4A.	
KD-0805	KD6: Section 5 - Preservation and Protection of Trees	0	0		04-Jan-19	-78						۰ ۱
Major Milesto	nes and Events											
MS-1060f	T6f: TTA to shift FLH SB Middle Lane to the Permanent Alignment (3rd lane) (South Portion)	1	0	25-Aug-18 A	25-Aug-18 A		 T6f: TTA to shift FLH SB Mid 	dle Lane to the Permanent Alignment (3rd lane	e) (South Porti	ion)		
MS-1060h	T6h: TTA to shift FLH SB Slow Lane to the Permanent Alignment (2nd lane) (South Portion)	1	0	08-Sep-18 A	08-Sep-18 A		I	 T6h: TTA to shift FLH SB Slow Lane to the shift FLH S	ne Permanen	Alignment (2nd lane) (South Portion)		
	ubmissions											
Design and S												
	nent and Design (Major) Approved by AECOM											
	nent and Design (Major) Approved by A ECOM E&M design for Public Lighting of Kiu Tau Footbridge (luthercomments provided by	60	0	05-Sep-16 A	21-Sep-18 A			E&M design for Public Llighting of Kiu Te	au Footbridge	(further comments provided by HyD/Lid	ahtings)	
Method States PRE-2030	nent and Design (Major) Approved by A ECOM E&M design for Public Llighting of Kiu Tau Footbridge (furthercomments provided by HyDLightings)	60	0	05-Sep-16 A	21-Sep-18 A			E&M design for Public Llighting of Kiu T	au Footbridge	(further comments provided by HyD/Lig	ghtings)	
Method States PRE-2030 Section IA & I	nent and Design (Major) Approved by AECOM E&M design for Public Llighting of Kiu Tau Footbridge (further comments provided by HyDL gittings) B - Fanling High way Widening (KD-1 & KD-2)	60	0	05-Sep-16 A	21-Sep-18 A			E&M design for Public Llighting of Kiu T	au Footbridgê	(further comments provided by HyD/Lig	phtings)	
Method States PRE-2030 Section IA & I Fanling Highw	nent and Design (Major) Approved by AECOM E&M design for Public Llighting of Kiu Tau Footbridge (further comments provided by HyDLightings) 3 - Fan Ing High way Widening (KD-1 & KD-2) ay South Portion between CH6935 and CH7470	60	0	05-Sep-16 A	21-Sep-18 A			E&M design for Public Llighting of Kiu Ta	au Footbridgę	(further comments provided by HyD/Lig	thtings)	
Method States PRE-2030 Section IA & I Fanling High Fanling High	nent and Design (Major) Approved by AECOM E&M design for Public Lighting of Kiu Tau Footbridge (further comments provided by HyDLightings) B - Fanling High way Widening (KD-1 & KD-2) ay South Portion between CH6935 and CH7470 way Zone 1 between CH6935 and CH7130 (within SBZ2)	60	0	05-Sep-16 A	21-Sep-18 A			E&M design for Public Llighting of Kiu Ti	u Footbridge	(lurther comments provided by HyD/Lic	ghtings)	
Method State PRE-2030 Section IA & I Fanling High Fanling High Noise Barri	nent and Design (Major) Approved by AECOM E&M design for Public Lighting of Kiu Tau Footbridge (luther comments provided by HyDL[shtring) 3 - Fanling High way Widening (KD-1 & KD-2) ay South Portion between CH6935 and CH7170 way Zone 1 between CH6935 and CH7130 (within SB22) ar							E&M design for Public Llighting of Kiu T				
Method State PRE-2030 Section IA & I Fanling Highw Fanling High Noise Barri FHW-1110	nent and Design (Major) Approved by AECOM E&M design for Public Llighting of Kiu Tau Footbridge (further comments provided by HyDLightings) B - Fanling Highway Widening (KD-1 & KD-2) ay South Portion between CH6935 and CH7470 way Zone 1 between CH6935 and CH7130 (within SEZ2) or Noise Barrier NB6 and NB7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199)	30	30	16-Aug-18 A	27-Oct-18	-9		E&M design for Public Llighting of Kiu Ti		e Bartier NB6 and N87 - Remaining Ste	im Wal (28m, maintain access for	
Method State PRE-2030 Section IA & I Fanling Highw Fanling Highw Noise Barri FHW-1110	nent and Design (Major) Approved by AECOM E&M design for Public Llighting of Ku Tau Footbridge (further comments provided by HyDL lghtings) 3 - Faning High way Widening (KD-1 & KD-2) ay South Portion between CH5935 and CH7470 way Zone 1 between CH5935 and CH7130 (within SBZ2) ar Noise Barrier NB6 and NB7 - Remaining Stem Wall (28m, maintain access for		30			-9		E&M design for Public Llighting of Kiu T		e Bartier NB6 and N87 - Remaining Ste		
Method States PRE-2030 Section IA & I Fanling High Fanling High Noise Barri FHW-11100 FHW-11400	nent and Design (Major) Approved by AECOM E&M design for Public Llighting of Kiu Tau Footbridge (further comments provided by HyDLightings) B - Fanling Highway Widening (KD-1 & KD-2) ay South Portion between CH6935 and CH7470 way Zone 1 between CH6935 and CH7130 (within SEZ2) or Noise Barrier NB6 and NB7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199)	30	30	16-Aug-18 A	27-Oct-18	-9 -43		E&M design for Public Llighting of Kiu T		e Bartier NB6 and N87 - Remaining Ste	im Wal (28m, maintain access for	
Method State PRE-2030 Section IA & I Fanling High Noise Barri FHW-11100 FHW-11400 At-Grade R	nent and Design (Major) Approved by AECOM E&M design for Public Llighting of Kiu Tau Footbridge (further comments provided by HyDuEghtings) 3 - Faning Highway Widening (KD1 & KD-2) ay South Portion between CH5935 and CH7470 way Zone 1 between CH5935 and CH7130 (within SBZ2) ar Noise Barrier NB6 and NB7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199) Noise Barrier NB70 - Footing (extended 10m under VO199)	30	30	16-Aug-18 A	27-Oct-18	-9	Foad Drainage - MN7.4 & MI	E&M design for Public Llighting of Kiu T	Nois	e Barrier NB6 and NB7 - Remaining Ste	im Wal (28m, maintain access for	
Nethod States PRE-2030 Section IA & I Fanling High Noise Barri FHW-11100 FHW-11100 FHW-11400 FHW-11350	nent and Design (Major) Approved by AECOM E&M design for Public Llighting of Kiu Tau Footbridge (further comments provided by HyDLightings) 3 - Faning Highway Widening (KD-1 & KD-2) ay South Portion between CH6935 and CH7470 way Zone 1 between CH6935 and CH7130 (within SEZ2) ar Noise Barrier NB6 and NB7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199) ix Noise Barrier NB70 - Footing (extended 10m under VO199) advarks (195m) a Road Drainage - MN7.4 & MN7.5 on FLH NB 1st lane (after combined TTA	30 47	30 47	16-Aug-18 A 05-Oct-18*	27-Od-18 29-Nov-18	-9 -9 -43	Road Drainage - MN7.4 & MI	17.5 on FLH NB 1st lane (after combined TTA	Nois	e Barrier NB6 and NB7 - Remaining Ste with CSHK) It (FLH NB 1st lane and Hard Shoulder)	m Wall (28m, maintain access for Noise Barrier NB70 - Footing (exte	nded 10m unde
Method States PRE-2030 Section IA & I Fanling High Roise Barri FHW-11100 FHW-11100 FHW-11100 FHW-11350 FHW-1350	Image: Second	30 47 40	30 47 0	16-Aug-18 A 05-Oct-18* 15-Jan-18 A	27-Oct-18 29-Nov-18 25-Aug-18 A	9 43	Poad Painage - MN7.4 & MI	17.5 on FLH NB 1st lane (after combined TTA	Nois	e Barrier NB6 and NB7 - Remaining Ste vith CSHK)	m Wall (28m, maintain access for Noise Barrier NB70 - Footing (exte	nded 10m und
Nethod States PRE-2030 Section IA & I Fanling High Raning High Noise Barri FHW-11100 FHW-11100 FHW-11100 FHW-11350 FHW-1350	Implement and Design (Major) Approved by AECOM E&M design for Public Llighting of Kiu Tau Footbridge (further comments provided by HyDu Eghtings) 3 - Fanling High way Widening (KD-1 & KD-2) ay South Portion between CH5935 and CH7470 way Zone 1 between CH5935 and CH7130 (within SBZ2) ar Noise Barrier NB6 and NB7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199) Noise Barrier NB70 - Footing (extended 10m under VO199) addworks (195m) a Poad Dainage - MN7.4 & MN7.5 on FLH NB 1st lane (after combined TTA implemented with CSHK) a Poad Pavement (FLH NB 1st lane and Hard Shoulder) way Zone 2 between CH7130 and CH7290	30 47 40	30 47 0	16-Aug-18 A 05-Oct-18* 15-Jan-18 A	27-Oct-18 29-Nov-18 25-Aug-18 A	-9 -43	Foad Drainage - MN7.4 & MI	17.5 on FLH NB 1st lane (after combined TTA	Nois	e Barrier NB6 and NB7 - Remaining Ste with CSHK) It (FLH NB 1st lane and Hard Shoulder)	m Wall (28m, maintain access for Noise Barrier NB70 - Footing (exte	nded 10m und
Nethod State PRE-2030 Section IA & I Fanling High Noise Barri FHW-11100 FHW-11400 FHW-11400 FHW-1350 FHW-1350 FHW-1350 FAMING High Noise Barri	Implement and Design (Major) Approved by AECOM E&M design for Public Llighting of Kiu Tau Footbridge (further comments provided by HyDu Eghtings) 3 - Fanling High way Widening (KD-1 & KD-2) ay South Portion between CH5935 and CH7470 way Zone 1 between CH5935 and CH7130 (within SBZ2) ar Noise Barrier NB6 and NB7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199) Noise Barrier NB70 - Footing (extended 10m under VO199) addworks (195m) a Poad Dainage - MN7.4 & MN7.5 on FLH NB 1st lane (after combined TTA implemented with CSHK) a Poad Pavement (FLH NB 1st lane and Hard Shoulder) way Zone 2 between CH7130 and CH7290	30 47 40	30 47 0 14	16-Aug-18 A 05-Oct-18* 15-Jan-18 A	27-Oct-18 29-Nov-18 25-Aug-18 A	-9 -9 -43 -2	Foad Drainage - MN7.4 & MI	17.5 on FLH NB 1st lane (after combined TTA	Nois	e Barrier NB6 and NB7 - Remaining Ste with CSHK) It (FLH NB 1st lane and Hard Shoulder)	m Wall (28m, maintain access for Noise Barrier NB70 - Footing (exte	nded 10m unde
Method State PRE-2030 Section IA & I Fanling High Noise Barri FHW-11100 FHW-11400 FHW-11400 FHW-1350 FHW-1350 FAMIng High Noise Barri	nent and Design (Major) Approved by AECOM E&M design for Public Lighting of Kiu Tau Footbridge (further comments provided by HyDLightings) 3: Faning High way Widening (KD-1 & KD-2) ay South Portion between CH5935 and CH7470 way Zone 1 between CH5935 and CH7130 (within SBZ2) ar Noise Barrier NB6 and NE7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199) Noise Barrier NB70 - Footing (extended 10m under VO199) adworks (195m) a Road Drainage - MN7.4 & MN7.5 on FLH NB 1st lane (after combined TTA implemented with CSHK). p Road Pavement (FLH NB 1st lane and Hard Shoulder) way Zone 2 between CH7130 and CH7290	30 47 40 14	30 47 0 14	16-Aug-18 A 05-Oct-18* 15-Jan-18 A 03-Oct-18*	27-Od-18 29-Nov-18 25-Aug-18 A 19-Od-18	-2	Road Drainage - MN7.4 & MI	17.5 on FLH NB 1st lane (after combined TTA	Nois	e Barrier NB6 and NB7 - Remaining Ste with CSHK) It (FLH NB 1st lane and Hard Shoulder)	m Wall (28m, maintain access for Noise Barrier NB70 - Footing (exte	nded 10m unde
Method State PRE-2030 Section IA & I Fanling High Noise Barri FHW-11100 FHW-11400 FHW-11400 FHW-1350 FHW-1350 FAMIng High Noise Barri	nent and Design (Major) Approved by AECOM E&M design for Public Lighting of Kiu Tau Footbridge (further comments provided by HyDLightings) 3: Faning High way Widening (KD-1 & KD-2) ay South Portion between CH5935 and CH7470 way Zone 1 between CH5935 and CH7130 (within SBZ2) ar Noise Barrier NB6 and NE7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199) Noise Barrier NB70 - Footing (extended 10m under VO199) adworks (195m) a Road Drainage - MN7.4 & MN7.5 on FLH NB 1st lane (after combined TTA implemented with CSHK). p Road Pavement (FLH NB 1st lane and Hard Shoulder) way Zone 2 between CH7130 and CH7290	30 47 40 14	30 47 0 14	16-Aug-18 A 05-Oct-18* 15-Jan-18 A 03-Oct-18* 24-May-18 A	27-Od-18 29-Nov-18 25-Aug-18 A 19-Od-18	-2		V7.5 on FLH NB 1st lane (after combined TTA i	Nois	e Barrier NB6 and NB7 - Remaining Ste with CSHK) It (FLH NB 1st Iane and Hard Shoulder) Noise Barrier NB71 - Footing adjace 3-Month Rolling Pr	m Wall (28m, maintain access for Noise Barrier NB70 - Footing (exte nt to Abutment AD1 (27m) (Covere rogramme updated to 2018-9	nded 10m unde d by V(0.199), 1
Method State PRE-2030 Section IA & I Fanling High Noise Barri FHW-11100 FHW-11400 At-Grade R FHW-1350 FHW-1350 FANING High Noise Barri	nent and Design (Major) Approved by AECOM E&M design for Public Lighting of Kiu Tau Footbridge (further comments provided by HyDLightings) 3: Faning High way Widening (KD-1 & KD-2) ay South Portion between CH5935 and CH7470 way Zone 1 between CH5935 and CH7130 (within SBZ2) ar Noise Barrier NB6 and NE7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199) Noise Barrier NB70 - Footing (extended 10m under VO199) adworks (195m) a Road Drainage - MN7.4 & MN7.5 on FLH NB 1st lane (after combined TTA implemented with CSHK). p Road Pavement (FLH NB 1st lane and Hard Shoulder) way Zone 2 between CH7130 and CH7290	30 47 40 14	30 47 0 14 35 Actual	16-Aug-18 A 05-Oct-18* 15-Jan-18 A 03-Oct-18* 24-May-18 A	27-Od-18 29-Nov-18 25-Aug-18 A 19-Od-18	-2	CEDD Contract No.	V7.5 on FLH NB 1st lane (after combined TTA in F	Nois	e Barrier NB6 and NB7 - Remaining Ste vith CSHK) tt (FLH NB 1st Iane and Hard Shoulder) Noise Barrier NB71 - Footing adjace	m Wall (28m, maintain access for Noise Barrier NB70 - Footing (exte nt to Abutment AD1 (27m) (Covere rogramme updated to 2018-9	nded 10m und d by VD.199), 20
Nethod State PRE-2030 Section IA & I Fanling High Noise Barri FHW-11100 FHW-11400 FHW-11400 FHW-1350 FHW-1350 FAMIng High Noise Barri	nent and Design (Major) Approved by AECOM E&M design for Public Lighting of Kiu Tau Footbridge (further comments provided by HyDLightings) 3: Faning High way Widening (KD-1 & KD-2) ay South Portion between CH5935 and CH7470 way Zone 1 between CH5935 and CH7130 (within SBZ2) ar Noise Barrier NB6 and NE7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199) Noise Barrier NB70 - Footing (extended 10m under VO199) adworks (195m) a Road Drainage - MN7.4 & MN7.5 on FLH NB 1st lane (after combined TTA implemented with CSHK). p Road Pavement (FLH NB 1st lane and Hard Shoulder) way Zone 2 between CH7130 and CH7290	30 47 40 14	30 47 0 14 35 Actual Remai	16-Aug-18 A 05-Oct-18* 15-Jan-18 A 03-Oct-18* 24-May-18 A Work	27-Od-18 29-Nov-18 25-Aug-18 A 19-Od-18	-2	CEDD Contract No. ntang / Heung Yuen Wai BC	V7.5 on FLH NB 1st lane (after combined TTA is F CV/2012/09 P - Site Formation &	Nois	e Barrier NB6 and NB7 - Remaining Ste with CSHK) It (FLH NB 1st Iane and Hard Shoulder) Noise Barrier NB71 - Footing adjace 3-Month Rolling Pr	m Wall (28m, maintain access for Noise Barrier NB70 - Footing (exte nt to Abutment AD1 (27m) (Covere rogramme updated to 2018-9	nded 10m und d by VD.199), 20
Nethod State PRE-2030 Section IA & I Fanling High Noise Barri FHW-11100 FHW-11400 FHW-11400 FHW-1350 FHW-1350 FAMIng High Noise Barri	nent and Design (Major) Approved by AECOM E&M design for Public Lighting of Kiu Tau Footbridge (further comments provided by HyDLightings) 3: Faning High way Widening (KD-1 & KD-2) ay South Portion between CH5935 and CH7470 way Zone 1 between CH5935 and CH7130 (within SBZ2) ar Noise Barrier NB6 and NE7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199) Noise Barrier NB70 - Footing (extended 10m under VO199) adworks (195m) a Road Drainage - MN7.4 & MN7.5 on FLH NB 1st lane (after combined TTA implemented with CSHK). p Road Pavement (FLH NB 1st lane and Hard Shoulder) way Zone 2 between CH7130 and CH7290	30 47 40 14	30 47 0 14 35 Actual Remai Summ	16-Aug-18 A 05-Oct-18* 15-Jan-18 A 03-Oct-18* 24-May-18 A Work ining Work	27-Oct-18 29-Nov-18 25-Aug-18 A 19-Oct-18 02-Nov-18	-2	CEDD Contract No. ntang / Heung Yuen Wai BC Infrastructure Works	V7.5 on FLH NB 1st lane (after combined TTA is F CV/2012/09 P - Site Formation & , Contract 3	Nois	e Barrier NB6 and NB7 - Remaining Ste with CSHK) It (FLH NB 1st Iane and Hard Shoulder) Noise Barrier NB71 - Footing adjace 3-Month Rolling Pr	m Wall (28m, maintain access for Noise Barrier NB70 - Footing (exte nt to Abutment AD1 (27m) (Covere rogramme updated to 2018-9	nded 10m und d by VD.199), 20
Nethod States PRE-2030 Section IA & I Faning High Noise Barri FHW-11100 FHW-11400 FHW-11400 FHW-1350 FHW-1350 FAMIng High Noise Barri	nent and Design (Major) Approved by AECOM E&M design for Public Lighting of Kiu Tau Footbridge (further comments provided by HyDLightings) 3: Faning High way Widening (KD-1 & KD-2) ay South Portion between CH5935 and CH7470 way Zone 1 between CH5935 and CH7130 (within SBZ2) ar Noise Barrier NB6 and NE7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199) Noise Barrier NB70 - Footing (extended 10m under VO199) adworks (195m) a Road Drainage - MN7.4 & MN7.5 on FLH NB 1st lane (after combined TTA implemented with CSHK). p Road Pavement (FLH NB 1st lane and Hard Shoulder) way Zone 2 between CH7130 and CH7290	30 47 40 14	30 47 0 14 35 Actual Remai Summ	16-Aug-18 A 05-Oct-18* 15-Jan-18 A 03-Oct-18* 24-May-18 A Work ining Work nary Bar al Remaining W	27-Oct-18 29-Nov-18 25-Aug-18 A 19-Oct-18 02-Nov-18	-14	CEDD Contract No. ntang / Heung Yuen Wai BC Infrastructure Works 3-Month Rolling Pr	V7.5 on FLH NB 1st lane (after combined TTA is CV/2012/09 P - Site Formation & , Contract 3 ogramme	nplemented v oad Pavemer	e Barrier NB6 and NB7 - Remaining Ste with CSHK) It (FLH NB 1st Iane and Hard Shoulder) Noise Barrier NB71 - Footing adjace 3-Month Rolling Pr	m Wall (28m, maintain access for Noise Barrier NB70 - Footing (exte nt to Abutment AD1 (27m) (Covere rogramme updated to 2018-9	nded 10m unde
Nethod State PRE-2030 Section IA & I Fanling High Noise Barri FHW-11100 FHW-11400 FHW-11400 FHW-1350 FHW-1350 FAMING Barri Noise Barri	nent and Design (Major) Approved by AECOM E&M design for Public Lighting of Kiu Tau Footbridge (further comments provided by HyDLightings) 3: Faning High way Widening (KD-1 & KD-2) ay South Portion between CH5935 and CH7470 way Zone 1 between CH5935 and CH7130 (within SBZ2) ar Noise Barrier NB6 and NE7 - Remaining Stem Wall (28m, maintain access for extension of NB 70, VO199) Noise Barrier NB70 - Footing (extended 10m under VO199) adworks (195m) a Road Drainage - MN7.4 & MN7.5 on FLH NB 1st lane (after combined TTA implemented with CSHK). p Road Pavement (FLH NB 1st lane and Hard Shoulder) way Zone 2 between CH7130 and CH7290	30 47 40 14	30 47 0 14 35 Actual Remai Summ Critica	16-Aug-18 A 05-Oct-18* 15-Jan-18 A 03-Oct-18* 24-May-18 A Work ining Work nary Bar al Remaining W	27-Oct-18 29-Nov-18 25-Aug-18 A 19-Oct-18 02-Nov-18	-14	CEDD Contract No. ntang / Heung Yuen Wai BC Infrastructure Works	V7.5 on FLH NB 1st lane (after combined TTA is CV/2012/09 P - Site Formation & , Contract 3 ogramme	nplemented v oad Pavemer	e Barrier NB6 and NB7 - Remaining Ste with CSHK) It (FLH NB 1st Iane and Hard Shoulder) Noise Barrier NB71 - Footing adjace 3-Month Rolling Pr	m Wall (28m, maintain access for Noise Barrier NB70 - Footing (exte nt to Abutment AD1 (27m) (Covere rogramme updated to 2018-9	nded 10m unde d by V(0.199), 1

Activity ID	Activity Name	OD	RD	Start	Finish	1	2018			2019
							Aug Sep Oct	Nov	Dec	Jan
FHW-2340a	Noise Barrier NB67-2 - Cap ID4-1A_2 and Stem Wall	28	28	17-May-18 A	25-Oct-18	-3	No	ise Barrier NB67-2 - Cap ID4-1A_2 and Ste	m Wall, Noise Barrier NB67-2 - Cap	ID4-1A_2 and Ste
	Noise Barrier NB67-2 - Cap ID4-1A_1 and Cap ID4-1A_2 head beam (affected by Tau Pass, VO 191)	24	24	01-Nov-18*	28-Nov-18	-8			Noise Barrier NB67-2 - Cap ID4-1A_	
FHW-2370c	Access Ramp at Tau Pass - Additional Mini-Piling (3 nos.) (under VO191)	21	21	01-Nov-18*	24-Nov-18	-10			ss Ramp at Tau Pass - Additional Mi	
FHW-2370d	Access Ramp at Tau Pass - Pile caps and other structures (under VO191)	72	72	26-Nov-18*	27-Feb-19	-10		_		
At-Grade Ro	dworks (160m)		, ,							
FHW-2240	Permanent Street Light Installation (due to Claim No. 63)	21	21	20-Jun-18 A	16-Oct-18	-1	Permanent Str	eet Light Installation (due to Claim No. 63),	Permanent Street Light Installation	(due to Claim No
FHW-2250	Road Pavement on FLH SB 4th lane after Removal of Temp. Street Light (due to Claim No. 63)	11	11	18-Oct-18*	30-Oct-18	-1		Road Pavement on FLH SB 4th lane a	fter Removal of Temp. Street Light (due to Claim No.
FHW-2350a	Road Drainage and Pavement (near NB67-2, MN7.9 to MN7.11)	58	33	29-Mar-18 A	31-Oct-18	-1		Road Drainage and Pavement (near I	NB67-2, MN7.9 to MN7.11), Road D	rainage and Pave
FHW-2350b	Installation of Drain pipe and Manholes (MN7.12 & MN7.12A) (affected by Tau Pass under VO191)	29	29	26-Nov-18 A	26-Oct-18	-7		_		Installati
FHW-2350c	Road Drainage and Pavement (near NB67-2, MN7.12 & MN7.12A) (affected by Tau	46	46	29-Nov-18	24-Jan-19	-8				
Fanling Highw	Pass, VO not yet issed) ay Zone 3 between CH7290 and CH7380									
Noise Barrie										
FHW-3340	Noise Barrier NB69 - Pile cap/ Footing and Stem Wall adjacent to NB lane (108m)	77	35	16-Oct-17 A	02-Nov-18	-3		Noise Barrier NB69 - Pile cap/ Foot	ing and Stem Wall adjacent to NB la	ane (108m), Noise
At-Grade Roa	dworks (130m)									
FHW-3240	Road Pavement on FLH SB 4th lane after Removal of Temp. Street Light (due to Claim No. 63)	10	10	31-Aug-18 A	03-Oct-18	1	Road Pavement on FLH SB 4th	lane after Removal of Temp. Street Light (due to Claim No. 63), Road Paveme	ent on FLH SB 4t
FHW-3350a	Road Drainage (FLH NB hard shoulder, next to NB69)	61	50	26-Feb-18 A	20-Nov-18	-5		Road Drain	hage (FLH NB hard shoulder, next to	NB69), Road Dr
FHW-3350b	Road Formation and Pavement (FLH NB 1st lane and HS next to NB69, due to Tau Pass under VO191)	25	25	21-Nov-18*	19-Dec-18	-5			Road Fo	ormation and Pa
Fanling Highwa	y North Portion between CH7470 and CH7925									
Fanling Highw	ay Zone 4 between CH7380 and CH7470									
At-Grade Roa	ndworks (90m)									
EHW-4140	Road Pavement (FLH SB 2nd lane) by re-surfacing (due to Claim No. 63)	17	0	21-Aug-18 A	07-Sep-18 A	.	Road Pavement (FLH SB 2nd lane) by re-surfacing (due to Claim	No. (20)		
	Road Pavement (FLH SB 1st lane) by re-surfacing (due to claim No. 63)	15	33	10-Sep-18 A	31-Oct-18	` 			in and size (due to Obies No. 00).	D
				•				Road Pavement (FLH SB 1st lane) by		
	Road Drainage and Road Pavement (FLH H.S., Merging Lane)(due to Claim No. 63)	48	48	10-Sep-18 A	17-Nov-18				and Road Pavement (FLH H.S., Me	
	Construction of FL/RW2 (mass concrete wall, VO not yet received)	38	38		06-Nov-18				s concrete wall, VO not yet received	
FHW-4330d	Remaining Gullies and Road Pavement after Construction of FL/RW2 (VO not yet received)	25	25	13-Oct-18*	12-Nov-18	-2		Remaining Gullies and	d Road Pavement after Construction	n of FL/RW2 (VC
FHW-4330e	Road Drainage MN9.1 - MN9.3	24	24	08-Oct-18*	05-Nov-18	-1		Road Drainage MN9.1 - MN9.3	3	
Fanling Highw	ay Zone 5 between CH7470 and CH7600 (Provision of Kiu Tau Footbridge)									
Kiu Tau Fool	bridge Reprovision (East)									
FHW-5070	Installation of Lighting Facilities (affect by design change which is under VO)	21	21	20-Jun-18 A	16-Oct-18		Installation of L	ighting Facilities (affect by design change v	which is under VO), Installation of Li	ghting Facilities (
FHW-5080	Fabrication of Pillar Box (affect by design change which is under VO)	32	8	15-Jun-18 A	29-Sep-18	-6	Fabrication of Pillar Box (affect by de	sign change which is under VO), Fabricatio	n of Pillar Box (affect by design cha	inge which is und
FHW-5090	Erection of Pillar Box (affect by design change which is under VO)	19	19	02-Oct-18*	24-Oct-18	-6	Erec	ction of Pillar Box (affect by design change	which is under VO)	
FHW-5100	Power Cable Laying Works (affect by design change which is under VO)	36	36	25-Oct-18*	05-Dec-18	-6			Power Cable Laying Works	s (affect by de sig
FHW-5110	Permanent Power Supply Connection (affect by design change which is under VO)	6	6	06-Dec-18	12-Dec-18	-4			Permanent Powe	er Supply Conner
			Actual	Work			CEDD Contract No. CV/2012/09		rogramme updated to 2018-9-2	
			Rema	ining Work			ntang / Heung Yuen Wai BCP - Site Formation &	Date Revisio	on Checked	Approved
			Sumn	nary Bar		L	• •			
				al Remaining Wo	ork		Infrastructure Works, Contract 3			
			Milest	-			3-Month Rolling Programme			
		_				:	IPR062Page 2 of 820-Sep-18			
			Projec	t Baseline Bar						

Provision of BFA Facilities (Ltt) FHW-L-103(Lift Delivery and Installation FHW-L-104(Permanent Power Supply (affect Works at existing TWSRE FHW-5480a Noise Barrier NB73 Footing Bay FHW-5480d Noise Barrier NB73 Footing Bay Glaim no. 62) FHW-5480 FHW-5480d Noise Barrier NB73 Remaining S daim no. 62) FHW-5480 FHW-5480 Noise Barrier NB73 Remaining S daim no. 62) FHW-5480 FHW-5480 Road Drainage, Pavement and daim FHW-5500 Road Drainage (MS10.1-10.3A), next to NB73) At-Grade Road Works (130m) FHW-5120 FHW-5130 Road Pavement (FLH SB 2nd Ia FHW-51300 Road Drainage (MN10.1-10.3A, FHW-5330a, Road Drainage (MN10.1-10.3A, FHW-5330a, Fill Peplacement Works 3SW-D1	g (affect by design change which is under VO) ct by design change which is under VO) s 1-6, 10 - 14 7A & 7B (Access for FR32, due to claim no. 62) 8 & 9 (after completion of Bay 1-3 of FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to TCSS duct laying (Merging lane next to NB72)(due to TCSS duct laying (Merging lane next to NB72)(due to ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63)	ne 31 21 15 60	32 62 55 78 10 333 37 54 27 51 2 44	10-Sep-18A 28-Jun-18A 21-May-18A 08-Jan-18A 06-Dec-18* 29-Aug-17A 16-Jul-18A 20-Sep-18* 05-Jul-18A 26-Feb-18A 22-Nov-18* 21-Apr-18A	30-Oct-18 04-Dec-18 26-Nov-18 22-Dec-18 17-Dec-18 31-Oct-18 05-Nov-18 24-Nov-18 24-Nov-18 24-Nov-18 21-Nov-18 23-Nov-18	-11 -1 -4 -61 -61 -61 -61 -61 -61 -61 -61 -21 -31 -21 -41 -41 -41 -41 -41 -41 -41 -41 -41 -4		affect by design c Lift Delivery and li nent Power Supp ting Bays 1-6, 10 e to claim no. 62), (after completion
 FHW-5110b Laying of Floor Tiles (affect by d FHW-5110c Installation of Suspended Celling Provision of BFA Facilities (Litt) FHW-L103 Lift Delivery and Installation FHW-L104 (Permanent Power Supply (affect Works at existing TWSRE FHW-5480a Noise Barrier NB73 Footing Bay FHW-5480d Noise Barrier NB73 Footing Bay Gaim no. 62) FHW-5480d Noise Barrier NB73 Footing Bay Gaim no. 62) FHW-5480d Noise Barrier NB73 Footing Bay Gaim no. 62) FHW-5480d Noise Barrier NB73 Penaining S Gaim no. 62) FHW-5480d Noise Barrier NB73 Pemaining S Gaim no. 62) FHW-5480 Noise Barrier NB73 Pemaining S Gaim no. 62) FHW-5480 Robe Barrier NB73 Pemaining S Gaim no. 62) FHW-5480 Robe Barrier NB73 Pemaining S Gaim no. 62) FHW-5480 Robe Barrier NB73 Pemaining S Gaim no. 62) FHW-5481 Noise Barrier NB73 Pemaining S Gaim no. 62) FHW-5480 Robe Barrier NB73 Pemaining S Gaim no. 62) FHW-5480 Robe Barrier NB73 Pemaining S Gaim no. 62) FHW-5490 Road Drainage (MS10.1-10.3A), next to NB73) Al-Grade Road Works (130m) FHW-5330a Road Pavement (FLH SB 1st lar FHW-5330a File Placement Works 3SW-D1 received) FHW-5330a Road Drainage (MIN10.1-10.3A, FHW-5330a Road Drainage (MIN10.1-10.3A, FHW-5330a Road Drainage (MIN10.1-10.3A, FHW-5330a Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and Al-Grade Roadworks (60m) 	g (affect by design change which is under VO) ct by design change which is under VO) is 1-6, 10 - 14 7A & 7B (Access for FR32, due to claim no. 62) 78 & 9 (after completion of Bay 1-3 of FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to TCSS duct laying (Merging lane next to NB72)(due to TCSS duct laying (Merging lane next to NB72)(due to ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) guilies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	72 104 70 10 10 140 37 54 19 73 54 19 73 0 2 2 1 19 73 0 2 2 1 15 60	62 55 10 33 33 37 54 27 51 2 44	28-Jun-18 A 21-May-18 A 08-Jan-18 A 06-Dec-18* 29-Aug-17 A 16-Jul-18 A 20-Sep-18* 05-Jul-18 A 26-Feb-18 A 22-Nov-18*	04-Dec-18 26-Nov-18 22-Dec-18 17-Dec-18 31-Oct-18 05-Nov-18 24-Nov-18 24-Nov-18 24-Oct-18 21-Nov-18 21-Nov-18	-4 -3 -64 -64 -64 -64 -24 -44 -44 -22 -22 -44 -44 -44 -33	Laying of Floor Tiles (al Installation of Suspended Ceiling Perma Noise Barrier NB73 Footing Bays 1-6, 10 - 14, Noise Barrier NB73 Footing Bays 1-6, 10 - 14, Noise Barrier NB73 Footing Bays 7A & 7B (Access for FR32, du	affect by design c Lift Delivery and li nent Power Supp ting Bays 1-6, 10 e to claim no. 62), (after completion
FHW-5110c Installation of Suspended Ceiling Provision of BFA Facilities (Litt) FHW-L-103(Lift Delivery and Installation FHW-L-104(Permanent Power Supply (affect Works at existing TWSRE FHW-5480a Noise Barrier NB73 Footing Bay FHW-5480d Noise Barrier NB73 Footing Bay FHW-54801 Noise Barrier NB73 Footing Bay FHW-54801 Noise Barrier NB73 Footing Bay Claim no. 62) FHW-54801 FHW-54801 Noise Barrier NB73 Footing Bay Claim no. 62) FHW-54801 Noise Barrier NB73 Pemaining Stalam Claim no. 62) FHW-5490 Road Drainage, Rwement and Claim) FHW-5490 Road Drainage, (MS10.1-10.3A), next to NB73) Al-Grade Road Works (130m) FHW-5120 FHW-5130 Road Pavement (FLH SB 1st Iar FHW-5330a Road Drainage (MN10.1-10.3A, FHW-5330a FHW-5330a Road Drainage (MN10.1-10.3A, FHW-5330a FHW-5330a Road Drainage (MS10.1-10.3A, received) FHW-5330a	g (affect by design change which is under VO) ct by design change which is under VO) is 1-6, 10 - 14 7A & 7B (Access for FR32, due to claim no. 62) 78 & 9 (after completion of Bay 1-3 of FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to TCSS duct laying (Merging lane next to NB72)(due to TCSS duct laying (Merging lane next to NB72)(due to ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) guilies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	104 70 10 140 37 54 19 73 54 19 73 0 2 1 21 15 60	55 78 10 33 37 54 27 51 2 2 44	21-May-18 A 08-Jan-18 A 06-Dec-18* 29-Aug-17 A 16-Jul-18 A 20-Sep-18* 05-Jul-18 A 26-Feb-18 A 26-Feb-18 A 22-Nov-18*	26-Nov-18 22-Dec-18 17-Dec-18 31-Oct-18 05-Nov-18 24-Nov-18 24-Oct-18 24-Oct-18 21-Nov-18 21-Nov-18	-34 -64 -63 -24 -24 -24 -24 -24 -24 -24 -24 -24 -24	Installation of Suspended Ceiling Installation of Suspended Ceiling Perma Noise Barrier NB73 Footing Bays 1-6, 10 - 14, Noise Barrier NB73 Footing Bays 1-6, 10 - 14, Noise Barrier NB73 Footing Bays 7A & 7B (Access for FR32, du	affect by design Lift Delivery and nent Power Sup ting Bays 1-6, 1 e to claim no. 62
 Provision of BFA Facilities (Lift) FHW-L-103(Lift Delivery and Installation FHW-L-104(Permanent Power Supply (affect Works at existing TWSRE FHW-5480a Noise Barrier NB73 Footing Bay FHW-5480d Noise Barrier NB73 Footing Bay Gaim no. 62) FHW-54801 Noise Barrier NB73 Permaining S daim no. 62) FHW-54801 Noise Barrier NB73 Permaining S daim no. 62) FHW-5490 Road Drainage, Pavement and daim) FHW-5400 Road Drainage, Pavement and daim) FHW-5510 Road Drainage (MS10.1-10.3A), mext to NS73) Al-Grade Road Works (130m) FHW-5120 Road Pavement (FLH SB 1st lar FHW-5130 Road Pavament (FLH SB 1st lar FHW-5130 Road Drainage (MN10.1-10.3A, FHW-5130 Road Drainage (MN10.1-10.3A, FHW-5130 C) Fill Peplacement Works 3SW-D1 received) FHW-5330d Penabaring Gullies, road formation under VO) FHW-5330E Road Pavement (log on effect b) Fanling Highway Zone 6 between CH7600 and Al-Grade Roadworks (60m) 	ct by design change which is under VO) Is 1-6, 10 - 14 77A & 7B (Access for FR32, due to claim no. 62) 8 & 9 (after completion of Bay 1-3 of FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to TCSS duct laying (Merging lane next to NB72)(due to 17CSS	70 10 140 37 54 19 73 54 19 73 2 2 19 73 2 2 11 15 60	78 10 333 37 54 27 51 2 44	08-Jan-18 A 06-Dec-18* 29-Aug-17 A 16-Jul-18 A 20-Sep-18* 05-Jul-18 A 26-Feb-18 A 22-Nov-18*	22-Dec-18 17-Dec-18 31-Oct-18 05-Nov-18 24-Nov-18 24-Oct-18 21-Nov-18 23-Nov-18	-64 -63 -21 -21 -33 -33 -44 -44 -44 -33	Noise Barrier NB73 Footing Bays 1-6, 10 - 14, Noise Barrier NB73 Footing Bays 1-6, 10 - 14, Noise Barrier NB73 Footing Bay 7A & 7B (Access for FR32, du	Lift Delivery and nent Power Suj ting Bays 1-6, ; e to claim no. 62
 FHW-L-103(Lift Delivery and Installation FHW-L-104(Permanent Power Supply (affect Works at existing TWSRE FHW-5480a Noise Barrier NB73 Footing Bay FHW-5480d Noise Barrier NB73 Footing Bay FHW-5480d Noise Barrier NB73 Footing Bay FHW-54800 Noise Barrier NB73 Footing Bay FHW-54801 Noise Barrier NB73 Footing Bay FHW-54801 Noise Barrier NB73 Footing Bay FHW-54801 Noise Barrier NB73 Remaining S daim no. 62) FHW-5481 Noise Barrier NB72 Bay 5 - 9 (aff daim no. 62) FHW-5481 Noise Barrier NB72 Bay 5 - 9 (aff daim) FHW-5480 Noise Barrier NB72 Bay 5 - 9 (aff daim) FHW-5480 Noise Barrier NB72 Bay 5 - 9 (aff daim) FHW-5480 Noise Barrier NB73 Remaining S daim no. 62) FHW-5480 Noise Barrier NB73 Bernaining S daim no. 62) FHW-5480 Noise Barrier NB73 Bernaining S daim no. 62) FHW-5480 Noise Barrier NB73 Bernaining S daim no. 62) FHW-5480 Road Drainage (MS10.1-10.3A), next to NB73) Al-Grade Road Works (130m) FHW-5120 Road Pavement (FLH SB 1st lar FHW-5130 Road Pavement (FLH SB 1st lar FHW-5130 Road Drainage (MN10.1-10.3A, FHW-5330a Road Drainage (MN10.1-10.3A, FHW-5330a Road Drainage (MN10.1-10.3A, FHW-5330a Road Drainage (MN10.1-10.3A, FHW-5330a Road Pavement (log on effect D Fanling Highway Zone 6 between CH7600 and Al-Grade Roadworks (60m) 	rs 1-6, 10 - 14 7A & 7B (Access for FR32, due to claim no. 62) 78 & 9 (after completion of Bay 1-3 of FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to ffer water shutdown for twin DN1400 WM, due to TCSS duct laying (Merging lane next to NB72)(due to ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) guilies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	10 140 37 54 19 73 5 2 2 1 19 73 5 2 2 1 15 60	10 33 37 54 27 51 2 44	06-Dec-18* 29-Aug-17 A 16-Jul-18 A 20-Sep-18* 05-Jul-18 A 26-Feb-18 A 22-Nov-18*	17-Dec-18 31-Oct-18 05-Nov-18 24-Nov-18 24-Oct-18 21-Nov-18 23-Nov-18	-6: -21 -3: -4! -2: -4! -4! -3:	Perma Noise Barrier NB73 Footing Bays 1-6, 0 - 14, Noise Barrier NB73 Footing Bay 7A & 7B (Access for FR32, du Noise Barrier NB73 Footing Bay 7A & 7B (Access for FR32, du	nent Power Su ting Bays 1-6, to claim no. 6 (after completi
 FHW-L-104(Permanent Power Supply (affect Works at existing TWSRE FHW-5480a Noise Barrier NB73 Footing Bay FHW-5480d Noise Barrier NB73 Footing Bay FHW-5480d Noise Barrier NB73 Footing Bay daim no. 62) FHW-54801 Noise Barrier NB73 Footing Bay daim no. 62) FHW-54801 Noise Barrier NB73 Pemaining S daim no. 62) FHW-54801 Noise Barrier NB73 Pemaining S daim no. 62) FHW-54801 Noise Barrier NB73 Pemaining S daim FHW-54801 Noise Barrier NB73 Pemaining S daim FHW-54801 Noise Barrier NB73 Pemaining S daim FHW-54800 Road Drainage, Pavement and daim FHW-5500 Road Drainage (MS10.1-10.3A), next to NB73) AFGrade Road Works (130m) FHW-5120 Road Pavement (FLH SB 2nd Ia FHW-5130 Road Pavement (FLH SB 1st Iar FHW-5130 Road Drainage (MN10.1-10.3A, FHW-51300 Reinaining Gullies, road formation under VO) FHW-53302 Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and Al-Grade Roadwork's (60m) 	rs 1-6, 10 - 14 7A & 7B (Access for FR32, due to claim no. 62) 78 & 9 (after completion of Bay 1-3 of FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to ffer water shutdown for twin DN1400 WM, due to TCSS duct laying (Merging lane next to NB72)(due to ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) guilies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	10 140 37 54 19 73 5 2 2 1 19 73 5 2 2 1 15 60	10 33 37 54 27 51 2 44	06-Dec-18* 29-Aug-17 A 16-Jul-18 A 20-Sep-18* 05-Jul-18 A 26-Feb-18 A 22-Nov-18*	17-Dec-18 31-Oct-18 05-Nov-18 24-Nov-18 24-Oct-18 21-Nov-18 23-Nov-18	-6: -21 -3: -4! -2: -4! -4! -3:	Perma Noise Barrier NB73 Footing Bays 1-6, 0 - 14, Noise Barrier NB73 Footing Bay 7A & 7B (Access for FR32, du Noise Barrier NB73 Footing Bay 7A & 7B (Access for FR32, du	nent Power Suj ting Bays 1-6, - to claim no. 62 (after completi
Works at existing TWSRE FHW-5480a Noise Barrier NB73 Footing Bays FHW-5480d Noise Barrier NB73 Footing Bay FHW-5480e Noise Barrier NB73 Footing Bay claim no. 62) FHW-54801 Noise Barrier NB73 Pemaining S claim no. 62) FHW-5481 Noise Barrier NB73 Pemaining S claim no. 62) FHW-5490 Road Drainage, Pavement and claim) FHW-5490 Road Drainage, Pavement and claim) FHW-5490 Road Drainage (MS10.1-10.3A), next to NB73) AtGrade Road Works (130m) FHW-5120 Road Pavement (FLH SB 2nd Ia FHW-5130 Road Pavement (FLH SB 1st Iar FHW-5330a Foad Drainage (MN10.1-10.3A, FHW-5330a Foad Drainage (MN10.1-10.3A, FHW-5330a Foad Pavement (IcLH SB 1st Iar FHW-5330a Foad Pavement (Isla 1st Iar FHW-5330a Foad Pavement (Isla 1st Iar FHW-5330b Foad Pavement (Isla	rs 1-6, 10 - 14 7A & 7B (Access for FR32, due to claim no. 62) 78 & 9 (after completion of Bay 1-3 of FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to ffer water shutdown for twin DN1400 WM, due to TCSS duct laying (Merging lane next to NB72)(due to ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) guilies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	140 37 54 19 73 0 2 ne 31 21 15 60	33 37 54 27 51 2 2 44	29-Aug-17 A 16-Jul-18 A 20-Sep-18* 05-Jul-18 A 26-Feb-18 A 26-Feb-18 A 22-Nov-18*	31-Oct-18 05-Nov-18 24-Nov-18 24-Oct-18 21-Nov-18 23-Nov-18	-21 -33 -41 -23 -41 -33	Noise Barrier NB73 Footing Bays 1-6, 10 - 14, Noise Barrier NB73 Footing Bays 1-6, 10 - 14, Noise Barrier NB73 Footing Bay 7A & 7B (Access for FR32, du	ting Bays 1-6, e to claim no. 62 (after completi
 FHW-5480a Noise Barrier NB73 Footing Bays FHW-5480d Noise Barrier NB73 Footing Bays FHW-5480e Noise Barrier NB73 Footing Bays FHW-5480e Noise Barrier NB73 Footing Bays FHW-5480 Noise Barrier NB73 Footing Bays FHW-5481 Noise Barrier NB73 Femaining Sclaim no. 62) FHW-5481 Noise Barrier NB72 Bay 5 - 9 (aff claim) FHW-5490 Road Drainage, Pavement and claim) FHW-5490 Road Drainage (MS10.1-10.3A), next to NB73) Al-Grade Road Works (130m) FHW-5120 Road Pavement (FLH SB 2nd Ia FHW-5130 Road Pavement (FLH SB 1st Iar FHW-5330a Foad Drainage (MN10.1-10.3A, FHW-5330a Fill Replacement Works 3SW-DI received) FHW-5330c Fill Replacement Works 3SW-DI received) FHW-5330a Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and Al-Grade Roadworks (60m) 	7A & 7B (Access for FR32, due to claim no. 62) 78 & 9 (after completion of Bay 1-3 of FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to fter water shutdown for twin DN1400 WM, due to TCSS duct laying (Merging lane next to NB72)(due to ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) guilies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	37 54 19 73 0 2 ne 31 21 15 60	37 54 27 51 2 44	16-Jul-18 A 20-Sep-18* 05-Jul-18 A 26-Feb-18 A 22-Nov-18*	05-Nov-18 24-Nov-18 24-Oct-18 21-Nov-18 23-Nov-18	-3: -4: -2: -4: -3:	Noise Barrier NB73 Footing Bays 1-6, 10 - 14, Noise Barrier NB73 Footing Bays 1-6, 10 - 14, Noise Barrier NB73 Footing Bay 7A & 7B (Access for FR32, du	ting Bays 1-6, e to claim no. 6 (after completi
FHW-5480a Noise Barrier NB73 Footing Bays FHW-5480d Noise Barrier NB73 Footing Bays FHW-5480e Noise Barrier NB73 Footing Bays FHW-5480e Noise Barrier NB73 Footing Bays FHW-5480e Noise Barrier NB73 Footing Bays FHW-5480 Noise Barrier NB73 Permaining S claim Noise Barrier NB72 Bays 5 - 9 (aft claim) FHW-5480 Road Drainage, Pavement and claim) FHW-5500 Road Drainage (MS10.1-10.3A), next to NB73) At-Grade Road Works (130m) FHW-5120 FHW-5120 Road Pavement (FLH SB 2nd Ia FHW-5130 Road Pavement (FLH SB 1st Iar FHW-5330a Road Drainage (MIN10.1-10.3A), received) FHW-5330a Fail Replacement Works 3SW-D1 received) FHW-5330a Road Drainage (MIN0.1-10.3A), received) FHW-5330a Fail Replacement Works 3SW-D1 received) FHW-5330a Fail Replacement Works 3SW-D1 received) FHW-5330a Road Pavement (log on effect b Faning Highway Zone 6 between CH7600 and <t< td=""><td>7A & 7B (Access for FR32, due to claim no. 62) 78 & 9 (after completion of Bay 1-3 of FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to fter water shutdown for twin DN1400 WM, due to TCSS duct laying (Merging lane next to NB72)(due to ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) guilies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet</td><td>37 54 19 73 0 2 ne 31 21 15 60</td><td>37 54 27 51 2 44</td><td>16-Jul-18 A 20-Sep-18* 05-Jul-18 A 26-Feb-18 A 22-Nov-18*</td><td>05-Nov-18 24-Nov-18 24-Oct-18 21-Nov-18 23-Nov-18</td><td>-3: -4: -2: -4: -3:</td><th>Noise Barrier NB73 Footing Bay 7A & 7B (Access for FR32, du</th><td>to claim no. 6</td></t<>	7A & 7B (Access for FR32, due to claim no. 62) 78 & 9 (after completion of Bay 1-3 of FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to fter water shutdown for twin DN1400 WM, due to TCSS duct laying (Merging lane next to NB72)(due to ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) guilies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	37 54 19 73 0 2 ne 31 21 15 60	37 54 27 51 2 44	16-Jul-18 A 20-Sep-18* 05-Jul-18 A 26-Feb-18 A 22-Nov-18*	05-Nov-18 24-Nov-18 24-Oct-18 21-Nov-18 23-Nov-18	-3: -4: -2: -4: -3:	Noise Barrier NB73 Footing Bay 7A & 7B (Access for FR32, du	to claim no. 6
FHW-5480d Noise Barrier NB73 Footing Bay FHW-5480e Noise Barrier NB73 Footing Bay claim no. 62) FHW-5480f FHW-5480f Noise Barrier NB73 Femaining S claim no. 62) FHW-5480f FHW-5480f Noise Barrier NB73 Remaining S claim no. 62) FHW-5480f FHW-5480f Noise Barrier NB73 Pemaining S fHW-5480f Road Drainage, Pavement and claim) FHW-5500 Road Drainage, Pavement and claim) FHW-5500 Road Drainage (MS10.1-10.3A), next to NB73) Al-Grade Road Works (130m) FHW-5120 FHW-5120 Road Pavement (FLH SB 1st lar FHW-5130 Road Pavement Works 3SW-DI received) FHW-5330c Fill Replacement Works 3SW-DI received) FHW-53300 Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and Al-Grade Roadworks (60m)	7A & 7B (Access for FR32, due to claim no. 62) 78 & 9 (after completion of Bay 1-3 of FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to fter water shutdown for twin DN1400 WM, due to TCSS duct laying (Merging lane next to NB72)(due to ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) guilies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	37 54 19 73 0 2 ne 31 21 15 60	37 54 27 51 2 44	16-Jul-18 A 20-Sep-18* 05-Jul-18 A 26-Feb-18 A 22-Nov-18*	05-Nov-18 24-Nov-18 24-Oct-18 21-Nov-18 23-Nov-18	-3: -4: -2: -4: -3:	Noise Barrier NB73 Footing Bay 7A & 7B (Access for FR32, du	e to claim no. 6 (after complet
 FHW-5480e Noise Barrier NB73 Footing Bay daim no. 62) FHW-54801 Noise Barrier NB73 Feenaining S daim no. 62) FHW-5481 Noise Barrier NB72 Bay 5 - 9 (aft daim) FHW-5481 Noise Barrier NB72 Bay 5 - 9 (aft daim) FHW-5500 Road Drainage, Pavement and daim) FHW-5500 Road Drainage (MS10.1-10.3A), next to NB73) At-Grade Road Works (130m) FHW-5120 Road Pavement (FLH SB 2nd Ia FHW-5130 Road Pavement (FLH SB 2nd Ia FHW-5130 Road Pavement (FLH SB 1st Iar FHW-5130 Road Pavement (FLH SB 1st Iar FHW-5130 Road Drainage (MN10.1-10.3A, FHW-5330e Road Drainage (MN10.1-10.3A, FHW-5330e Road Drainage (MN10.1-10.3A, FHW-5330e Road Drainage (MN10.1-10.3A, FHW-5330e Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and At-Grade Roadworks (60m) 	8 & 9 (after completion of Bay 1-3 of FR32, due to Stem Wall of Bay 12 & 13 (access for FR32, due to fter water shutdown for twin DN1400 WM, due to TCSS duct laying (Merging lane next to NB72)(due to , Road Pavement and TCSS duct laying (Merging lane ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) guilies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	54 19 73 0 2 ne 31 21 15 60	54 27 51 2 44	20-Sep-18* 05-Jul-18 A 26-Feb-18 A 22-Nov-18*	24-Nov-18 24-Oct-18 21-Nov-18 23-Nov-18	-4! -2: -4!		(after complet
claim no. 62) FHW-54801 Noise Barrier NB73 Remaining S claim no. 62) FHW-5481 Noise Barrier NB72 Bay 5 - 9 (aft claim) FHW-5490 Road Drainage, Pavement and claim) FHW-5500 Road Drainage (MS10.1-10.3A), next to NB73) Al-Grade Road Works (130m) FHW-5120 Road Pavement (FLH SB 2nd Ia FHW-5130 Road Pavement (FLH SB 1st Iar FHW-5330a Road Drainage (MN10.1-10.3A, FHW-5330a Road Road Road Road Road Road Road Road	Stem Wall of Bay 12 & 13 (access for FR32, due to fter water shutdown for twin DN1400 WM, due to TCSS duct laying (Merging lane next to NB72)(due to , Road Pavement and TCSS duct laying (Merging lane ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) gullies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	19 73 0 2 10 8 9 10 15 60	27 51 2 44	05-Jul-18 A 26-Feb-18 A 22-Nov-18*	24-Oct-18 21-Nov-18 23-Nov-18	-2:	Noise Barrier NB73 Epoting Bay 8 &	
claim no. 62) FHW-5481 Noise Barrier NB72 Bay 5 - 9 (aft (claim) FHW-5490 Road Drainage, Pavement and claim) FHW-5500 Road Drainage (MS10.1-10.3A), next to NB73) At-Grade Road Works (130m) FHW-5120 Road Pavement (FLH SB 2nd la FHW-5130 FHW-5130 Road Pavement (FLH SB 1st lar FHW-5330a FHW-5330a Road Drainage (MIN10.1-10.3A, received) FHW-5330a Fail Replacement Works 3SW-DI received) FHW-5330a Remaining Gullies, road formatic under VO FHW-5330a Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and At-Grade Roadworks (60m)	fter water shutdown for twin DN1400 WM, due to TCSS duct laying (Merging lane next to NB72)(due to a, Road Pavement and TCSS duct laying (Merging lane ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) gullies affected by Slope F18) F18 next to FLHNB (further modified by VO no1yet	73 0 2 10 31 21 15 60	51 2 44	26-Feb-18 A 22-Nov-18*	21-Nov-18 23-Nov-18	-41		to claim no. 6.
claim) claim) FHW-5490 Road Drainage, Pavement and claim) FHW-5500 Road Drainage (MS10.1-10.3A), next to NB73) FHW-5120 Road Drainage (MS10.1-10.3A), next to NB73) FHW-5120 Road Pavement (FLH SB 2nd la FHW-5130 Road Pavement (FLH SB 1st lar FHW-5330a Road Drainage (MN10.1-10.3A, FHW-5330a FHW-5330a Fill Replacement Works 3SW-D1 received) FHW-5330a Road Pavement (Icl model to C) received) FHW-5330a Road Pavement (log on effect to Pavement (log on ef	TCSS duct laying (Merging lane next to NB72)(due to , Road Pavement and TCSS duct laying (Merging lane ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) gullies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	2 2 31 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2	2	22-Nov-18*	23-Nov-18	-3:	Noise Barrier NB73 Remaining Stem Wall of Bay 12 & 13 (access for FR32, du	
claim) FHW-5500 Road Dainage (MS10.1-10.3A), next to NB73) At-Grade Road Works (130m) FHW-5120 Road Pavement (FLH SB 2nd Ia FHW-5130 Road Pavement (FLH SB 1st Iar FHW-5130 Road Dainage (MN10.1-10.3A, next) FHW-5330a Road Pavement (og on effect b next) FHW-5330a Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and At-Grade Roadworks (60m)	, Road Pavement and TCSS duct laying (Merging land ane) by re-surfacing (due to claim 63) ne) by re-surfacing (due to claim 63) gullies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	ne 31 21 15 60	44				Noise Bartier NB72 Bay 5 - 9 (after water	hutdown for tw
At-Grade Road Works (130m) At-Grade Road Works (130m) FHW-5120 Road Pavement (FLH SB 2nd la FHW-5130 Road Pavement (FLH SB 1st lar FHW-5330a Road Drainage (MN10.1-10.3A, FHW-5330a Fill Replacement Works 3SW-DI received) received FHW-5330a Road Drainage (MN10.1-10.3A, FHW-5330a Fill Replacement Works 3SW-DI received) received FHW-5330a Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and Al-Grade Roadworks (60m)	ane) by re-sulfacing (due to claim 63) ne) by re-sulfacing (due to claim 63) gullies affected by Slope F18) F18 next io FLHNB (further modified by VO not yet	21 15 60		21-Apr-18 A	13-Nov-18	-23	Road Drainage, Pavement and TCSS	luct laying (Me
Al-Grade Road Works (130m) FHW-5120 Road Pavement (FLH SB 2nd la FHW-5130 Road Pavement (FLH SB 1st lar FHW-5330a Road Drainage (MN10.1-10.3A, FHW-5330c Fill Replacement Works 3SW-D1 received) FHW-5330d Remaining Gullies, road formatic under VO FHW-5330e Remaining Gullies, road formatic under VO FHW-5330e Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and Al-Grade Roadworks (60m)	ne) by re-surfacing (due to claim 63) gullies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	15	0				Road Drainage (MS10.1-10.3A), Road Pavement a	
FHW-5130 Road Pavement (FLH SB 1st lar FHW-5330a Road Drainage (MN10.1-10.3A, FHW-5330c Fill Replacement Works 3SW-D1 received) FHW-5330d Remaining Gullies, road formatic under VO FHW-5330e Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and Al-Grade Roadworks (60m)	ne) by re-surfacing (due to claim 63) gullies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	15	0					
FHW-5330a Poad Drainage (MN10.1-10.3A, FHW-5330c Fill Replacement Works 3SW-DI received) FHW-5330d Bemaining Gullies, road formatic under VO) FHW-5330e Poad Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and At-Grade Roadworks (60m)	gullies affected by Slope F18) F18 next to FLHNB (further modified by VO not yet	60		20-Aug-18 A	07-Sep-18 A		Road Pavement (FLH SB 2nd lane) by re-surfacing (due to daim 63)	
FHW-5330c Fill Replacement Works 3SW-DI received) FHW-5330c Remaining Gullies, road formatic under VO) FHW-5330e Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and Al-Grade Roadworks (60m)	F18 next to FLHNB (further modified by VO not yet		18	10-Sep-18 A	12-Oct-18	:	Road Pavement (FLH SB 1st lane) by re-surfacing (due to claim 63), Road Pavement (FLH SB	i st lane) by re-s
received) FHW-53300 FHW-53300 FHW-53300 FHW-5330e Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and Al-Grade Roadworks (60m)			15	16-Dec-17 A	09-Oct-18		Road Drainage (MN10.1-10.3A, gullies affected by Slope F18), Road Drainage (MN10.1-10.3A, gu	ies affected by
FHW-53300 Remaining Gullies, road formatic under VO) FHW-53300 Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and At-Grade Roadworks (60m)	on and TCSS duct laying (log on effect by Slope F18	73	24	01-Aug-18 A	20-Oct-18	-43	Fill Replacement Works 3SW-DF18 next to FLHNB (further modified by V	notyetreceiv
under VO) FHW-5330e Road Pavement (log on effect b Fanling Highway Zone 6 between CH7600 and At-Grade Roadworks (60m)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	25	25	22-Oct-18	19-Nov-18	-4	Remaining Guilies, road formation and TCS	duct laving (lo
Fanling Highway Zone 6 between CH7600 and At-Grade Roadworks (60m)	ov Slope F18 under VO)	14	14	20-Nov-18*	05-Dec-18	-4:	Road Pavement (log	, , ,
At-Grade Roadworks (60m)								1011000 03 0100
	Chronie (Existing Venicular Enage)							
FHW-6330a Road Drainage and Road Forma		· · ·	, ,			_		
		60	18	16-Dec-17 A	12-Oct-18		Road Drainage and Road Formation (FLH NB hard shoulder), Road Drainage and Road Formation	on (FLH NB ha
Fanling Highway Zone 7 between CH7660 and	I CH7925 at NBZ (Section 1B)							
At-Grade Roadworks (265m)								
FHW-7330 Road Pavement (FLH NB 3rd lar	ne at NBZ joint with CSHK) by re-surfacing	24	35	20-Aug-18 A	02-Nov-18	-13	Road Pavement (FLH NB 3rd lane at NBZ joint w	h CSHK) by re-
FHW-7340 Road Pavement, Central Barrier	r (FLH NB 4th lane) by re-surfacing	24	24	20-Aug-18 A	20-Oct-18	-	Road Pavement, Central Barrier (FLH NB 4th Ian) by re-surfacing
Remaining Works for Noise Barrier along wide	ned Fanling Highway							
FHW-NB-110a Installation of Steelworks & Pan	el for NB70 (25m, and extended 10m under VO199),	, 6	6	30-Nov-18*	06-Dec-18	-4:	Installation of Steelw	orks & Panel for
	ne 1 nel for NB72 & NB73 (248m), adjacent to FLH SB	16	16	26-Nov-18	13-Dec-18	-49	Installation	of Steelworks &
lanes at Zones 4, 5 & 6 FHW-NB-220 Installation of Steelworks & Pan	nel for NB68 (63m), FLH central median at Zones 1	36	36	20-Sep-18*	03-Nov-18	-18	Installation of Steelworks & Panel for NB68 (63m), FLH central n	
	nel for NB68A (50m), FLH œntral median at Zone 4	36	0	13-Aug-18 A	25-Aug-18 A		Installation of Steelworks & P	
			Ŭ		207.691071			
			Actual	Work			CEDD Contract No. CV/2012/09 3-Month Rolling Programme updated to 2018	9-20
				ining Work			tang / Heung Yuen Wai BCP - Site Formation &	Approv
				nary Bar		LI		_
				al Remaining W	lot		Infrastructure Works, Contract 3	_
		_		0			3-Month Rolling Programme	
		•	Milesto			3	PR062 Page 3 of 8 20-Sep-18 Page 3 of 8 20-Sep-18	_
	•		Proiect	t Baseline Bar		-		

D	Activity Name	OD	RD	Start	Finish			2018			201
FHW-NB-320	Installation of Steelworks & Panel for NB67-2 (85m), adjacent to FLH NB lanes at	14	14	26-Oct-18*	10-Nov-18		Aug Sep	Oct	Nov	Dec	Ja
	Zones 2 & 3								1	& Panel for NB67-2 (85m), adjacent	
FHW-NB-330	Installation of Steelworks & Panel for NB69 (109m), adjacent to FLH NB lanes near LR1 at Zone 3	18	18	12-Nov-18*	01-Dec-18	-3				Installation of Steelworks & Panel	I for NB69
ection II - Rer	nainder of the Works (KD-3)										
t Grade Link	Road at Fanling Highway Interchange										
Link Road 1 (near Abutment AB1)										
FHI-LR1-101	Allow Contractor of Contract 4 for Installation of TCSS Cable at Abutment AB1	0	0		20-Sep-18*	3	Allow Contract	ctor of Contract 4 for Installation of TCS	S Cable at Abutment AB1		
FHLI B1-102	Backfilling works of abutment, Gully and Profile Barrier at Abutment AB1	20	34	28-May-18 A	01-Nov-18	_			Backfilling works of abutment, Gully a	nd Desfile Demise at Abutmant AD1 D	DooleElling
	Road Formation and Pavement (CH 240 - CH 340, nr AB1)	15	15	19-Sep-18 A	09-Oct-18				Hoad Formati	on and Pavement (CH 240 - CH 340,), nr AB1),
FHI-LR1-1120	Road Formation, Road Drainage, TCSS ducting, Profile Barrier and Pavement (CH 80 - CH 240, nr NB66 & 67-1)	70	49	07-Feb-18 A	19-Nov-18	-1			Road Formati	on, Road Drainage, TCSS ducting, Pr	Profile Bar
Noise Barrie	r										
FHI-LR1-109	Noise Barrier NB67-1 - Remaining ground beam of Bay 3 (allow access from TWSRW)	7	7	28-Sep-18*	06-Oct-18	2		Noise Barrier NB67-1 - Remain	ing ground beam of Bay 3 (allow access	rom TWSRW)	
Link Road 2 (near Abutment AA1)										
FHI-LR2-202	Construction of Fill slope FL/F10 and Road Formation of Link Road nr Abutment AA1	78	55	25-Apr-18 A	26-Nov-18	-1			Con	struction of Fill slope FL/F10 and Roa	ad Forma
	TCSS Duct Laying along Link Road next to FL/F10	52	52	28-Jul-18 A	22-Nov-18	-1				ct Laying along Link Road next to FL/	
FHI-LR2-203	3SW-D/FR32 Bay 3207 (including temporary works)	43	37	19-Jul-18 A	05-Nov-18				3SW-D/FR32 Bay 3207 (includin	g temporary works), 3SW-D/FR32 Ba	ay 3207 (
FHI-LR2-203	3SW-D/FR32 Bay 3208 (including temporary works)	46	46	27-Aug-18 A	15-Nov-18				3SW-D/FR32 Bay	3208 (including temporary works), 3SV	SW-D/FR3
FHI-LR2-203	3SW-D/FR32 Bay 3209 (including temporary works)	46	46	15-Aug-18 A	15-Nov-18	•			3SW-D/	FR32 Bay 3209 (including temporary	works), 3
FHI-LR2-203	3SW-D/FR32 Bay 3210 (including temporary works)	45	45	30-Jun-18 A	14-Nov-18	-4			3SW-D/FR32 Bay 3	210 (including temporary works), 3SW	N-D/17R32
FHI-LR2-204	3SW-D/FR32 Bay 3211 (including temporary works)	37	0	21-May-18 A	08-Sep-18 A		3SW-D/FR32 Bay 3211 (includi	iding temporary works)			
FHI-LR2-204	3SW-D/FR32 Bay 3212 (including temporary works)	37	37	27-Sep-18*	10-Nov-18				3SW-D/FR32 Bay 3212 (i	ncluding temporary works)	
FHI-I B2-204	3SW-D/FR32 Bay 3213 (including temporary works)	35	35	08-Nov-18	18-Dec-18	-4				3SW-D/FR3	22 804 22
										330-0/110	
	3SW-D/FR32 Bay 3214 (including temporary works)	36	36	15-Nov-18	28-Dec-18	-4					3\$W-D
FHI-LR2-205	Road Pavement and Drainage next to Abutment (after completion of NB73 Bay 12&13 Stem Wall)	20	20	25-Oct-18	16-Nov-18				Road Pavement	and Drainage next to Abutment (after	r completi
FHI-LR2-205	Road Formation, Road Drainage and Pavement (SMH1302 - 1303 & MY2.4 - 2.5) at grade	72	72	01-Mar-18 A	15-Dec-18	-3				Road Formation	n, Road E
FHW-SG-103	Fabrication and Delivery of Sign Gantry DS11	99	26	28-Dec-17 A	23-Oct-18			Fabrica	tion and Delivery of Sign Gantry DS11, Fa	prication and Delivery of Sign Gantry E	DS11
FHW-SG-103	Erection of Sign Gantry DS11 (include On-site Fabrication)	15	15	24-Oct-18	09-Nov-18				Erection of Sign Gantry D\$	11 (include On-site Fabrication)	
FHW-SG-104	Fabrication and Delivery of Sign Gantry FADS11 and DS64	99	34	02-Feb-18 A	01-Nov-18	-1			Fabrication and Delivery of Sign Gant	v FADS11 and DS64. Fabrication and	nd Delivery
FHW-SG-104	Erection of Sign Gantry FADS11 and DS64 (include On-site Fabrication)	15	15	02-Nov-18	19-Nov-18	-1				gn Gantry FADS11 and DS64 (include	
		10	10	02110110	13140410				Election of S	gn Gantry PADS IT and D364 (include	le Oli-sile
	near Abutment AD1)										
FHI-LR3-302	Permanent Fill Slope, Construction of Gullies and Profile Barriers	48	35	25-Apr-18 A	02-Nov-18	-2			Permanent Fill Slope, Construction	f Gullies and Profile Barriers, Perman	nent Fill Sl
FHI-LR3-303	Road Pavement	1	1	03-Nov-18*	03-Nov-18	-2			Road Pavement		
FHI-LR3-304	Other Civil Works for TCSS duct laying - along Link Road 3	25	25	03-Nov-18	01-Dec-18	-2				Other Civil Works for TCSS duct lay	iying - a lo
Link Road 4 (near Abutment AC1)										
		Actual Work				CEDD Contract No. CV/2012/09			3-Month Rolling Programme updated to 2018-9-20		
			Remai	ining Work		1	ntang / Heung Yuen Wai BCP - Site F		Date Revision	n Checked	Appro
			Summ	nary Bar		-	Infrastructure Works, Contrac				
				l Remaining W	'ork						
	•	•	Milesto				3-Month Rolling Programme			<u> </u>	
	•			t Baseline Bar		:	PR062Page 4 of 8	20-Sep-18			
			PIOPPI								

H H 4000 Kub Shatoshow M, Ku		Activity Name	OD	nD	Start	Finish		Aug	Sep	Oct	Nov	Dec	2
Bits No. Sec. P Visit Sec. P	-HI-LR4-4030	Road Formation, Road Drainage, TCSS ducting and Pavement	55	35	27-Nov-17 A	02-Nov-18	-	3	Job L	001			
Bit Mathema Practice Migram	-HI-LR4-4040	Remaining Section of Carriageway connect to FLH	44	44	03-Nov-18*	24-Dec-18	_	19				Re	emaining S
0 Numerican (VAD AC) AND AC)	aduct - Pavem	ent, Street Furnitures, Lighting inside Internal Voids and Others											
0.000 Nakadam / Age, Oga of Odd 02 7 Nakadam / Age, Oga of Odd	S-1000a	MJ Installation for Pier AD5, AB6, AB12, AD1 and AC5	72	30	15-Mar-18 A	27-Oct-18		8			MJ Installation for Pier AD5, AB6, AB12,	AD1 and AC5, MJ Installation for Pier AD	05, AB6,AI
Ciril M Market M 19 Market M 1000000000000000000000000000000000000	S-1000b	MJ Installation for ACI , AC11, AA18, AA13 and AA9	33	30	28-May-18 A	27-Oct-18	+	8			MJ Installation for ACI , AC11, AA18, AA	13 and AA9, MJ Installation for AC1, AC	C11, AA18
Bits Advances if funct (strugt statistics Bits Bit	S-1000c	MJ Installation for AA5, AA1, AB1, AD8 and AD14	32	75	16-May-18 A	19-Dec-18	_	27				MJ Instal	llation for
Control Analyzania Control Control <td>S-1010d</td> <td>Installation of Lighting</td> <td>96</td> <td>70</td> <td>09-Mar-18 A</td> <td>13-Dec-18</td> <td>+</td> <td>32</td> <td></td> <td></td> <td></td> <td>Installation of Lig</td> <td>ahting, Ins</td>	S-1010d	Installation of Lighting	96	70	09-Mar-18 A	13-Dec-18	+	32				Installation of Lig	ahting, Ins
81.99 01/10/2007 01/2007	S-1010e	Cable Connection	31	31	20-Sep-18*	29-Oct-18	-	7			Cable Connection	-	
10. Currently 10. Currently 4 10. 2. May 14. 4 40.011 10. 2. May 14. 4 40.011 10.001	S-1020a	Allow Access for Street Lighting Installation	132	71	11-Jan-18 A	14-Dec-18	-	33				Allow Access fo	r Street L
Bittling Watermark Lang al Per Add on Watch Linder VO/T1 6 1 2 Hebre Add 0 2 Hebre Add 0 2 Hebre Add 0 0 0 0 </td <td>S-1020b</td> <td>Other Street Furniture including Sign Gantry, NB, Handrail, traffic signs, etc, for Bridge</td> <td>112</td> <td>20</td> <td>26-Feb-18 A</td> <td>15-Oct-18</td> <td>-</td> <td>18</td> <td></td> <td>Other Street Fur</td> <td>miture including Sign Gantry, NB, Handra</td> <td>ail, traffic signs, etc, for Bridge A, B, C an</td> <td>nd D, Othe</td>	S-1020b	Other Street Furniture including Sign Gantry, NB, Handrail, traffic signs, etc, for Bridge	112	20	26-Feb-18 A	15-Oct-18	-	18		Other Street Fur	miture including Sign Gantry, NB, Handra	ail, traffic signs, etc, for Bridge A, B, C an	nd D, Othe
8.84.4. Wommak Lepig al Pau20 av Mada g fada VC077) 48 45 9.40-14 <td></td> <td></td> <td>45</td> <td>11</td> <td>21-May-18 A</td> <td>04-Oct-18</td> <td>_</td> <td>16</td> <td></td> <td></td> <td></td> <td></td> <td></td>			45	11	21-May-18 A	04-Oct-18	_	16					
81846 Viannara Lapra (Pru/M2 on Vada (prod.V071) 4 4 4 95047 1	S-1040c	Watermains Laving at Pier AD9 on Viaduct (under VO171)	36	36	18-Oct-18*	28-Nov-18	_	19				_	
a 1 Add Memory Lyng a Per AL2 or Model Lyner (VOT) 42 2 2 1 Mon 101 16 40 10 Memory Lyng a Per AL2 or Model Lyner (VOT) 50 50 Memory Lyng a Per AL2 or Model Lyner (VOT) 50 50 Selection Memory Lyng a Per AL2 or Model Lyner (VOT) 50 50 Selection 50 Selection Memory Lyng a Per AL2 or Model Lyner (VOT) 50 50 Selection 50 Selection Selecion Selecion Selecion <td< td=""><td></td><td></td><td></td><td></td><td>05-Oct-18*</td><td>24-Nov-18</td><td>_</td><td>16</td><td></td><td></td><td> w</td><td></td><td></td></td<>					05-Oct-18*	24-Nov-18	_	16			w		
61:04 Waterstrik Lajvig 19 FeAAV or Volkski Lajer VO/Tr) 48 48 10 February 10 FeAAV or Volkski Lajer VO/Tr) 40 48 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeAAV or Volkski Lajer VO/Tr) 40 40 40 February 10 FeBru													
Bit Bit Instantion of Dam Gase (Lifer VQ) 10 64 95-461.8 06-00-19 20 Bit Bit Maternoling Addr. Addr. Math. Baak. Gases cally 6 10 235-867.8 To Date Parameter Addr. Addr. Baak. Gases cally 10 10 20 235-867.8 10 Coll 14 20 10 205-867.8 10 Pool Parameter Addr. Addr. Baak. Gases cally on only. Pool Parameter Addr. Addr. Baak. Gases calls call. Under Call. Call. Bit Instantion of Call. Call. Bit Instantin of							_	19				_	
Bit 100 And Patternet A41 - Akl Base coarse only 6 10 24 Abyr 14 00 Oct 1 20 Bit 100 And Patternet A44 - Akl Base coarse only 10 10 20 Oct 1 20 10 10 10 10 20 1													
Strifte Wategrooting ABA Abit Yead Strifte Strifte Wategrooting ABA Abit Yead Wategrooting ABA Abit Yead Mathematical Yead Strifte Wategrooting ABA Abit Yead Yead Strifte Wategrooting ABA Abit Yead Wategrooting ABA Abit	-						_			Boad Pavement AA1 - AA18 /ha	ace marse only) Boad Pavement AA1 -		
Strike Not Pharmarit Ade Add 2 Wale Base corres only 4 4 19-03-18 19-03-18 0 Strike Strike 19 19 19-03-18 23-03-18 0 0 Strike Strike 19 19 19-03-18 23-03-18 0 0 Strike Strike 19 19 19-03-18 22-03-18 0 0 Strike 5 5 5 22-03-18 24-03-18 1 0		· · ·					_	2				AATO (Dase Guaise Only)	
B-1000 Vaterpooling ABE-AB12 East 19 19 10 Ox 16 Ox New Pool								8		· · · ·			
6:1080 Note Prevenent AB6 AB 12 East pase coarse only) 4 4 4 19-02-19 29-02-19 9 6:1080 Waterpooling ADB - AD1 Vast 5 5 15-02-19 29-02-19 0 6:1080 Waterpooling ADB - AD1 Vast 5 5 15-02-19 29-02-18 0 0 0 15-02-19 29-02-18 0 0 0 0 0 0 0 0 0 22-02-18 0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td><td>3</td><td></td><td></td><td></td><td>, ,</td><td></td></td<>							_	3				, ,	
B-1000 Vaterpooling on Wakewy AB-AB12 4 4 4 24 Oct 18 27 Oct 18 6 B-1080 Wakepooling AD-AD 4 West 5 5 15 Oct 18 20 Oct 18 4 B-1090 Vaterpooling AD-AD 4 West four course only 0 0 2 2-0-18 1 B-1090 Vaterpooling AD-AD 4 Bat 5 25 22 Oct 18 26 Oct 18 6 B-10900 Vaterpooling AD-AD 4 Bat 5 25 22 Oct 18 6 6 B-10900 Waterpooling AD-AD 14 West and East (base course only) 0 0 2 2-0-18 6 B-10900 Waterpooling On Wakewy AD-AD14 West and East States 0								8		Baad			
S-1900 Waterpooling ADB ADI 4 West 5 5 15 05 15 05 15 05 15 05 15 06								8					
School 2 Road Pavement A28 - AD14 West (base coarse only) 3 3 22-Oct 18 24-Oct 18 1 School 2 Wateproofing A28 - AD14 West (base coarse only) 3 3 22-Oct 18 24-Oct 18 4 School 2 Road Pavement A28 - AD14 West (base coarse only) 3 3 22-Oct 18 24-Oct 18 4 School 2 Road Pavement A28 - AD14 East (base coarse only) 3 3 22-Oct 18 24-Oct 18 4 School 2 Road Pavement A28 - AD14 East (base coarse only) 3 3 22-Oct 18 30-Oct 18 4 School 2 Wateproofing on Wakway A28-AD 4 East (base coarse only) 10 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td><td>4</td><td></td><td></td><td></td><td></td><td></td></td<>							_	4					
Sr 100011 Witeproofing ADB - ADI 4 East 5 5 22-Oct-18 26-Oct-18 6 Sr 100012 Pood Pawment ADB - ADI 4 East Sa 2 27-Oct-18 30-Oct-18 6 Sr 100012 Pood Pawment ADB - ADI 4 East Sa 2 27-Oct-18* 30-Oct-18 6 Sr 100012 Witeproofing on Wakway (ADB-ADI 4 East States) 10 12 12 24-Aov-18 6 Sr 100102 Pood Pawment ADB - ADI 4 East Sates 10 10 22-Oct-18* 01-Nov-18 4 Sr 100102 Pood Pawment ADB - ADI 4 East Sates Pool Pawment and Pood Marking 12 12 12-Oct-18* 27 SD Works Wateproofing on Wakway (ADB-ADI 4 West and East States) Pool Pawment and Pood Marking Pool Pawment ADB - ADI 4 East Sates Pool Pawment ADB - ADI 4 East Sates WA10102 Pipe Laying - OCH 0 - 20 (2M450) near East TWSRW, 20m 12 12 12-Oct-18* 21 WA1020 Pipe Laying - OCH 113 - 135 (DM450) near East TWSRW, 20m 13 13 29-Sep-18* Octo-Oct-18* 5 MA1020 Pipe Laying - OCH 113 - 135 (DM450) near East TWSRW, 20m 13 13							_	44		·····			
Schools Pad Pavement ADB-AD14 East (base coame only) 3 3 27-Oct-18* 30-Oct-18* 6 Schools Waterpooling on Wakway (ADB-AD14 West and East Sides) 10 10 10 22-Oct-18* 01 How-18 4 Schools Waterpooling on Wakway (ADB-AD14 West and East Sides) 12												arse only)	
Sci 1000 Waterproofing on Wakway (ADB-AD14 West and East Sides) 10 10 12 22 24 Nov-18 4 Sci 110 Pinal Pavement and Raad Marking 12 12 24 Nov-18 -27 SKI 100 Pinal Pavement and Raad Marking 12 12 24 Nov-18 -27 SKI 100 Pinal Pavement and Raad Marking 12 12 24 Nov-18 -27 SKI 100 Pipe Laying - CHA 0- 20 (DM450) near Ext. TWSRW, 20m 12 12 12 12 26 Oct-18 21 WA1010a Pipe Laying - CHA 0- 20 (DM450) near Ext. TWSRW, 20m 11 17 16 Apr-18A 11-Oct-18 21 WA1010a Pipe Laying - CHA 13 - 135 (DM450) near Ext. TWSRW, 20m 13 13 20-Sep-18 Pipe Laying - CHA 13 - 135 (DM450) near Ext. TWSRW, 20m 20 3Month Rolling Programme updated to 20189-20 Date Revision CEDD Contract No. CV/2012/09 3Month Rolling Programme updated to 20189-20 Date Revision Checked App W Nove Summary Bar Critical Remaining Work Summary Bar S-Month Rolling Programme 3Month Rolling Programme 20-Sep-18 Date Revision Checked App 10								0					
Skill Final Pavement and Road Marking 12<				-				6					
SD Works SD Works NHSD Fire Mains (CH4) Pipe Laying - CH4 0 - 20 (DNH50) near Ext. TWSRW, 20m 12 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4</td> <td></td> <td></td> <td>Waterproofing on Walkway (AD8-</td> <td></td> <td></td>								4			Waterproofing on Walkway (AD8-		
NH50 Fire Mains (CH4) WA-1010a Pipe Laying - CH4.0 - 20 (DN450) near Ext. TWSRW, 20m 12 12 12 12 26-Oct.18 21 WA-1010a Pipe Laying - CH4.0 - 20 (DN450) near Ext. TWSRW, 20m 11 17 16-Apr.18A 11-Oct.18 21 WA-1020 Pipe Laying - CH4.313-135 (DN450) near Ext. TWSRW, 20m 13 13 20-Sep-18 06-Oct.18 5 Actual Work Remaining Work Summary Bar CEEDD Contract No. CV/2012/09 3Month Rolling Programme updated to 2018-920 Liantang / Heung Yuen Wai BCP - Site Formation & Infrastructure Works, Contract 3 3-Month Rolling Programme 20-Sep-18		Final Pavement and Road Marking	12	12	24-Nov-18	07-Dec-18		27				Final Pavement and Roa	ıd Markir
VA-1010a Pipe Laying - CHA 0 - 20 (DN450) near Ext. TWSRW, 20m 12 13 13 13 13 14 10 12 13 13 13 13													
WA-1010c Pipe Laying - CHA 38 - 113 (DN450) near Ext. TWSRW, 20m 11 17 16-Apr-18A 11-Oct-18 -21 WA-1020 Pipe Laying - CHA 13 - 135 (DN450) near Ext. TWSRW, 20m 13 13 20-Sep-18* 06-Oct-18 -5 Actual Work Remaining Work Summary Bar Critical Remaining Work Milestone CEDD Contract No. CV/2012/09 Liantang / Heung Yuen Wai BCP - Site Formation & Infrastructure Works, Contract 3 3-Month Rolling Programme 3MPR062 Page 5 of 8 20-Sep-18													
WA-1020 Pipe Laying - CHA 113 - 135 (DN450) near Ext. TWSRW, 20m Actual Work Actual Work Remaining Work Summay Bar Citical Remaining Work Milestore Milestore CEDD Contract No. CV/2012/09 Liantang / Heung Yuen Wai BCP - Site Formation & Infrastructure Works, Contract 3 3-Month Rolling Programme 3MPR062 Page 5 of 8 20-Sep-18													
Actual Work CEDD Contract No. CV/2012/09 340onth Rolling Programme updated to 2018-920 Remaining Work Liantang / Heung Yuen Wai BCP - Site Formation & Infrastructure Works, Contract 3 Date Revision Checked App Critical Remaining Work Milestore 34Month Rolling Programme Infrastructure Works, Contract 3								21				Pipe Laying - CHA 38 - 113 (DN450) nea	ar Ext. T
Remaining Work Liantang / Heung Yuen Wai BCP - Site Formation & Summay Bar Infrastructure Works, Contract 3 Critical Remaining Work 3-Month Rolling Programme ♦ Milestore	WA-1020	Pipe Laying - CHA 113 - 135 (DN450) near Ext. TWSRW, 20m	13	13	20-Sep-18*	06-Oct-18		-5		Pipe Laying - CHA 113 - 135	5 (DN450) near Ext. TWSRW, 20m		
Remaining Work Liantang / Heung Yuen Wai BCP - Site Formation & Date Revision Checked Application Summary Bar Infrastructure Works, Contract 3 Infra				Actua	l Work			CEDD Contra	t No CV/2	012/09	3-Month Rolling		0
Summary Bar Critical Remaining Work ♦ Milestone Summary Bar Infrastructure Works, Contract 3 Summary Bar Inf											Date Revi	sion Checked	Арр
Critical Remaining Work ♦ ♦ Milestone					-								
					-	w.							
3MPR062 Page 5 of 8 20-Sep-18					•			3-Month Roll	ing Progra	mme			
		•	•	Miles	tone								

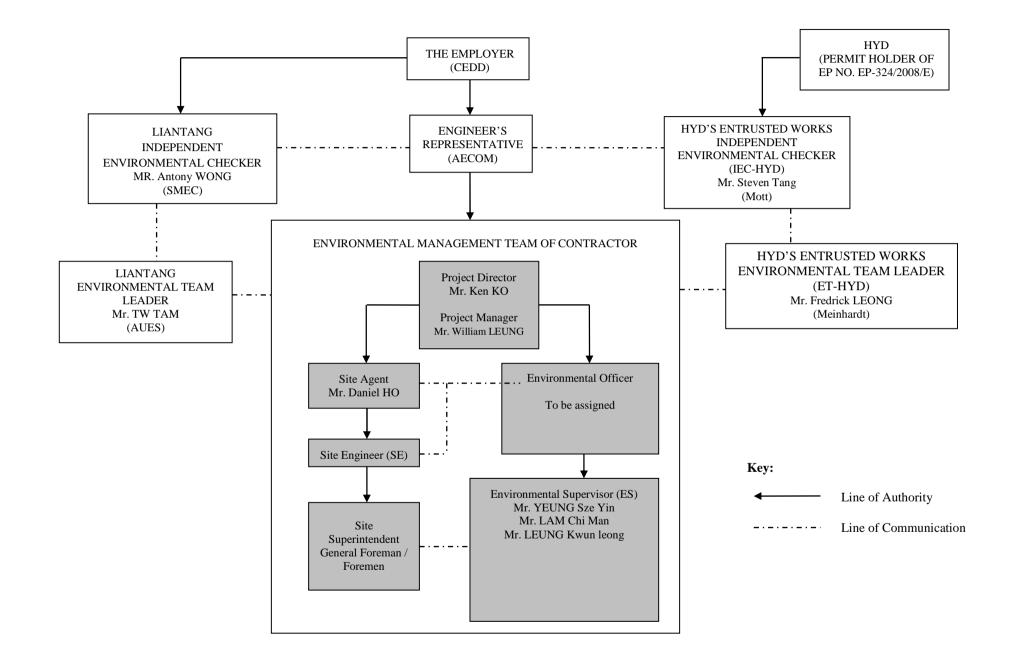
	Activity Name	OD	RD	Start	Finish	TF	2018 201
WA-1030	Pipe Laying - CHA 135 - 160 (DN450) near Ext. TWSRW, 25m	19	19	18-Apr-18 A	13-Oct-18*	— ,	Aug Sep Oct Nov Dec Ja Pipe Laying - CH4 135 - 160 (DN450) near Ext. Pipe Laying - CH4 135 - 160 (DN450) near Ext. Pipe Laying - CH4 135 - 160 (DN450) near Ext.
WA-1030	Pipe Laying - CHA 155 - 228 (DN450) near Ext. TWSRW, 2311 Pipe Laying - CHA 185 - 228 (DN450) near Ext. TWSRW, 43m	24	24	20-Sep-18*	20-Oct-18		
							Pipe Laying CHA 185 - 228 (DN450) near Ext. TWSRW, 43m
WA-1130b	Pipe Laying - CHA 373 - 380 (DN450) near Ext. TWSRW, 7m	18	18	•	12-Oct-18	-10	Pipe Laying - CHA 373 380 (DN450) near Ext. TWSRW, 7m
WA-1130c	Pipe Laying - CHA 380 - 388 (DN450) near Ext. TWSRW, 8m	12	12	20-Sep-18*	05-Oct-18	-4	Pipe Laying - CHA 380 - 388 (DN450) near Ext. TWSRW, 8m
WA-2080	Pipe Laying - CHA 624 - 663 (DN450) along Ext. TWSRW SB, 39m	23	23	20-Sep-18*	19-Oct-18	-15	Pipe Laying - CHA 624 - 663 (DN450) along Ext. TWSRW SB, 39m
WA-3040	Pipe Laying - CHA 810 - 835 (DN450) along Ext. TWSRW SB, 25m (NBZ)	14	14	20-Sep-18*	08-Oct-18	-46	Pipe Laying - CHA 810 - 835/(DN450) along Ext. TWSRW SB, 25m (NBZ)
WA-3050	Pipe Laying - CHA 835 - 880 (DN450) along Ext. TWSRW SB, 45m (NBZ)	14	14	09-Oct-18*	25-Oct-18	-46	Pipe Laying - CHA 835 - 880 (DN450) along Ext. TWSRW SB, 45m (NBZ)
WA-3060	Pipe Laying - CHA 880 - 925 (DN450) along Ext. TWSRW SB, 45m (NBZ)	14	14	26-Oct-18*	10-Nov-18	-46	Pipe Laying - CHA 880 - 925 (DN450) along Ext. TWSRW SB, 45m (NB2
WA-3080	Pipe Laying - CHA 925 - 972 (DN450) along Ext. TWSRW SB (Stage 2), 47m (NBZ)	13	13	12-Nov-18*	26-Nov-18	-46	Pipe Laying - CHA 925 - 972 (DN450) along Ext. T
WA-4100	Pressure Test for CHA (CHA 0 - 380)	13	13	27-Oct-18	10-Nov-18	-21	Pressure Test for CHA (CHA 0 - 380)
WA-4200	Pressure Test for CHA (CHA 380 - 810)	13	13	20-Oct-18*	03-Nov-18	-15	Pressure Test for CHA (CHA 380 - 810)
WA-4220	Pressure Test for CHA (CHA 810 - 972)	13	13	27-Nov-18*	11-Dec-18	-46	Pressure Test for CHA (CHA 81
DN1200 Wate	er Mains (CHC)						
WC-1030	Construction of IT inspection tee chamber(s) near the Jacking Pits	47	47	10-May-18 A	16-Nov-18	3	Construction of IT inspection tee chamber(s) near the Jacking Pi
	er Mains (CHF)			10 May 10 A	10140410		Construction of it inspection ree channel(s) near the sacking rin
WF-4000	Modification of Existing DN2200 DAV Chamber at FLH NB near Kiu Tau Footbridge (covered by VO no.50)	35	35	28-Sep-18*	09-Nov-18	-3	Modification of Existing DN2200 DAV Chamber at FLH NB near Kiu Tau Fo
Existing Nam	Wa Po Trunk Sewage Pumping Station (PST3)						
PS-1010	Construction of New Boundary Wall for Pumping Station (PST3)	80	74	25-Nov-16 A	18-Dec-18	-36	Construction of New I
	of Retaining Structures						
TWSRW-512	0 Remaining works incl. railing, u-channel on top of Bored Pile Wall (wait for VO)	22	22	25-Jun-18 A	18-Oct-18	-	
TWSRW-515	0 Slope Works and Retaining Wall of FL-C2 (covered by VO183)	60	25	01-Dec-17 A	22-Oct-18	-4	Slope Works and Retaining Wall of FL-C2 (covered by VO 183), Slope Works and Retaining Wall of
At-Grade Roa	dworks					<u> </u>	
	Determine Well DWD Dev 0000 8 0000 (second by VONs 44.0)	15	26	05-Feb-16 A	23-Oct-18	4	Retaining Wall RW9 - Bay 9002 & 9003 (covered by VO No.116), Retaining Wall RW9 - Bay 900
TWSRW-511	U Retaining Wall RW9 - Bay 9002 & 9003 (covered by VO No. 116)	45					Filling Works between Retaining Wal RW7 and RW8, Filling Works between
	0 Retaining Wall RW9 - Bay 9002 & 9003 (covered by VO No.116)		39			-18	Thing Works between the tailing works between the tailing works between
TWSRW-512	0 Filling Works between Retaining Wal RW7 and RW8	192	39	07-Jun-16 A	07-Nov-18		
TWSRW-512 TWSRW-512	0 Filling Works between Retaining Wal RW7 and RW8 0 Road Pavement and remaining works of Vehicular Access to Lot 81	192 27	27	07-Jun-16 A 12-Jul-18 A	07-Nov-18 24-Oct-18	-21	
TWSRW512 TWSRW512 TWSRW516	Filling Works between Retaining Wal RW7 and RW8 Road Pavement and remaining works of Vehicular Access to Lot 81 Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100)	192 27 85	27 48	07-Jun-16 A 12-Jul-18 A 27-Oct-16 A	07-Nov-18 24-Oct-18 17-Nov-18	-21	Construction of Extended Podium near RW7 incl. filling works &
TWSRW512 TWSRW512 TWSRW516 TWSRW517	Filling Works between Retaining WaI RW7 and RW8 Road Pavement and remaining works of Vehicular Access to Lot 81 Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100) Oonstruction of Pavilion (covered by VO No.137)	192 27	27	07-Jun-16 A 12-Jul-18 A	07-Nov-18 24-Oct-18	-21	Construction of Extended Podium near RW7 incl. filling works 8
TWSRW512 TWSRW512 TWSRW516 TWSRW517	Filling Works between Retaining Wal RW7 and RW8 Road Pavement and remaining works of Vehicular Access to Lot 81 Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100)	192 27 85	27 48	07-Jun-16 A 12-Jul-18 A 27-Oct-16 A	07-Nov-18 24-Oct-18 17-Nov-18	-21	Road Pavement and remaining works of Vehicular Access to Lot 81, Road Pavement and remaining works of Vehicular Access to Lot 81, Road Pavement and remaining works & Construction of Extended Podium near RW7 incl. filling works & Construction of Pavilion (covered by VO No. 137), Construction
TWSRW512 TWSRW512 TWSRW516 TWSRW517	Filling Works between Retaining WaI RW7 and RW8 Road Pavement and remaining works of Vehicular Access to Lot 81 Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100) Construction of Pavilion (covered by VO No.137) <i>Tehween CH530 and CH540</i>	192 27 85	27 48	07-Jun-16 A 12-Jul-18 A 27-Oct-16 A	07-Nov-18 24-Oct-18 17-Nov-18	-21	Construction of Extended Podium near RW7 incl. filling works &
TWSRW-512 TWSRW-516 TWSRW-516 TWSRW-517 WSRW Zone Al-Grade Road	Filling Works between Retaining WaI RW7 and RW8 Road Pavement and remaining works of Vehicular Access to Lot 81 Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100) Construction of Pavilion (covered by VO No.137) <i>Tehween CH530 and CH540</i>	192 27 85	27 48	07-Jun-16 A 12-Jul-18 A 27-Oct-16 A	07-Nov-18 24-Oct-18 17-Nov-18	-21	Construction of Extended Podium near RW7 incl. filling works & Construction of Pavilion (covered by VO No. 137), Construction
TWSRW-512 TWSRW-516 TWSRW-516 TWSRW-517 WSRW-517 WSRW-517 Al-Grade Road TWSRW-719	Filling Works between Retaining WaI RW7 and RW8 O Follow Retaining Works of Vehicular Access to Lot 81 O Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100) O Construction of Pavlion (covered by VO No.137) <i>Tetweeen CH530 and CH640</i> dworks O Remaining Road Drainage, Road Formation, Road Pavement and Footpath (incl.	192 27 85 49	27 48 49	07-Jun-16 A 12-Jul-18 A 27-Oct-16 A 10-Aug-18 A	07-Nov-18 24-Oct-18 17-Nov-18 19-Nov-18	-21 -27 -28	Construction of Extended Podium near RW7 incl. filling works & Construction of Pavilion (covered by VO No. 137), Construction
TWSRW-512 TWSRW-516 TWSRW-516 TWSRW-517 WSRW-517 WSRW-517 Al-Grade Road TWSRW-719	Filling Works between Retaining Wal RW7 and RW8 O Following Works of Vehicular Access to Lot 81 O Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100) O Construction of Pavilion (covered by VO No.137) 7 betweeen CH530 and CH540 dworks O Remaining Road Drainage, Road Formation, Road Pavement and Footpath (incl. Zone 6 & Zone 7)	192 27 85 49	27 48 49	07-Jun-16 A 12-Jul-18 A 27-Oct-16 A 10-Aug-18 A	07-Nov-18 24-Oct-18 17-Nov-18 19-Nov-18	-21 -27 -28	Construction of Extended Podium near RW7 incl. filling works & Construction of Pavilion (covered by VO No. 137), Construction
TWSRW-512 TWSRW-516 TWSRW-516 TWSRW-517 WSRW-517 WSRW-517 Al-Grade Road TWSRW-719	Filling Works between Retaining Wal RW7 and RW8 O Following Works of Vehicular Access to Lot 81 O Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100) O Construction of Pavilion (covered by VO No.137) 7 betweeen CH530 and CH540 dworks O Remaining Road Drainage, Road Formation, Road Pavement and Footpath (incl. Zone 6 & Zone 7)	192 27 85 49	27 48 49	07-Jun-16A 12-Jul-18A 27-Oct-16A 10-Aug-18A 27-Sep-18*	07-Nov-18 24-Oct-18 17-Nov-18 19-Nov-18	-21 -27 -28	Construction of Extended Podium near RW7 incl. filling works & Construction of Pavilion (covered by VO No. 137), Construction Remaining Fload Drainage, Road Formation, Road Paveme CEDD Contract No. CV/2012/09 3Month Rolling Programme updated to 20189-20
TWSRW-512 TWSRW-516 TWSRW-516 TWSRW-517 WSRW-517 WSRW-517 Al-Grade Road TWSRW-719	Filling Works between Retaining Wal RW7 and RW8 O Following Works of Vehicular Access to Lot 81 O Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100) O Construction of Pavilion (covered by VO No.137) 7 betweeen CH530 and CH540 dworks O Remaining Road Drainage, Road Formation, Road Pavement and Footpath (incl. Zone 6 & Zone 7)	192 27 85 49	27 48 49 49 44	07-Jun-16A 12-Jul-18A 27-Oct-16A 10-Aug-18A 27-Sep-18*	07-Nov-18 24-Oct-18 17-Nov-18 19-Nov-18	-21 -27 -28	Construction of Extended Podium near RW7 incl. filling works 8 Construction of Pavilion (covered by VO No.137), Construction Construction of Pavilion (covered by VO No.137), Construction Remaining Road Drainage, Road Formation, Road Pavement Remaining Road Drainage, Road Formation, Road Pavement CEDD Contract No. CV/2012/09 3Month Rolling Programme updated to 20189-20 Date Revision Checked Approv
TWSRW-512 TWSRW-516 TWSRW-516 TWSRW-517 WSRW-517 WSRW-517 Al-Grade Road TWSRW-719	Filling Works between Retaining Wal RW7 and RW8 O Following Works of Vehicular Access to Lot 81 O Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100) O Construction of Pavilion (covered by VO No.137) 7 betweeen CH530 and CH540 dworks O Remaining Road Drainage, Road Formation, Road Pavement and Footpath (incl. Zone 6 & Zone 7)	192 27 85 49 44	48 49 44 Actual Rema	07-Jun-16 A 12-Jul-18 A 27-Oct-16 A 10-Aug-18 A 27-Sep-18*	07-Nov-18 24-Oct-18 17-Nov-18 19-Nov-18	-21 -27 -28	Construction of Extended Podium near RW7 incl. filling works & Construction of Pavilion (covered by VO No. 137), Construction Remaining Poad Drainage, Road Formation, Road Paveme Remaining Poad Drainage, Road Formation, Road Paveme CEDD Contract No. CV/2012/09 tang / Heung Yuen Wai BCP - Site Formation &
TWSRW-512 TWSRW-516 TWSRW-516 TWSRW-517 WSRW-517 WSRW-517 Al-Grade Road TWSRW-719	Filling Works between Retaining Wal RW7 and RW8 O Following Works of Vehicular Access to Lot 81 O Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100) O Construction of Pavilion (covered by VO No.137) 7 betweeen CH530 and CH540 dworks O Remaining Road Drainage, Road Formation, Road Pavement and Footpath (incl. Zone 6 & Zone 7)	192 27 85 49 44	27 48 49 49 44 Actual Rema Summ	07-Jun-16 A 12-Jul-18 A 27-Oct-16 A 10-Aug-18 A 27-Sep-18* Work aining Work	07-Nov-18 24-Oct-18 17-Nov-18 19-Nov-18 19-Nov-18	-21 -27 -28	Construction of Extended Podium near RW7 incl. filling works & Construction of Pavilion (covered by VO No. 137), Construction Remaining Poad Drainage, Road Formation, Road Paveme Remaining Poad Drainage, Road Formation, Road Paveme Sector 2012/09 tang / Heung Yuen Wai BCP - Site Formation & Infrastructure Works, Contract 3
TWSRW-512 TWSRW-516 TWSRW-516 TWSRW-517 WSRW-517 WSRW-517 Al-Grade Road TWSRW-719	Filling Works between Retaining Wal RW7 and RW8 O Following Works of Vehicular Access to Lot 81 O Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100) O Construction of Pavilion (covered by VO No.137) 7 betweeen CH530 and CH540 dworks O Remaining Road Drainage, Road Formation, Road Pavement and Footpath (incl. Zone 6 & Zone 7)	192 27 85 49 44	27 48 49 49 44 Actual Rema Summ	07-Jun-16 A 12-Jul-18 A 27-Oct-16 A 10-Aug-18 A 27-Sep-18* Work siring Work nary Bar al Remaining Work	07-Nov-18 24-Oct-18 17-Nov-18 19-Nov-18 19-Nov-18	-21 -27 -28 -28	Construction of Extended Podium near RW7 incl. filling works of Construction of Pavilion (covered by VO No.137). Construction Permaining Poad Drainage, Road Formation, Road Paveme Remaining Poad Drainage, Road Formation, Road Paveme Sector CEDD Contract No. CV/2012/09 tang / Heung Yuen Wai BCP - Site Formation & Infrastructure Works, Contract 3 3-Month Rolling Programme
TWSRW-512 TWSRW-516 TWSRW-516 TWSRW-517 WSRW-517 WSRW-517 Al-Grade Road TWSRW-719	Filling Works between Retaining Wal RW7 and RW8 O Following Works of Vehicular Access to Lot 81 O Construction of Extended Podium near RW7 incl. filling works & slope protection (covered by VO No.100) O Construction of Pavilion (covered by VO No.137) 7 betweeen CH530 and CH540 dworks O Remaining Road Drainage, Road Formation, Road Pavement and Footpath (incl. Zone 6 & Zone 7)	192 27 85 49 44	27 48 49 44 44 Actual Rema Sumn Critica Miles	07-Jun-16 A 12-Jul-18 A 27-Oct-16 A 10-Aug-18 A 27-Sep-18* Work siring Work nary Bar al Remaining Work	07-Nov-18 24-Oct-18 17-Nov-18 19-Nov-18 19-Nov-18	-21 -27 -28 -28	Construction of Extended Podium near RW7 incl. filling works Construction of Extended Podium near RW7 incl. filling works Construction of Pavilion (covered by VO No. 137). Construct Remaining Poad Drainage, Road Formation, Road Pavene Remaining Poad Drainage, Road Formation, Road Pavene CEDD Contract No. CV/2012/09 tang / Heung Yuen Wai BCP - Site Formation & Infrastructure Works, Contract 3

ivity ID	Activity Name	OD	RD	Start	Finish	1	TF		2018			2019
At-Grade Roa	tworks						Aug	Sep	Oct	Nov	Dec	Jan
	Remaining Road Drainage, Road Formation, Road Pavement and Footpath	60	60	28-Sep-18*	08-Dec-18		-28					
		60	60	20-36p-10	00-Dec-10	,	-20				Remaining Road Drainag	je, Hoad For
Remainder of												
TWSRW-9020	Filling Works to the abandoned section of TWSRW and modify existing sewerage manhole	75	75	28-Sep-18*	28-Dec-18	3	-43					Filling Work
Utilities Layir	g Works											
UU-1010A	Utilities Duct Laying in Area 1, Phase 2, CLP - 132kV(150mVA), approx.30m at	16	12	10-Jan-18 A	05-Oct-18	•	-89		Utilities Duct Laying in Area 1, Ph	ase 2, CLP - 132kV(150mVA), approx.3	0m at interface section, Utilities Duct L	∟aying in Are
UU-1010B	interface section Utilities Duct Laying in Area 1, Phase 2, Towngas - DN600, approx.20m at interface section	58	58	23-Nov-18	01-Feb-19)	-89					
UU-1030	Utilities Duct Laying in Area 3, Phase 1 (along existing TWSRW, Approx. 150m) (by	7	7	28-Sep-18*	04-Oct-18	;	13		Utilities Duct Laying in Area 3, Pha	se 1 (along existing TWSRW, Approx. 1	50m) (by utilities undertakers)	
UU-1030A	utilities undertakers) Utilities Duct Laying in Area 3, Phase 2, CLP - 132kV(150mVA), approx. 30m	27	49	10-Jan-18 A	19-Nov-18	3	-28			Utilities Duct	Laying in Area 3, Phase 2, CLP - 132	kV(150mVA
UU-1040A	Utilities Duct Laying in Area 4, Phase 2, Towngas - DN600 & DN400, approx. 50m (by their own TTA)	121	50	15-Sep-16 A	20-Nov-18	3	-62			Utilities Duc	Laying in Area 4, Phase 2, Towngas	3 - DN600 &
UU-1040B	Utilities Duct Laying in Area 4, Phase 2, CLP - 132kV(150mVA), approx. 50m (by their	33	33	21-Nov-18	31-Dec-18	3	-62					Utilitie
Switch-Over	own TTA) f Existing Utilitiess											
	Switch-over Works (CLP 11 kV)	16	16	00 Con 10t	13-Oct-18		448					
		16		28-Sep-18*				-	Switch-over Works (Cl	P 11 KV)		_
UU-SO-3500	Switch-over Works (Towngas, DN400)	30	30	01-Dec-18*	30-Dec-18	3	370					Switch-
Remaining Wo	rks for Noise Barrier along realigned TWSRW											
TWSRW-NB-1	Noise Barrier Steelworks & Panel for NB2 at Zone 5	15	15	25-Oct-18*	10-Nov-18	3	-21			Noise Barrier Steelworks	& Panel for NB2 at Zone 5	
Stage N4A & I	4B - Realignment of Tai Wo Service Road East (KD-13 & KD-14)											
TWSRE Zone	between CH100 and CH270											
At-Grade Roa	tworks											
	Road Formation, Kerb and Pavement (Incl. FL/F8A, FL/F9)	24	42	11-Oct-17 A	10-Nov-18							
							-4				d Pavement (Incl. FL/F8A, FL/F9), R	
TWSRE-119	Drainage Works on Permanent Cycle Track (under VO159)	80	56	15-Jan-18 A	27-Nov-18	3	-50			Dr	rainage Works on Permanent Cycle Tr	ack (under \
TWSRE-120	Road Pavement on Permanent Cycle Track	32	32	28-Nov-18	07-Jan-19	•	-50			_		
TWSRE Zone	between CH270 and CH380											
At-Grade Roa	dworks											
TWSRE-210	Road Formation, Kerb and Pavement	20	22	23-Oct-17 A	10-Nov-18	3	-4			Road Formation, Kerb ar	d Pavement, Road Formation, Kerb	and Pavem
TWSRE-211	Drainage Works on Permanent Cycle Track (under VO159)	80	55	26-Mar-18 A	26-Nov-18	3	-50			Dra	Inage Works on Permanent Cycle Tra	ick (under V
TWSRE-212	Road Pavement on Permanent Cycle Track	33	33	27-Nov-18	07-Jan-19	,	-50			_	,	
		00	00	2.110110	or dan ro							
	between CH380 and CH456											
At-Grade Roa	dworks											
TWSRE-305	Drainage Works on Permanent Cycle Track (under VO159)	45	45	03-Apr-18 A	14-Nov-18	3	-47			Drainage Works on	Permanent Cycle Track (under VO15	9), Drainage
TWSRE-306	Road Pavement on Permanent Cycle Track	40	40	15-Nov-18	03-Jan-19	•	-47					R
Remaining Wo	rks for Noise Barrier along realigned TWSR East											
TWSRE-1160	Remaining Noise Barrier NB3 Stem Wall (24m long)	14	14	22-Oct-18*	06-Nov-18	3	0			Remaining Noise Barrier NB3	stem Wall (24m long)	
			Actual	Work			CEDD Contrac	t No. CV/201	2/09	3-Month Rolling Pr	rogramme updated to 2018-9-20	J
				ining Work		,				Date Revisio	n Checked	Approve
				nary Bar		I	Liantang / Heung Yuen W					
				al Remaining Wo	ork		Infrastructure		r i na star			
			Milest	•	· ·		3-Month Roll					
	· · · · · · · · · · · · · · · · · · ·			t Baseline Bar			3MPR062F	Page 7 of 8	20-Sep-18			
			ngeo	a dasenne dan								

Activity ID	Activity Name	OD	RD	Start	Finish	TI	2018			2019
							Aug Sep Oct	Nov	Dec	Jan
	2 Installation of Steelwork & Transparent Panel - Noise Barrier NB3 (254m)	35	78	09-Jun-17 A	22-Dec-18	-4(Insta	Ilation of Steelwork
Stage 1C - Viac	luct Structure & TCSS Civil Provisions (KD-9)									
Viaduct Bridge	e Segement Erection									
Key Segment	Erection and Stitch Casting (Narrow-box Section)									
KD-D-2000	Construction of longitudinal stitch at Bridge D3	35	19	11-May-18 A	13-Oct-18	4	Construction o	ongitudinal stitch at Bridge D3, Constructio	n of longitudinal stitch at Bridge D3	
Major Works o	n Deck Surfaces									
Parapet Insta	llation									
Bridge D										
	M Parapet Installation for Bridge D (AD10W-AD14W), LHS	22	19	05-Jun-18 A	13-Oct-18	19	Derest hereit	ion for Bridge D (AD10W-AD14W), LHS, P		
								ion for Bridge D (AD10W-AD14W), LHS, P		
	Parapet Installation for Bridge D (AD10E-AD14E), RHS	22	19	05-Jun-18 A	13-Oct-18	19	Parapet Instal	ion for Bridge D (AD10E-AD14E), RHS, Pa	rapet Installation for Bridge D (AD10E-A	(D14E), RHS
Landscaping	& Establishment Works (KD-4, 4A, 5, 5A, 6)									
Secton 3A - La	ndscaping Softworks in NB21									
S3A-1000	Transplant and Landscaping Softworks in NBZ1	50	50	05-Nov-18*	04-Jan-19	-101				Transp
Secton 3 - Ren	nainder of Landscaping Softworks Not Included in Secton 3A									
S3-1000	Transplant and Landscaping Softworks on At grade Road	131	75	26-Mar-18 A	19-Dec-18	-89			Transpla	nt and Landscapin
S3-1010	Transplant and Landscaping Softworks on Viaduct or other remaining area	48	48	15-Oct-18*	10-Dec-18	-4			Transplant and Land	Iscaping Softworks
Section 4A: Es	tablishment Works for Landscape Softworks under Section 3A									
S4A-1000	Establishment Works at NBZ1	365	365	05 lon 19	04-Jan-20	-125				
		365	365	05-Jan-19	04-0811-20	-12;				
	servation and Protection of Trees									
S5-1000	Preservation and Protection of Trees	0	0		04-Jan-19	-64				Presei
			Actual	Work			CEDD Contract No. CV/2012/09		Programme updated to 2018-9-2	
			Remai	ning Work		Li	ntang / Heung Yuen Wai BCP - Site Formation &	Date Revis	sion Checked	Approved
			Summa	ary Bar			Infrastructure Works, Contract 3			
			Critical	Remaining Wo	ork		3-Month Rolling Programme			
	•	•	Milesto	ne		2	IPR062Page 8 of 820-Sep-18			
			Project	Baseline Bar		3	raye 0 01 020*3ep*10			



Appendix B Project Organization Structure





Appendix C Calibration Certificates of Monitoring Equipment



RECALIBRATION DUE DATE: February 13, 2019

Environmental Certificate of Calibration

			Calibration	Certificatio	on Informat	ion			
Cal. Date:	February 1	3, 2018	Roots	meter S/N:	438320	Ta:	293	°К	
Operator:	Jim Tisch					Pa:	763.3	mm Hg	
Calibration	Model #:	TE-5025A	Calil	prator S/N:	1612				
			Mal Plant	A) (= 1	ATI	AD	A11		
	Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	∆H (in H2O)		
	1	1	2	(113)	1.3970	3.2	2.00		
	2	3	4	- 1	1.0000	6.3	4.00		
	3	5	6	1	0.8900	7.9	5.00		
	4	7	8	1	0.8440	8.7	5.50		
	5	9	10	1	0.7010	12.6	8.00		
				Data Tabula	tion				
	Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstc}\right)}$)(<u>Tstd</u>)		Qa	$\sqrt{\Delta H(Ta/Pa)}$		
	(m3)	(x-axis)	(y-ax	(is)	Va	(x-axis)	(y-axis)		
	1.0172	0.7281	1.42	93	0.9958	0.7128	0.8762		
	1.0130	1.0130	2.02	and the second se	0.9917	0.9917	1.2392		
	1.0109	1.1358	2.25		0.9896	1.1120	1.3854		
	1.0098	1.1964	2.37	A PERSON NEW YORK OF THE PARTY	0.9886	1.1713	1.4530		
	1.0046	1.4331	2.85 2.02 (0.9835	1.4030 m=	1.7524 1.26500	4	
	QSTD	m= b=	-0.03		QA	b=	-0.02263	1	
	QSID	r=	0.999		QA	r=	0.99988		
				Calculatio	1				
	Vstd=	∆Vol((Pa-∆P)/Pstd)(Tstd/T		1				
	Qstd=	Vstd/∆Time]				
			For subsequ	uent flow ra	te calculatio	ns:		-	
	Qstd=	1/m ((Pa <u>Tstd</u>	-))-b)	Qa=	$1/m\left(\sqrt{\Delta H}\right)$	H(Ta/Pa))-b)		
	Standard	Conditions							
Tstd		CONTRACTOR AND A CONTRACTOR OF A DATA OF				RECA	LIBRATION		
Pstd	1	mm Hg			US EPA recommends annual recalibration per 19				
AH: calibrat		Key ter reading (in H2O)		40 Code of Federal Regulations Part 50 to 51,				
		eter reading			1), Reference Metl		
Ta: actual a	bsolute tem	perature (°K)				ended Particulat		
		ressure (mm	Hg)		1		ere, 9.2.17, page		
b: intercept	t								
m: slope									

Tisch Environmental, Inc.

145 South Miami Avenue

Village of Cleves, OH 45002

www.tisch-env.cor TOLL FREE: (877)263-761(FAX: (513)467-900

TSP Sampler Calibration

Location: Lian Tang 3 Date: July 6, 2018 Sampler: TE-5170 MFC (Serial # : 2359) Tech: Sam Wong					SITE			
Sampler, TE-5170 MEC (Serial # • 2359) Tech, Sam Mong	Location:	Lian Tang 3				Date:	July 6, 2018	
Sampier. In Sive mic (Seriar # . 2555) reen. Sam wong	Sampler:	TE-5170 MFC	(Serial	# :	2359)	Tech:	Sam Wong	

		COND	ITIONS		
Barometric Pressure	(in Hg):	39.48	Corrected Pressure	(mm Hg):	1003
Temperature	(deg F):	85	Temperature	(deg K):	302
Average Press.	(in Hg):	39.48	Corrected Average	(mm Hg):	1003
Average Temp.	(deg F):	85	Average Temp.	(deg K):	302

		CALIBRATION ORIFICE	
Make:	Tisch	Qstd Slope:	2.02017
Model:	TE-5025A	Qstd Intercept:	-0.03691
Serial#:	1612	Date Certified:	February 13, 2018

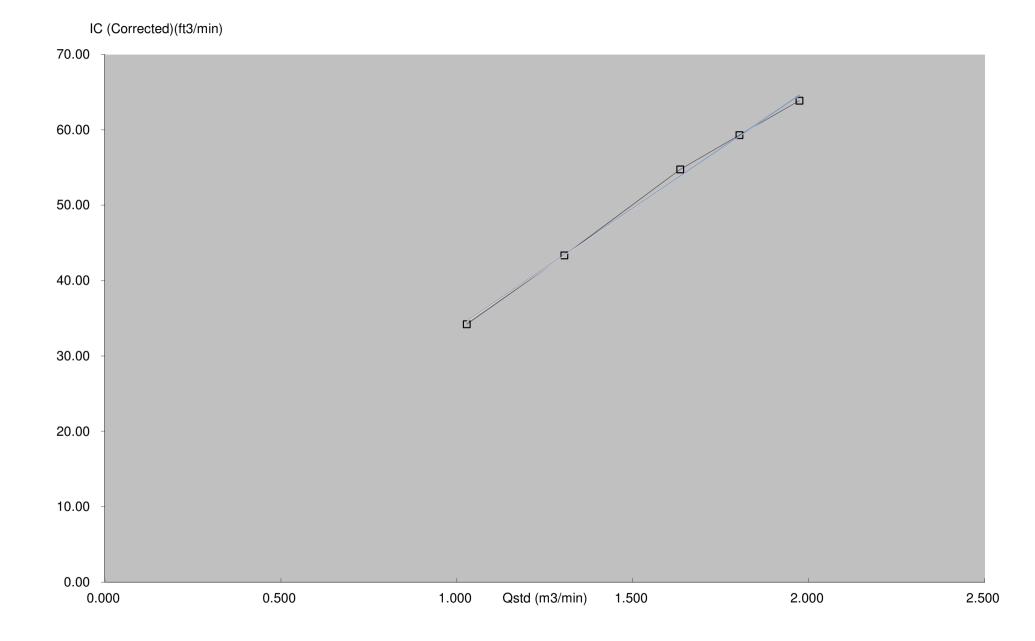
			CA	LIBRATIONS		
Plate or Test #	H2O (in)	Qstd (m3/min)	I (chart)	IC (corrected)	LINEAR REGRESSION	
1	12.00	1.973	56.0	63.85	Slope =	31.7376
2	10.00	1.803	52.0	59.29	Intercept =	1.9243
3	8.20	1.635	48.0	54.73	Corr. coeff.=	0.9987
4	5.20	1.305	38.0	43.33		
5	3.20	1.028	30.0	34.21	<pre># of Observations:</pre>	5

Calculations

IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]
Qstd = standard flow rate
IC = corrected chart response
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pa = actual pressure during calibration (mm Hg)
Tstd = 298 deg K
Pstd = 760 mm Hg
For subsequent calculation of sampler flow:
1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

Qstd = 1/m[Sqrt(H2O(Pa/Pstd)(Tstd/Ta))-b]

m = sampler slope b = sampler intercept I = chart response Tav = daily average temperature Pav = daily average pressure



TSP Sampler Calibration

SITE		
Location: Lian Tang 3 Sampler: TE-5170 MFC (Serial # : 2359)	September 6, 2018 Sam Wong	
CONDITIONS		

Barometric Pressure	(in Hg):	39.58	Corrected Pressure	(mm Hg):	1005
Temperature	(deg F):	88	Temperature	(deg K):	304
Average Press.	(in Hg):	39.58	Corrected Average	(mm Hg):	1005
Average Temp.	(deg F):	88	Average Temp.	(deg K):	304
,	1 2 1				

		CALIBRATION ORIFICE	
Make:	Tisch	Qstd Slope:	2.02017
Model:	TE-5025A	Qstd Intercept:	-0.03691
Serial#:	1612	Date Certified:	February 13, 2018

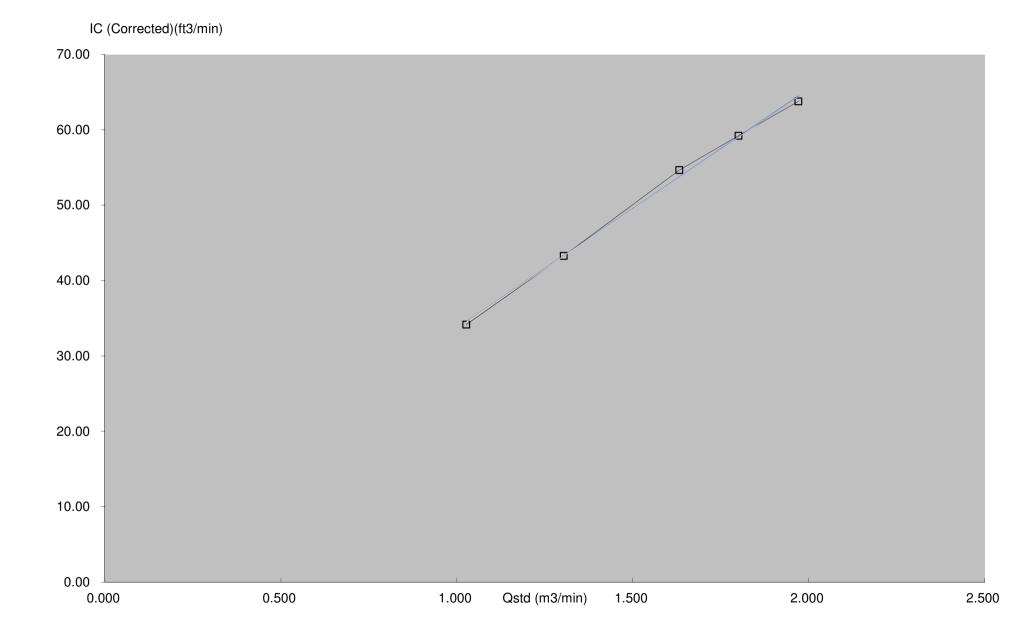
CALIBRATIONS						
Plate or Test #	H2O (in)	Qstd (m3/min)	I (chart)	IC (corrected)	LINEAR REGRESSION	
1	12.00	1.971	56.0	63.76	Slope =	31.7376
2	10.00	1.800	52.0	59.20	Intercept =	1.9206
3	8.20	1.632	48.0	54.65	Corr. coeff.=	0.9987
4	5.20	1.303	38.0	43.26		
5	3.20	1.026	30.0	34.16	<pre># of Observations:</pre>	5

Calculations

IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]
Qstd = standard flow rate
IC = corrected chart response
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pa = actual pressure during calibration (mm Hg)
Tstd = 298 deg K
Pstd = 760 mm Hg
For subsequent calculation of sampler flow:
1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

Qstd = 1/m[Sqrt(H2O(Pa/Pstd)(Tstd/Ta))-b]

m = sampler slope b = sampler intercept I = chart response Tav = daily average temperature Pav = daily average pressure





Certificate No.	708774		Page	1 of 2 Pa	ages
Customer :	Enovative Environmental Serv	ice Limited			
Address :	Flat 6, 3/F, Block E, Wah Lok	Industrial Centre, 31-	35 Shan Mei Stree	et, Shatin, N.T.,	Hong Kong.
Order No. :	Q73499		Date of receipt	: 1-	Sep-17
Item Tested					
Description :	Sound Level Calibrator				
Manufacturer :			I.D.	: 215901	
Model :	NC-74		Serial No.	: 34857296	
Test Conditi	ions				
Date of Test :	4-Sep-17		Supply Voltage	:	
Ambient Temp	•		Relative Humid		, 0
Test Specifi	cations			·	
Calibration chee	ck.				
Ref. Document	/Procedure : F21, Z02, IEC 609	42.			
Test Results	3				aja •
All results were	within the IEC 60942 Class 1 s	pecification.			
The results are	shown in the attached page(s).				
Main Test equip	oment used:				
Equipment No.	Description	<u>Cert. No.</u>		Traceable to	
S014	Spectrum Analyzer	707126		NIM-PRC & SC	L-HKSAR
S240	Sound Level Calibrator	703741		NIM-PRC & SC	L-HKSAR
S041	Universal Counter	707135		SCL-HKSAR	
S206	Sound Level Meter	707129		SCL-HKSAR	
will not include allow overloading, mis-ha for any loss or dam The test equipment	this Calibration Certificate only relate wance for the equipment long term drift andling, or the capability of any other la age resulting from the use of the equip t used for calibration are traceable to In oly to the above Unit-Under-Test only	:, variations with environm boratory to repeat the mea ment.	ental changes, vibratio asurement. Hong Kong	n and shock during g Calibration Ltd. sh	transportation, all not be liable
Calibrated by	:	αΑ	proved by :	F	

Elva (Chong
--------	-------

This Certificate is issued by:

Approved by :	
· · · · ·	Alan Chu

Date:	4-Sep-17

Hong Kong Calibration Ltd. Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street, Kwai Chung, NT, Hong Kong. Tel: 2425 8801 Fax: 2425 8646



Certificate No. 708774

Page 2 of 2 Pages

Results :

1. Level Accuracy (at 1 kHz)

UUT Nominal Value	Measured Value	Mfr's Spec.	
94 dB	94.1 dB	± 1 dB	

Uncertainty : $\pm 0.2 \text{ dB}$

2. Frequency Accuracy

UUT Nominal Value	Measured Value	Mfr's Spec.
1 kHz	0.998 kHz	±2 %

Uncertainty : ± 0.1 %

- **3.** Level Stability : 0.0 dB Uncertainty : ± 0.01 dB
- 4. Total Harmonic Distortion : < 1.5% Mfr's Spec. : < 3 % Uncertainty : ± 2.3 % of reading

Remarks: 1. UUT : Unit-Under-Test

- 2. The uncertainty claimed is for a confidence probability of not less than 95%.
- 3. Atmospheric Pressure : 1 025 hPa

----- END -----



Certificate No	. 803615		Pa	ge 1 of 2 Pages
Customer :	Enovative Environmental Se	ervice Limited		
Address :	Flat 6, 3/F, Block E, Wah Lok I	Industrial Centre, 31-35	5 Shan Mei Street, S	Shatin, N.T., Hong Kong
Order No. :	Q81437		Date of rece	ipt : 13-Apr-18
Item Tested				
Description	: Sound Level Calibrator			
Manufacturer			I.D.	: 217656
Model	: NC-74		Serial No.	: 34678506
Test Condit	ions			
Date of Test :	20-Apr-18		Supply Volta	age :
Ambient Temp				midity: (50 ± 25) %
Test Specifi				
Calibration che	ck			
	/Procedure : F21, Z02.			
rton. D'obuintoni	1110000010.121, 202.			
Test Result	S			
All				
	within the IEC 60942 Class 1			
The results are	shown in the attached page(S).		
Main Test equi	nment usod:			
Equipment No.		Cert. No.		Traceable to
S014	Spectrum Analyzer	707126		NIM-PRC & SCL-HKSAR
S240	Sound Level Calibrator	703741		NIM-PRC & SCL-HKSAR
S041	Universal Counter	802061		SCL-HKSAR
S206	Sound Level Meter	707129		SCL-HKSAR
0200		101123		JUL-INJAN
will not include allo overloading, mis-ha	n this Calibration Certificate only related wance for the equipment long term of andling, or the capability of any other hage resulting from the use of the equi	frift, variations with environ r laboratory to repeat the r	nmental changes, vibi	it and any uncertainties quoted ration and shock during transportation, Kong Calibration Ltd. shall not be liable
The test equipmen The test results ap	t used for calibration are traceable to ply to the above Unit-Under-Test only	o International System of U y	Jnits (SI), or by refere	nce to a natural constant.
	MAN			0
Calibrated ku	. X			(day
Calibrated by	Elva Chong	A	pproved by : _	Kin Wong
This Certificate is issued		D	ate: 20-Apr-18	NIT WONG
Hong Kong Calibration Lt	d.		a.o. 20-Api-10	
Jnit 8B, 24/F , Well Fung Fel: 2425 8801 - Fax: 242	Industrial Centre, No. 58-76, Ta Chuen Ping Str 25 8646	eet,Kwai Chung, NT,Hong Kong.		



Certificate No. 803615

Page 2 of 2 Pages

Results :

1. Generated Sound Pressure Level

UUT Nominal Value (dB)	Measured Value (dB)	IEC 60942 Class 1 Spec.	
94.0	94.2	± 0.4 dB	

Uncertainty : $\pm 0.2 \text{ dB}$

2. Short-term Level Fluctuation : 0.0 dB IEC 60942 Class 1 Spec. : ± 0.1 dB Uncertainty : ± 0.01 dB

3. Frequency

UUT Nominal Value (kHz)	Measured Value (kHz)	IEC 60942 Class 1 Spec.
1	0.999	± 1 %

Uncertainty : \pm 3.6 x 10 ⁻⁶

4. Total Distortion : < 1.1 % IEC 60942 Class 1 Spec. : < 4 % Uncertainty : ± 2.3 % of reading

Remark : 1. UUT : Unit-Under-Test

2. The uncertainty claimed is for a confidence probability of not less than 95%.

3. Atmospheric Pressure : 1 016 hPa.

----- END -----

The copyright of this certificate is owned by Hong Kong Calibration Ltd., It may not be reproduced except in full.



Certificate No	. 708773		Page	1 of 3 Pages
Customer :	Enovative Environmental Ser	vice Limited		
Address :	Flat 6, 3/F, Block E, Wah Lok	Industrial Centre,	31-35 Shan Mei Stre	eet, Shatin, N.T., Hong Kong.
Order No. :	Q73499		Date of receip	t: 1-Sep-17
Item Tested	k			
Description	: Sound Level Meter			
Manufacturer	: Rion		I.D.	:
Model	: NL-52		Serial No.	: 00821072
Test Condi	tions			
Date of Test :	5-Sep-17		Supply Voltag	je :
Ambient Tem	perature : (23 ± 3)°C		Relative Humi	idity:(50 ± 25) %
Test Specif	fications			
Calibration che	⊳ck			
	t/Procedure: Z01, IEC 61672.			
Test Result	ts			
	e within the IEC 61672 Type1 o e shown in the attached page(s)		pecification.	
Main Test equ	ipment used:			
Equipment No	•	Cert. No.		Traceable to
S017	Multi-Function Generator	C170120		SCL-HKSAR
S240	Sound Level Calibrator	703741		NIM-PRC & SCL-HKSAR
will not include all overloading, mis- for any loss or da The test equipme	in this Calibration Certificate only relate owance for the equipment long term dr handling, or the capability of any other l mage resulting from the use of the equi nt used for calibration are traceable to	ift, variations with enviro laboratory to repeat the ipment. International System of	onmental changes, vibra measurement. Hong Ko	tion and shock during transportation, ong Calibration Ltd. shall not be liable
The test results a	pply to the above Unit-Under-Test only			
Calibrated by	· :		Approved by :	

Elva Chong

This Certificate is issued by:

Alan Chu Date: 5-Sep-17

Hong Kong Calibration Ltd. Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street,Kwai Chung, NT,Hong Kong. Tei: 2425 8801 Fax: 2425 8646



Certificate No. 708773

Page 2 of 3 Pages

Results :

1. Self-generated noise: 16.4 dBA (Mfr's Spec \leq 17 dBA)

2. Acoustical signal test

	UUT Se	etting			
	Frequency	Time	Octave	Applied	UUT
Range (dB)	Weighting	Weighting	Filter	Value (dB)	Reading (dB)
20-130	A	F	OFF	94.0	94.1
		S	OFF		94.1
	С	F	OFF		94.1
	Z	F	OFF		94.1
	A	F	OFF	114.0	114.1
		S	OFF		114.1
	С	F	OFF		114.1
	Z	F	OFF		114.1

IEC 61672 Type 1 Spec. : \pm 1.1 dB Uncertainty : \pm 0.1 dB

3 Electrical signal tests of frequency weightings (A weighting)

Frequency	Attenuation (dB)	IEC 61672 Type 1 Spec.
31.5 Hz	-39.7	- 39.4 dB, ± 2 dB
63 Hz	-26.2	- 26.2 dB, ± 1.5 dB
125 Hz	-16.2	- 16.1 dB, ± 1.5 dB
250 Hz	-8.7	- 8.6 dB, ± 1 dB
500 Hz	-3.2	- $3.2 \text{ dB}, \pm 1.4 \text{ dB}$
1 kHz	0.0 (Ref)	$0 \text{ dB}, \pm 1.1 \text{ dB}$
2 kHz	+1.2	$+$ 1.2 dB, \pm 1.6 dB
4 kHz	+1.0	$+$ 1.0 dB, \pm 1.6 dB
8 kHz	-1.1	- 1.1 dB, + 2.1 dB ~ -3.1 dB
16 kHz	-8.0	- 6.6 dB, + 3.5 dB ~ - 17.0 dB

Uncertainty : $\pm 0.1 \text{ dB}$



Certificate No. 708773

Page 3 of 3 Pages

4. Frequency & Time weightings at 1 kHz

4.1	Fraguanov	Weighting	(Fact)
4.1	riequency	weighung	(rasi)

UUT	Applied	UUT	Difference	IEC 61672
Setting	Value (dB)	Reading (dB)	(dB)	Type 1 Spec.
А	94.0	94.0 (Ref.)		± 0.4 dB
С	94.0	94.0	0.0	
Z	94.0	94.0	0.0	

4.2 Time Weighting (A-weighted)

UUT	Applied	UUT	Difference	IEC 61672
Setting	Value (dB)	Reading (dB)	(dB)	Type 1 Spec.
Fast	94.0	94.0 (Ref.)		± 0.3 dB
Slow	94.0	94.0	0.0	
Time-averaging	94.0	94.0	0.0	

Uncertainty : $\pm 0.1 \text{ dB}$

Remarks : 1. UUT : Unit-Under-Test

- 2. The uncertainty claimed is for a confidence probability of not less than 95%.
- 3. Atmospheric Pressure : 1 028hPa.
- 4. Preamplifier model : NH-25, S/N : 10553
- 5. Microphone model: UC-59, S/N: 07040
- 6. Power Supply Check: OK
- 7. The UUT was adjusted with the supplied sound calibrator at the reference sound pressure level before the calibration.

----- END -----



Certificate No.	804605		Page	1 of	3	Pages
Customer :	Enovative Environmental Servic	e Limited				
Address :	Flat 6, 3/F, Block E, Wah Lok Indus	strial Centre, 31-35 Sha	an Mei Street, Shati	n, N.T.,	Hong	Kong.
Order No. :	Q81807		Date of receipt	:		9-May-18
Item Tested						
Description :	Sound Level Meter					
Manufacturer :			I.D.	:		
	NL-52		Serial No.	: 01	14348	34
Test Conditi	ons					
Date of Test :	15-May-18		Supply Voltage	:		
Ambient Temp	erature : (23 ± 3)°C		Relative Humidi	ty : (50	± 25) %
Test Specifi	cations					
Calibration chec Ref. Document/	k. Procedure: Z01, IEC 61672.					
Test Results	•					
	within the IEC 61672 Type1 or n shown in the attached page(s).	nanufacturer's specif	ication.			
Main Test equip	ment used:					
Equipment No.		<u>Cert. No.</u>	-	Traceat	ole to	
S017	Multi-Function Generator	C170120		SCL-HK	SAR	
S240	Sound Level Calibrator	803357	1	NIM-PR	C & S	SCL-HKSAR
will not include allow overloading, mis-ha	this Calibration Certificate only relate to vance for the equipment long term drift, v ndling, or the capability of any other labc age resulting from the use of the equipm	variations with environmen pratory to repeat the meas	ntal changes, vibration	n and sho	ck duri	ing transportation,
	used for calibration are traceable to Inte ly to the above Unit-Under-Test only	rnational System of Units	(SI), or by reference t	to a natur	al cons	stant.

Calibrated by :	Appro	oved by :	Chri
Elva Chong			Kin Wong
This Certificate is issued by:	Date:	15-May-18	
Hong Kong Calibration Ltd.			
Holt OD 24/E Molt Euro Industrial Castra No 50 76 To Church Disc Obert Musi Church MT Hans M			



Certificate No. 804605

Page 2 of 3 Pages

Results :

1. Self-generated noise: 16.0 dBA (Mfr's Spec \leq 17 dBA)

2. Acoustical signal test

	UUT S				
	Frequency	Time	Octave	Applied	UUT
Range (dB)	Weighting	Weighting	Filter	Value (dB)	Reading (dB)
20-130	A	F	OFF	94.0	94.0
		S	OFF		94.0
	С	F	OFF		94.0
	Z	F	OFF		94.0
	А	F	OFF	114.0	114.1
		S	OFF	:	114.1
	С	F	OFF		114.1
	Z	F	OFF		114.1

IEC 61672 Type 1 Spec. : \pm 1.1 dB Uncertainty : \pm 0.1 dB

Attenuation (dB) IEC 61672 Type 1 Spec. Frequency 31.5 Hz -39.6 - 39.4 dB, ± 2 dB -26.2 - 26.2 dB, ± 1.5 dB 63 Hz -16.2 125 Hz - 16.1 dB, ± 1.5 dB -8.7 - 8.6 dB, ± 1 dB 250 Hz -3.2 500 Hz - $3.2 \text{ dB}, \pm 1.4 \text{ dB}$ 1 kHz 0.0 (Ref) $0 \, dB, \pm 1.1$ dB 2 kHz +1.0+ 1.2 dB, ± 1.6 dB +0.7+ $1.0 \text{ dB}, \pm 1.6 \text{ dB}$ 4 kHz - 1.1 dB, + $2.1 \text{ dB} \sim -3.1 \text{ dB}$ 8 kHz -1.26.6 dB, + 3.5 dB ~ - 17.0 dB 16 kHz -8.6 -

3 Electrical signal tests of frequency weightings (A weighting)

Uncertainty : $\pm 0.1 \text{ dB}$



Certificate No. 804605

Page 3 of 3 Pages

4. Frequency & Time weightings at 1 kHz

4.1 Frequency Weighting (Fast)

UUT	Applied	UUT	Difference	IEC 61672
Setting	Value (dB)	Reading (dB)	(dB)	Type 1 Spec.
Setting			(uD)	
A	94.0	94.0 (Ref.)		$\pm 0.4 \text{ dB}$
C	94.0	94.0	0.0	
Z	94.0	94.0	0.0	

4.2 Time Weighting (A-weighted)

UUT	Applied	UUT	Difference	IEC 61672
Setting	Value (dB)	Reading (dB)	(dB)	Type 1 Spec.
Fast	94.0	94.0 (Ref.)		± 0.3 dB
Slow	94.0	94.0	0.0	
Time-averaging	94.0	94.0	0.0	

Uncertainty : $\pm 0.1 \text{ dB}$

Remarks : 1. UUT : Unit-Under-Test

- 2. The uncertainty claimed is for a confidence probability of not less than 95%.
- 3. Atmospheric Pressure : 1 009 hPa.
- 4. Preamplifier model : NH-25, S/N : 21113
- 5. Firmware Version: 1.8
- 6. Power Supply Check: OK
- 7. The UUT was adjusted with the laboratory's sound calibrator at the reference sound pressure level before the calibration.

----- END ------



Appendix D EM&A Monitoring Schedules

Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2 Impact Monitoring & Site Auditing Schedule for September 2018

	September 2018							
Sun	Mon	Tue	Wed	Thu	Fri	Sat 1		
2	3 24-hour TSP + 3 x 1-hour TSP, Noise (SR77)	4	5	6 ET Site Walk(09:30am – 11:00am)	7 24-hour TSP + 3 x 1-hour TSP	8		
9	10	11	12	13 24-hour TSP + 3 x 1-hour TSP, Noise (SR77) ET Site Walk(09:30am – 11:00am)	14	15		
16	17	18	19 24-hour TSP + 3 x 1-hour TSP, Noise (SR77) ET Site Walk(09:30 am – 11:00 am) with Liantang Project-wide ET and IEC + SSEMC	20	21	22		
23	24 24-hour TSP + 3 x 1-hour TSP, Noise (SR77)	25 Day after Mid-Autumn Festival	26	27 24-hour TSP + 3 x 1- hour TSP ET Site Walk(09:30am – 11:00 am) with Fanling Stage 2 IEC & Liantang Project-wide ET and IEC	28	29		
30		1	1	1	1			

Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2 Impact Monitoring & Site Auditing Schedule for October 2018

			October 2018	}		
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 National Day of the People's Republic of China	2	3	4 24-hour TSP + 3 x 1-hour TSP, Noise (SR77) ET Site Walk(09:30am – 11:00am)	5	6
7	8	9	10 24-hour TSP + 3 x 1-hour TSP, Noise (SR77)	11 ET Site Walk(09:30am – 11:00am)	12	13
14	15	16 24-hour TSP + 3 x 1-hour TSP, Noise (SR77)	17 Chung Yeung Festival	18 ET Site Walk(09:30am – 11:00am)	19	20
21	22 24-hour TSP + 3 x 1-hour TSP, Noise (SR77)	23	24 ET Site Walk(09:30am – 11:00 am) with Fanling Stage 2 IEC & Liantang Project-wide ET and IEC +SSEMC (To be confirmed)	25	26 24-hour TSP + 3 x 1-hour TSP	27
28	29	30	31		- -	•



Appendix E Meteorological Data Extracted from Hong Kong Observatory

	Hong Kong Observatory							
		Air	Tempera	ture			Mean	
Day	Mean Pressure (hPa)	Absolute Daily Max (deg. C)	Mean (deg. C)	Absolute Daily Min (deg. C)	Mean Dew Point (deg. C)	Mean Relative Humidity (%)	Amount of Cloud (%)	Total Rainfall (mm)
01	1009.9	27.9	26.3	25.0	25.2	93	89	32.0
02	1007.9	29.9	26.8	24.6	24.5	88	76	9.8
03	1006.9	30.5	27.7	25.6	24.3	82	70	0.3
04	1005.7	32.0	29.1	27.0	25.3	80	40	0.0
05	1004.9	33.1	29.8	27.9	25.8	79	54	0.1
06	1005.4	31.8	29.6	28.2	26.1	82	77	0.0
07	1006.3	31.2	29.4	28.0	25.6	80	76	Trace
08	1008.6	29.6	27.4	25.6	23.8	81	86	24.6
09	1011.5	30.5	27.1	24.6	22.4	76	86	16.7
10	1012.5	28.3	26.1	24.3	22.4	80	83	0.2
11	1009.3	32.7	28.2	25.2	20.6	65	46	0.0
12	1007.7	28.7	27.8	26.9	23.6	78	87	Trace
13	1009.4	30.3	27.7	26.3	24.7	84	69	2.5
14	1009.2	31.7	28.8	26.7	24.6	78	72	0.0
15	1002.8	35.1	30.7	26.8	23.1	65	59	Trace
16	990.9	31.8	26.4	23.6	23.6	86	97	167.5
17	1008.6	30.4	27.5	25.8	25.4	89	93	12.0
18	1013.7	31.8	28.2	26.5	25.3	85	65	1.2
19	1012.7	31.4	28.6	26.2	24.0	77	43	0.0
20	1011.0	31.9	29.0	27.0	24.3	77	63	0.0
21	1011.6	31.9	29.2	27.4	23.4	71	33	0.0
22	1013.3	33.2	29.2	27.0	24.5	76	51	0.0
23	1013.1	32.4	29.0	27.6	24.7	78	76	Trace
24	1011.1	29.6	27.0	24.8	24.9	88	80	72.2
25	1009.9	30.2	27.0	24.8	23.1	80	82	34.5
26	1009.6	28.6	26.8	25.1	23.3	81	77	9.7
27	1009.8	30.2	27.3	26.0	22.9	77	88	Trace
28	1009.9	31.3	27.6	25.8	21.4	70	74	0.0
29	1008.9	31.3	27.4	24.3	18.8	60	26	0.0
30	1010.5	30.6	27.5	25.0	18.9	60	29	0.0
Mean/Total	1008.8	31.0	28.0	26.0	23.7	78	68	383.3
Normal§	1008.9	30.1	27.7	25.8	23.4	78	66	327.6

Daily Extract of Meteorological Observations , September 2018

Trace means rainfall less than 0.05 mm

& 1981-2010 Climatological Normal

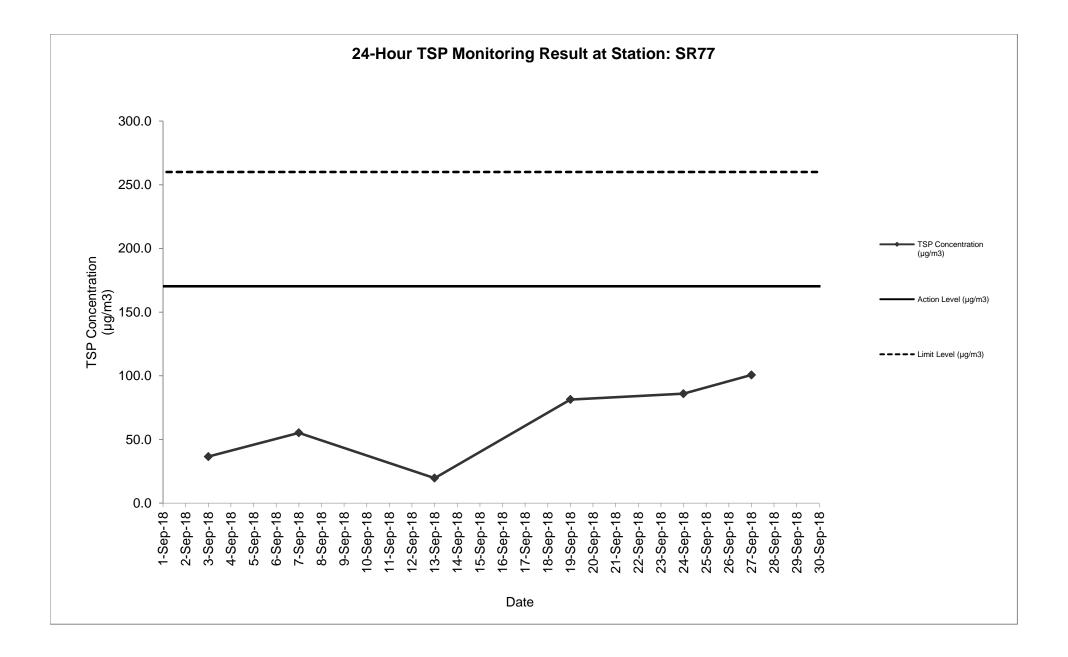


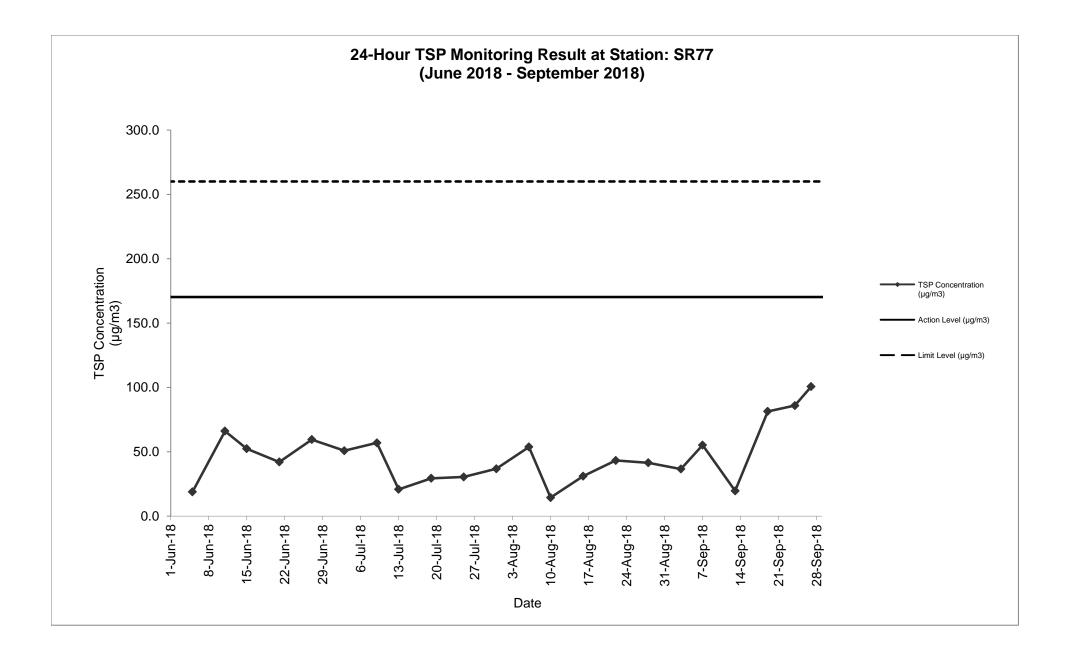
Appendix F Air Quality Monitoring Results and their Graphical Presentation

24-Hour TSP Monitoring Result at	Station: SR77
----------------------------------	---------------

Sampling Date	Weather Condition	Starting Time	Paper No.	v	Vt. of paper	(g)	E	lapse Tim	ne	Flo	ow Rate (C	FM)	Flow	v Rate (m ³	/min)	Total Volume	TSP Concentration	Action Level	Limit Level	Wind speed	Wind direction	NOE	IR
Date	Condition	Time		Initial Wt.	Final Wt.	Wt. of Dust	Initial	Final	Sampling Hour	Initial	Final	Avg Flow Rate	Initial	Final	Avg Flow Rate	(m³)	(µg/m³)	(µg/m3)	(µg/m3)	m/s	unection		
3-Sep-18	Cloudy	12:11	C170	2.8293	2.9054	0.0761	8820.67	8844.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	36.6	170.3	260.0	<5	N		
7-Sep-18	Fine	12:13	C172	2.8223	2.9371	0.1148	8847.67	8871.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	55.2	170.3	260.0	<5	N		
13-Sep-18	Fine	12:11	C174	2.6738	2.7147	0.0409	8874.67	8898.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	19.7	170.3	260.0	<5	N		
19-Sep-18	Cloudy	12:13	C176	2.6787	2.8479	0.1692	8901.67	8925.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	81.4	170.3	260.0	<5	N		
24-Sep-18	Fine	12:12	C178	2.6814	2.8601	0.1787	8928.67	8952.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	85.9	170.3	260.0	<5	N		
27-Sep-18	Fine	12:12	C180	2.6498	2.8591	0.2093	8955.67	8979.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	100.6	170.3	260.0	<5	N		
																Average	63.2						
																Min	19.7						
																Max	100.6						

Note:No major dust source observed during the monitoring periodData in Bold denotes exceedanece of respective Action LevelData in Bold Underline denotes exceedance of respective Limit Level



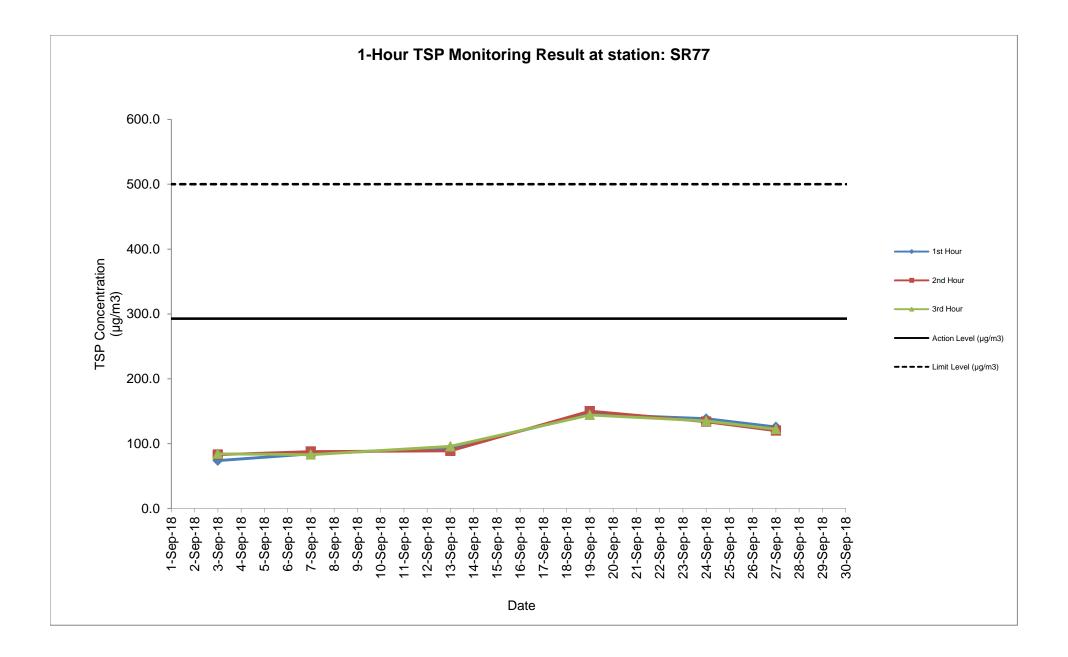


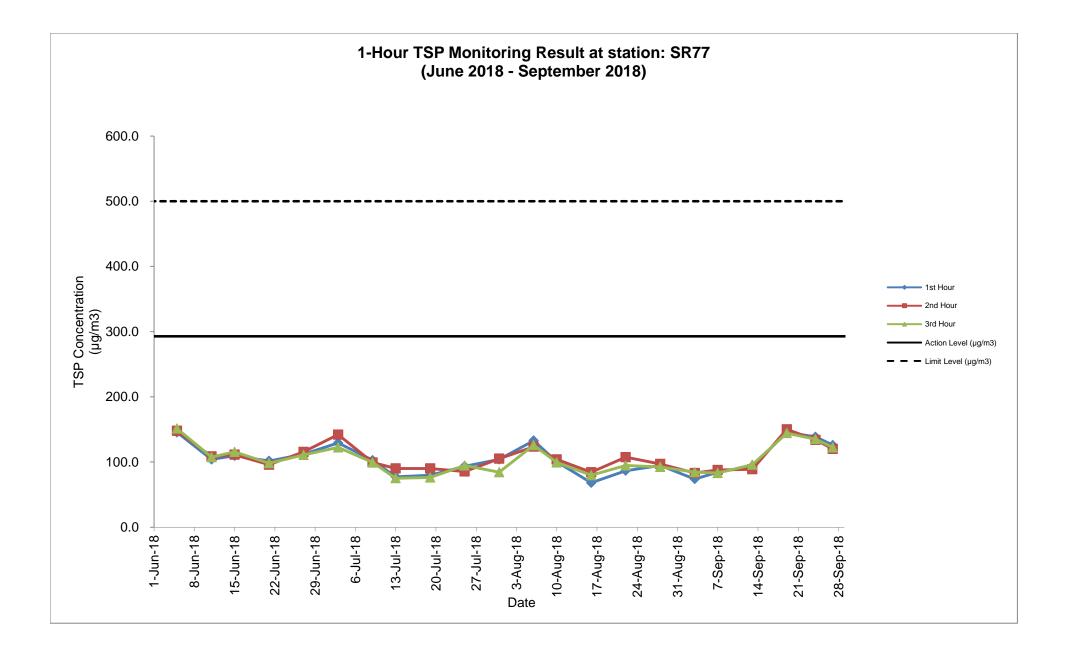
	Weather	Starting Time	Paper No.	Wt. of paper (g)			Elapse Time			Flow Rate (CFM)			Flow Rate (m ³ /min)			Total Volume	TSP Concentration	Action Level	Limit Level	Wind speed	Wind	NOE	IR
Date	Condition	Time		Initial Wt.	Final Wt.	Wt. of Dust	Initial	Final	Sampling Hour	Initial	Final	Avg Flow Rate	Initial	Final	Avg Flow Rate	(m³)	(µg/m³)	(µg/m3)	(µg/m3)	m/s	direction		
3-Sep-18	Cloudy	09:00	C171A	2.8415	2.8479	0.0064	8817.67	8818.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	73.9	292.7	500.0	<5	N		
	Cloudy	10:04	C171B	2.8329	2.8401	0.0072	8818.67	8819.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	83.1	292.7	500.0	<5	N		
	Cloudy	11:08	C171C	2.8198	2.8271	0.0073	8819.67	8820.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	84.2	292.7	500.0	<5	N		
7-Sep-18	Fine	09:00	C173A	2.8420	2.8493	0.0073	8844.67	8845.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	84.2	292.7	500.0	<5	N		
	Fine	10:03	C173B	2.8271	2.8347	0.0076	8845.67	8846.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	87.7	292.7	500.0	<5	N		
	Fine	11:08	C173C	2.8369	2.8441	0.0072	8846.67	8847.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	83.1	292.7	500.0	<5	N		
13-Sep-18	Fine	09:00	C175A	2.6670	2.6751	0.0081	8871.67	8872.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	93.5	292.7	500.0	<5	N		
	Fine	10:04	C175B	2.6756	2.6833	0.0077	8872.67	8873.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	88.9	292.7	500.0	<5	N		1
	Fine	11:08	C175C	2.6693	2.6776	0.0083	8873.67	8874.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	95.8	292.7	500.0	<5	N		1
19-Sep-18	Cloudy	09:00	C177A	2.6853	2.6979	0.0126	8898.67	8899.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	145.4	292.7	500.0	<5	N		1
	Cloudy	10:03	C177B	2.6791	2.6921	0.0130	8899.67	8900.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	150.0	292.7	500.0	<5	N		
	Cloudy	11:07	C177C	2.6884	2.7009	0.0125	8900.67	8901.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	144.3	292.7	500.0	<5	N		
24-Sep-18	Fine	09:00	C179A	2.6911	2.7031	0.0120	8925.67	8926.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	138.5	292.7	500.0	<5	N		
	Fine	10:03	C179B	2.6874	2.6990	0.0116	8926.67	8927.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	133.9	292.7	500.0	<5	N		1
	Fine	11:08	C179C	2.6793	2.6910	0.0117	8927.67	8928.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	135.0	292.7	500.0	<5	N		
27-Sep-18	Fine	09:00	C181A	2.6688	2.6797	0.0109	8952.67	8953.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	125.8	292.7	500.0	<5	N		
	Fine	10:03	C181B	2.6187	2.6291	0.0104	8953.67	8954.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	120.0	292.7	500.0	<5	N		4
	Fine	11:08	C181C	2.6388	2.6494	0.0106	8954.67	8955.67	1.00	51	51	51.0	1.44	1.44	1.44	86.65	122.3	292.7	500.0	<5	N		
																Average	110.5						
																Min	73.9						
																Max	150.0						

Detailed Calculation of 1-Hour TSP Monitoring Result at Station: SR77

Note:

No major dust source observed during the monitoring period Data in **Bold** denotes exceedanece of respective Action Level Data in <u>Bold Underline</u> denotes exceedance of respective Limit Level







Appendix G Summary of Event and Action Plan



Event and Action Plan for Air Quality

Event	Action			
	ET Leader	IEC	ER	Contractor
Action level being exceeded by one	 Identify source; Inform IEC and ER; 	1. Check monitoring data submitted by ET;	1. Notify Contractor.	1. Rectify any unacceptable practice;
sampling day	 Repeat measurement to confirm finding; 	2. Check Contractor's working method.		2. Amend working methods if appropriate.
	 Increase monitoring frequency to daily. 			
Action level being	1. Identify source;	1. Check monitoring data submitted	1. Confirm receipt of notification of	1. Submit proposals for remedial
exceeded by two or more consecutive	2. Inform IEC and ER;	by ET;	failure in writing;	actions to IEC within 3 working
sampling days	3. Repeat measurements to confirm	2. Check Contractor's working	2. Notify Contractor;	days of notification;
	findings;	method;	3. Ensure remedial measures	2. Implement the agreed proposals;
	 Increase monitoring frequency to daily; 	3. Discuss with ET and Contractor on possible remedial measures;	properly implemented.	3. Amend proposal if appropriate.
	 Discuss with IEC and Contractor on remedial actions required; 	 Advise the ER on the effectiveness of the proposed remedial measures; 		
	 If exceedance continues, arrange meeting with IEC and ER; 	 Supervise Implementation of remedial measures. 		
	 If exceedance stops, cease additional monitoring. 			

Event	Action										
	ET Leader	IEC	ER	Contractor							
Limit level being exceeded by one sampling day	 Identify source; Inform IEC, ER, Contractor and EPD; Repeat measurement to confirm 	 Check monitoring data submitted by ET; Check Contractor's working method; 	 Confirm receipt of notification of exceedance in writing; Notify Contractor; Ensure remedial measures 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of netification; 							
	 finding; Increase monitoring frequency to daily; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 	 Discuss with ET and Contractor on possible remedial measures; Advise ER on the effectiveness of the proposed remedial measures; Supervise implementation of remedial measures. 	properly implemented.	days of notification;3. Implement the agreed proposals;4. Amend proposal if appropriate.							
Limit level being exceeded by two or more consecutive sampling days	 Notify IEC, ER, Contractor, and EPD; Identify source; Repeat measurement to confirm findings; Increase frequency to daily; Analyse Contractor's working procedures to determine possible mitigation to be; Arrange meeting with IEC and ER to discuss the remedial actions to be taken; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; If exceedance stops, cease additional monitoring. 	 Discus amongst ER, ET, and Contractor on the potential remedial actions; Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly; Supervise the implementation of remedial measures. 	 Confirm receipt of notification of exceedance in writing; Notify Contractor; In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented; Ensure remedial measures properly implemented; 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. 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; Resubmit proposals if problem still not under control; Stop the relevant portion of works as determined by ER until the exceedance is abated. 							

Event and Action Plan for Noise

Event	Action										
	ET Leader	IEC	ER	Contractor							
Action Level	 Notify IEC and the Contractor. Carry out investigation. 	1. Review with analysed results submitted by ET.	1. Confirm receipt of notification of failure in writing.	1. Submit noise mitigation proposals to IEC.							
	 Carry out investigation. Report the results of investigation to IEC and the Contractor. Discuss with the Contractor and formulate remedial measures. Increase monitoring frequency to check mitigation effectiveness. 	 Review the proposed remedial measures by the Contractor and advise ER accordingly. Supervise the implement of remedial measures. 	 Notify the Contractor. Require the Contractor to propose remedial measures for the analysed noise problem. Ensure remedial measures are properly implemented. 	2. Implement noise mitigation proposals.							
Limit Level	 Notify IEC, ER, EPD and the Contractor. Identify the source. Repeat measurement to confirm findings. Increase monitoring frequency. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. Inform IEC, ER, and EPD the causes & actions taken for the exceedances. Assess effectiveness of the Contractor's remedial actions and keep IEC, EPD and ER informed of the results. If exceedance stops, cease 	 Discuss amongst ER, ET Leader and the Contractor on the potential remedial actions. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly. Supervise the implementation of remedial measures. 	 Confirm receipt of notification of failure in writing. Notify the Contractor. Require the Contractor to propose remedial measures for the analysed noise problem. Ensure remedial measures are properly implemented. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated. 	 Take immediate action to avoid further exceedance. Submit proposals for remedial actions to IEC within 3 working days of notification. Implement the agreed proposals. Resubmit proposals if problem still not under control. Stop the relevant activity of works as determined by the ER until the exceedance is abated. 							



Event and Action Plan for Water Quality

Event	Action											
	ET Leader	IEC	ER	Contractor								
Action level being exceeded by one sampling day	 Repeat in-situ measurement on next day of exceedance to confirm findings; 		1. Confirm receipt of notification of failure in writing; Notify, Contractor	 Inform the ER & confirm notification of the non-compliance in writing; 								
	2. Identify source(s) of impact;			2. Rectify unacceptable practice;								
	3. Inform IEC, Contractor & ER;			3. Amend working methods if								
	 Check monitoring data, all plant, equipment & contractor's working methods; 			appropriate.								
Action level being exceeded by two or more consecutive sampling days	 Repeat measurement on next day of exceedance to confirm findings; 	 Checking monitoring data submitted by ET & Contractor's working method; 	 Discuss with IEC on the proposed mitigation measures; Ensure mitigation measures 	 Inform the Engineer & confirm notification of the non-compliance in writing; 								
sampling days	Identify source(s) of impact;	2. Discuss with ET & Contractor on	properly implemented;	2. Rectify unacceptable practice;								
	3. Inform IEC, Contractor, ER & EPD;	3. Review the proposed mitigation	3. Assess the effectiveness of the implemented mitigation	3. Check all plant & equipment & consider changes of working								
	4. Check monitoring data, all plant, equipment & Contractor's working methods;	measures.	 methods; 4. Submit proposal of mitigation measures to ER within 3 working down of patitionation 2 discuss with 									
	5. Discuss mitigation measures with IEC, ER & Contractor;	4. Supervise the implementation of mitigation measures.		days of notification & discuss with ET, IEC & ER;								
	 Ensure mitigation measures are implemented; 			 Implement the agreed mitigation measures. 								
	 Increase monitoring to daily until no exceedance of Action level. 											

Event	Action			
	ET Leader	IEC	ER	Contractor
Limit level being exceeded by one sampling day	 Repeat measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor, ER & EPD; Check monitoring data, all plant, equipment & contractor's working methods; Discuss mitigation measures with IEC, Contractor & ER. 	 Checking monitoring data submitted by ET & Contractor's working method; Discuss with ET & Contractor on the possible mitigation measures; Review the proposed mitigation measures submitted by Contractor & advise the ER accordingly. 	 Confirm receipt of notification of failure in writing; Discuss with IEC, ET & Contractor on the proposed mitigation measures; Request Contractor to review the working methods. 	 Inform the ER & confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant & equipment & consider changes of working methods; Submit proposal of mitigation measures to ER within 3 working days of notification & discuss with ET, IEC & ER.
Limit level being exceeded by two or more consecutive sampling days	 Repeat measurement on the next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, Contractor, ER & EPD; Check monitoring data, all plant, equipment & Contractor's working methods; Discuss mitigation measures within IEC, Contractor & ER; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days. 	 Checking monitoring data submitted by ET & Contractor's working method; Discuss with ET & Contractor on potential remedial actions; Review Contractor's mitigation measures whenever necessary to assure their effectiveness & advise the ER accordingly; Supervise the implementation of mitigation measures. 	review the working methods;	 further exceedance; Submit proposal of mitigation measures to ER within 3 working days of notification & discuss with ET, IEC & ER; Implement the agreed mitigation measures; Resubmit proposals of mitigation measures if problem still not under control;



Appendix H Noise Monitoring Results and their Graphical Presentation

Appendix H Noise Monitoring Results and their Graphical Presentation

Noise Monitoring Result at SR77

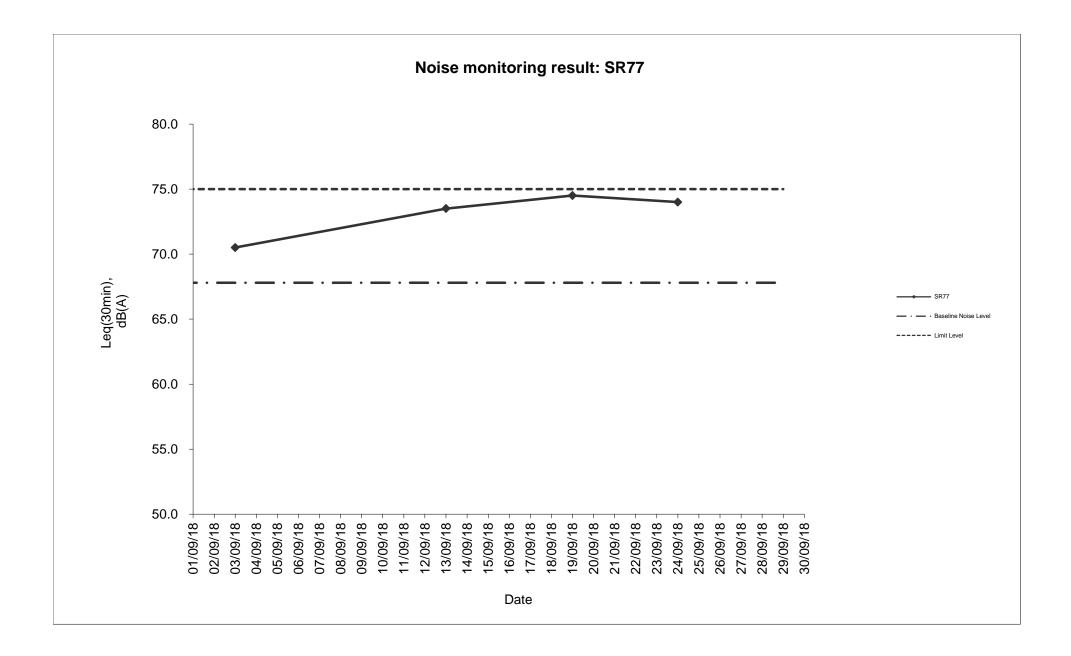
Date	Weather	Start	End	Measured Noise Level (dB(A))*		Baseline Corrected	Baseline Noise Level	Limit Level	
	Condition	Time	Time	L10(30min)	L90(30min)	Leq(30min)	Level, dB(A)**	(dB(A)), Leq(30min)	dB(A)
2018-09-03	Cloudy	11:15	11:45	75.0	66.5	70.5	-	67.8	75.0
2018-09-13	Fine	11:15	11:45	78.5	66.0	73.5	-	67.8	75.0
2018-09-19	Cloudy	11:15	11:45	75.5	74.0	74.5	-	67.8	75.0
2018-09-24	Fine	11:30	12:00	82.0	64.5	74.0	-	67.8	75.0
					Average	73.1			
					Minimum	70.5			
					Maximum	74.5			

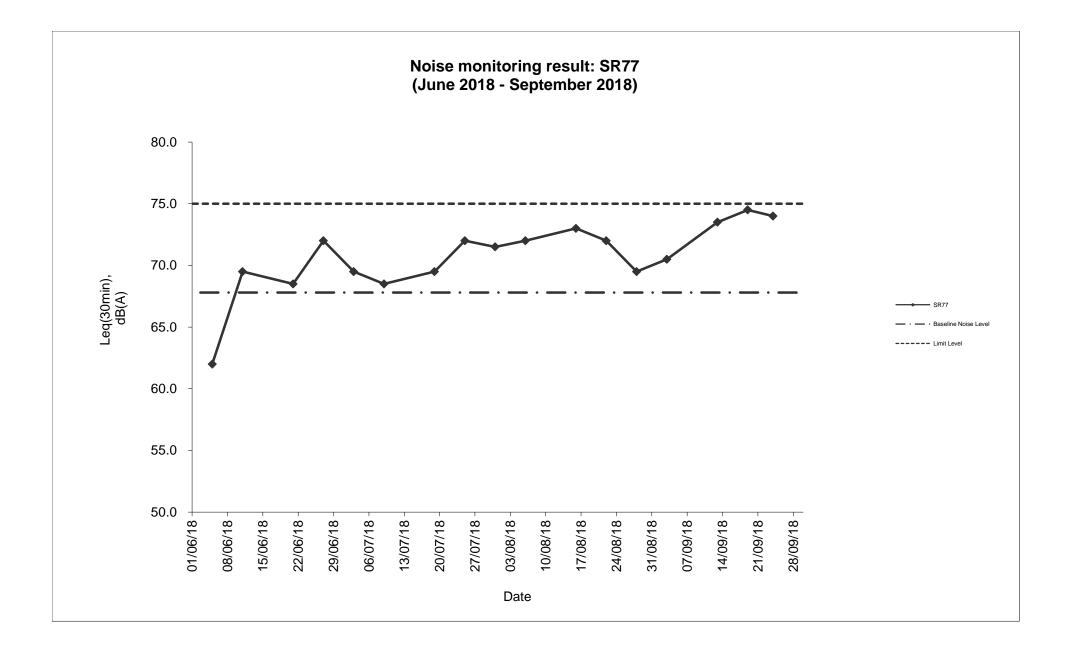
Remarks

* +3dB(A) Façade effect correction included

** Baseline corrected level is only calculated when measured noise level (Leq) > limit level.

*** Data in **Bold Underline** denotes exceedance of respective Limit Level







Appendix K Waste Flow Table

Monthly Summary Waste Flow Table

		Actual C	Quantities of In	ert C&D Materia	als Generated	Monthly		Actual	Quantities of	C&D Wastes	Generated M	Ionthly
		Hard Rock							Paper/			
	Total	and Large		Soil Reused	Soil Reused				cardboard			General
	Quantity	Broken		in the	in other	Soil Disposed			packaging		Chemical	Refuse
Month	Generated	Concrete	Soil	Contract	Projects	as Public Fill	Imported Fill	Metals	(Note 3)	Plastics	Waste	(Note 2)
Unit	(in '000m ³)	(in m ³)	(in '000m ³)									
Jan-18	3.089	0.304	2.785	0.060	-	2.725	0.923	-	-	-	-	0.150
Feb-18	2.698	0.256	2.442	0.150	-	2.292	1.144	-	-	-	-	0.095
Mar-18	1.524	0.141	1.383	0.120	-	1.263	0.211	-	-	-	-	0.085
Apr-18	2.880	0.786	2.094	0.360	-	1.734	0.788	-	-	-	-	0.125
May-18	1.164	0.290	0.874	0.101	-	0.773	0.185	-	-	-	-	0.150
Jun-18	0.862	0.082	0.780	0.515	-	0.265	0.000	-	-	-	-	0.110
Sub-Total	12.217	1.859	10.358	1.306	-	9.052	3.251	-	-	-	-	0.715
Jul-18	1.520	0.261	1.259	0.476	-	0.783	0.039	-	-	-	-	0.135
Aug-18	2.372	0.478	1.894	0.613	-	1.281	0.193	-	-	-	-	0.095
Sep-18	1.709	0.361	1.348	0.381	-	0.967	0.272	-	-	-	-	0.150
Oct-18	-	-	-	-	-	-	-	-	-	-	-	-
Nov-18	-	-	-	-	-	-	-	-	-	-	-	-
Dec-18	-	-	-	-	-	-	-	-	-	-	-	-
Total	17.818	2.959	14.859	2.776	-	12.083	3.755	-	-	-	-	1.095

Note: 1. Assume the density of soil fill is 2 ton/m^3 .

2. Assume the density of rock and broken concrete is 2.5 ton/m³.

3. Assume each truck of C&D wastes is $5m^3$.

4. The inert C&D materials except slurry and bentonite are disposed at Tuen Mun 38.

5. The slurry and bentonite are disposed at Tseung Kwun O 137.

6. The non-inert C&D wastes are disposed at NENT.

7. Assume the density of metal is $7,850 \text{ kg/m}^3$.

8. Assume the density of plastic is 941 kg/m³.

9. Assume the density of paper is 800 kg/m^3 .



Appendix L Implementation Schedule of Environmental Mitigation Measures (EMIS)



Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status [#]
Air Quality				
Air Quality during Construction	• Restricting heights from which materials are dropped, as far as practicable to minimize the fugitive dust arising from unloading/loading.	During Construction	Contractor	\checkmark
	• All stockpiles of excavated materials or spoil of more than 50m ³ shall be enclosed, covered or dampened during dry or windy conditions.			Rem.
	• Effective water sprays shall be used to control potential dust emission sources such as unpaved haul roads and active construction areas.			×
	 All spraying of materials and surfaces shall avoid excessive water usage. 			\checkmark
	• Vehicles that have the potential to create dust while transporting materials shall be covered, with the cover properly secured and extended over the edges of the side and tail boards.			✓
	 Materials shall be dampened, if necessary, before transportation. 			\checkmark
	• Travelling speeds shall be controlled to reduce traffic induced dust dispersion and re-suspension within the site from the operating haul trucks.			✓
	• Vehicle washing facilities shall be provided to minimise the quantity of material deposited on public roads.			\checkmark
Air Quality during Operation	Not required	N/A	N/A	N/A
Noise				ł
Noise during Construction	• Use of silenced plant or plant equipped with mufflers or dampers in substitute of ordinary plant.	During Construction	Contractor	\checkmark
	 Reduce the number of equipment and their percentage on-time. 			\checkmark
Noise during Operation	Not required	N/A	N/A	N/A
Water Quality		1	1	1
Water Quality during	Road Widening Works, Earthworks and Culvert Extension Works			
Construction	• Wastewater generated from any concrete batching washdown of equipment or similar activities should be discharged into foul sewers, after the removal of settable solids, and pH adjustment as necessary. All sewage discharges from the study area should meet the TM standards and approval from EPD through the licensing process is required.	During Construction	Contractor	Obs.



Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status [#]
	• Sand traps, oil interceptors and other pollution prevention installations should be provided, properly cleaned and maintained.			✓
	• Runoff from exposed working areas, unfinished slopes and from unlined temporary channels should be directed to stilling basins and/or silt traps before discharging to the drainage outfalls.			Rem.
	• Regular inspections of stilling basins and/or silt traps is required to ensure that sediment is not conveyed into the existing drainage system.			~
	Open stockpiles should be covered with a tarpaulin cover.			\checkmark
	• During the wet season, any exposed top soils should be covered with a tarpaulin, shotcreted or hydroseeded.			~
	• Sand and silt from wash-water from vehicle washing should be settled out before discharging into storm drains.			✓
	• Fuels should be stored in bunded areas such that spillage can be easily collected.			~
Water Quality during Operation	Not required	N/A	N/A	N/A
Waste Management				
Waste Management during Construction	General Waste			
	• Transport of wastes off site as soon as possible.	During Construction	Contractor	✓
	Maintenance of accurate waste records.			~
	• Minimisation of waste generation for disposal (via reduction/recycling/re-use).			✓
	 No on-site burning will be permitted. 			~
	 Use of re-useable metal hoardings/signboards. 			✓
	Vegetation from site clearance			
	 Segregation of materials to facilitate disposal. 	During Construction	Contractor	\checkmark
	• Mulching to reduce bulk and where possible review opportunities for the possible beneficial use within landscaping areas.			✓



Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status [#]
	Demolition Wastes			
	 Segregation of materials to facilitate disposal. 	During Construction	Contractor	~
	Appropriate stockpile management.			\checkmark
	Excavated Materials			
	Segregation of materials to facilitate disposal / reuse.	During Construction	Contractor	\checkmark
	Appropriate stockpile management.			~
	• Re-use of excavated material on or off site (where possible).			~
	• Special handling and disposal procedures in the event that contaminated materials are excavated.			N/A
	Construction Wastes			
	• Segregation of materials to facilitate recycling/reuse (within designated area in appropriate containers/stockpiles).	During Construction	Contractor	✓
	Appropriate stockpile management.			✓
	 Planning to reduce over ordering and waste generation. 			✓
	 Recycling and re-use of materials where possible (e.g. metal, wood from formwork) 			v
	• For material which cannot be re-used/recycled, collection should be carried out by an approved waste contractor for landfill disposal.			v
	Bentonite Slurries			
	• Bentonite slurries should be reused as far as possible.	During Construction	Contractor	N/A
	• Disposal in accordance with Practice Note For Professional Persons ProPECC PN 1/94.			N/A
	Chemical Wastes			
	 Storage within locked, covered and bunded area. 	During Construction	Contractor	~
	• The storage area shall not be located adjacent to sensitive receivers e.g. drains.			~
	 Minimise waste production and recycle oils/solvents where possible. 			~

Notes ([#]): \checkmark – Compliance; Rem – Reminder; Obs – Observation; N/C – Non Compliance; N/A – Not Applicable



Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status [#]
	• A spill response procedure shall be in place and absorption material available for minor spillages.			\checkmark
	 Use appropriate and labelled containers. 			\checkmark
	• Educate site workers on site cleanliness/waste management procedures.			\checkmark
	• If chemical wastes are to be generated, the contractor must register with EPD as a chemical waste producer.			✓
	• The chemical wastes shall be collected by a licensed chemical waste collector.			✓
	Municipal Wastes			
	• Waste shall be stored within a temporary refuse collection facility, in appropriate containers prior to collection and disposal.	During Construction	Contractor	~
	Regular, daily collections are required by an approved waste collector.			\checkmark
Waste Management during Operation	Not required.	N/A	N/A	N/A
Ecology				
Ecology during Construction	Accurate Delineation of Works Area			
	• Boundaries of proposed works areas shall be clearly identified and separated from external areas by a physical barrier to prevent encroachment of adjacent habitats.	During Construction	Contractor	×
	• Individual trees which fall within the works areas but which work plans show do not require removal are to be retained and fenced off to maximise protection.			*
	Dust generation			
	There are a number of measures which shall be taken as specified in the Air Pollution Control (Construction Dust) Regulation on 'Dust Control Requirements, including the following key measures to be applied during construction:			
	• vehicle washing facilities to be provided at every discernible or designated vehicle exit point;	During Construction	Contractor	✓



Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status [#]
	• all temporary site access roads shall be sprayed with water to suppress dust as necessary;			✓
	• all dusty materials should be sprayed with water immediately prior to any handling; and			\checkmark
	• all debris should be covered entirely by impervious sheeting or stored in a sheltered debris collection area.			\checkmark
	Surface Run-off			
	In general, mitigation measures shall be in accordance with ProPECC PN1/94 on 'Construction Site Drainage'. Key measures include:			
	 Bund and cover stockpiles to avoid run-off; 	During Construction	Contractor	~
	• Channel any run-off through a system of oil, grease and sediment / silt traps and reuse water on site where ever practical;			✓
	• All vehicle maintenance to be undertaken within a bunded area; and			~
	• Maximise vegetation retention on-site to maximise absorption (minimise transport).			✓
Ecology during Operation	• To conduct compensatory ecological planting as specified in the latest landscape plans approved by EPD (Clause 2.6 of the Environmental Permit refers).	During Construction and operation	Contractor (during construction) / LCSD* (during operation) (Note: * The division of vegetation planting and maintenance responsibilities shall follow the guidelines stipulated in ETWB TCW No. 2/2004.)	N/A
Landscape and Visual		I	I	
Landscape and Visual during Construction	 Preservation of Existing Vegetation Trees identified for retention within the project limit would be protected during the works 	During Construction	Contractor	✓
	 The tree transplanting and planting works shall be implemented by approved Landscape Contractors 			×



Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status [#]
	Temporary Works Areas			
	Where feasible the works areas would be screened using hoarding and existing vegetation would be retained where possible to reduce the landscape and visual impacts arising from the construction activity. The landscape of these works areas would be restored following the completion of the construction phase.	During Construction	Contractor	×
	Hoarding			
	A hoarding would be erected where practicable in the most visually sensitive locations to screen the temporary construction works from the local VSRs.	During Construction	Contractor	\checkmark
	Top Soils			
	The works will result in disturbance to extensive areas of topsoil. Topsoil worthy of retention should be stockpiled for use following completion of the civil engineering works. It should either be temporarily vegetated with hydroseeded grass or turned over on a regular basis.	During Construction	Contractor	N/A
	Protection of Important Landscape Features			
	Important features such as temples, Island House and kilns within the study area, although remote from the proposed works retained and adequately protected.	During Construction	Contractor	N/A
Landscape and Visual during Operation	Not required.	N/A	N/A	N/A



Appendix N Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions



Cumulative Complaint Log

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
C131126	26, November, 2013	Mr. Tony Hung from WWF	Mat Wat River (works sites for box culvert extension)	Suspected unauthorised discharge of water from a construction site to Ma Wat River, Tai Wo Service Road East, Tai Po	It was found that the water leaving the end of the steel pipes was the diverted water from the upstream of the existing box culverts, instead of being discharged from the construction works sites. An EM&A Programme is being undertaken to monitoring the environmental performance of the construction works, and the Contractor has also implemented appropriate mitigation measures to avoid silt-laden runoff discharging from the works sites into the river. The complaint is considered an invalid complaint under this Project.	Completed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
C141120	20 November, 2014	EPD	Ng Tung River and Ma Wat River nearby the site of the Liantang/ Heung Yuen Wai BCP Project (Contract Number CV/2012/09)	At Bridge NF426 in Fanling, the whole Ng Tung River showed milky and suspected illegal discharge by nearby factory has undertaken. (粉嶺近天橋編號 NF426 梧桐河整條河 河水呈奶白色懷疑附 近有工廠非法排放污 水)	 Water Supplies Department (WSD) conducted a washout procedure on 20 November 2014 at about 9:30am to flush the newly installed water pipe of diameter of 1400mm which has recently finished disinfection. It is understood that the procedure has lasted for about 1 hour and large amount of freshwater has been discharged into the Ma Wat River through a washout port. Although water was observed seeping from the gantry switch and flew into the works sites, the area is a sump pit and the water was unlikely to run off and entered the river directly. As such, it is anticipated that only freshwater has been discharged into Ma Wat River through the washout port. Both site inspections conducted by the ET before the complaint (19 November 2014), and after the complaint (24 November 2014) did not identify any deficiencies on environmental mitigation measures. Also, there were no rains during the period and the risk of construction site run-off is considered minimal. 	Completed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					The water from the Ma Wat Channel adjoins the Ng Tung River before passing through the complaint location, so other pollution sources may also occur at upstream of Ng Tung River	
					The complaint is considered unlikely due to the construction works of this project.	
C171228	28 December, 2017	1823	Kau Lung Hang and Hong Lok Yuen	Air quality issue nearby Kau Lung Hang and Hong Lok Yuen area. Stockpiling within the Project area was observed to be uncovered, causing dust dispersion within the area. (大埔 九龍坑附近的空氣污 染問題嚴重。吐露港 公路蓮塘口岸隧道工 程經常見到沙泥沒有 覆蓋,導致沙土飛揚 散佈九龍坑,康樂園 一帶,造成極大困擾 與明顯健康風險。要 求立即改善,懲罰相	The Environmental Team (ET) was informed of the complaint through Chun Wo and CEDD via 1823 online- enquiry/ complaint form received on 28 December 2017 at 9:04am. Investigation was triggered in accordance with the procedures as specified in Section 7.3 of the EM&A Manual. A joint investigation by the ET and the IEC was conducted on 28 December 2017. As advised by the Contractor, no construction works were carried out during the public holiday. No exceedance of TSP level at the air monitoring station under this Contract was recorded in the past six months except 8 December 2017.	



Complaint Date Log No. Com	e of From and mplaint Received By	Nature of Complaint	Outcome	Status
		關建築商。附圖是該 區狀況。昨日洗車, 一日已經沙塵滿佈。)	Exceedance on 8 December 2017 was considered not project related as no major excavation works located close to the monitoring location at SR77. Based on the routine environmental site inspection and information provided by the Contractor, it is considered that dust suppression measures have been implemented to minimize dust nuisance arising from the works areas. Nonetheless, the ET and IEC will continue the auditing and reviewing of the Contractor's implementation of mitigation measures during the construction period.	



Meinhardt Infrastructure and Environment Ltd 邁進基建環保工程顧問有限公司

10/F Genesis 33-35 Wong Chuk Hang Road Hong Kong 香港黃竹坑道33-35號 創協坊10樓

Tel 電話: +852 2858 0738 Fax 傳真: +852 2540 1580

mail@meinhardt.com.hk www.meinhardt-china.com www.meinhardtgroup.com