

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

Quarterly EM&A Report

November 2016 to January 2017

Submitted to

Environmental Protection Department

Prepared By

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**

Quarterly EM&A Report

(November 2016 to January 2017)

Certified by: Fredrick Leong 

Position: Environmental Team Leader

Date: 24 February 2017

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100 How Ming Street,
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Attn: **Mr. James Penny**

Your Reference

Our Reference

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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/D
Quarterly EM&A Summary Report for November 2016 to January 2017 for the portion of Stage 2 works entrusted to CEDD under Contract No. CV/2012/09

23 February 2017

By Fax (2805 5028) & Hand

We refer to the revised Quarterly EM&A Summary Report for November 2016 to January 2017 for the Project received on 23 February 2017 submitted by ET via email. We confirm we have no comment.

Yours faithfully
for MOTT MACDONALD HONG KONG LIMITED



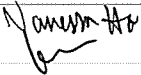


Steven Tang
Independent Environmental Checker

c.c.

HyD
CEDD/BCP
AECOM
Meinhardt

Mr. Chung Lok Chin
Mr. Desmond Lam
Mr. Alan Lee
Mr. Fredrick Leong

By Fax (2714 5198)
By Fax (3547 1659)
By Fax (3922 9797)
By Fax (2540 1580)

Date	Revision	Prepared By	Checked By	Approved By
24 Feb 2017	0	WK CHIU Vanessa HO 	Fredrick LEONG 	Helen COCHRANE 

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EXECUTIVE SUMMARY

This report documents the findings of EM&A works conducted in the quarter between 1 November 2016 and 31 January 2017.

The impact stage EM&A programme for the Project includes air quality and noise monitoring.

The EM&A programme was carried out by the ET in accordance with the EM&A Manual requirements. It is concluded from the environmental monitoring and audit works that adequate environmental mitigation measures have been implemented by the civil works contractors where appropriate in the reporting quarter.

In the reporting quarter, one (1) exceedance of Action Level of Dissolved Oxygen was recorded for water quality monitoring at the monitoring location I5 on 12 December 2016. No necessary remedial actions have been taken.

No environmental non-compliance was recorded in the reporting quarter. No environmental complaints were received in the reporting quarter. No environmental related prosecution or notification of summons was received in the reporting quarter.

The box culvert works have been partially completed by the end of March 2014 except the last construction activity, installation of a base slab at Box Culvert ID4. Due to the loading requirement of a fresh water main under the box culvert, installation of the base slab at Box Culvert ID4 has been commenced in December 2016.

The construction works at the box culvert ID4 are temporarily suspended until the utilities diversion works complete. The 4-week post construction water quality monitoring will be commenced after the installation of the base slab finishes, hence the completion of the box culvert works.

1 INTRODUCTION AND PROJECT INFORMATION

1.1 Background

1.1.1 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 current VEP (EP-324/2008/D) was granted on 27 August 2015.

1.1.2 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/D in accordance with the Updated EM&A Manual (dated March 2015) for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling Stage 2. The EM&A programme commenced in 5 November 2013.

1.1.3 **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.

1.2 Construction Programme and Activities

1.2.1 The construction programme is presented in **Appendix A**. The major construction activities undertaken in the reporting quarter are summarized below:

- Cable Detection and Trial Trenches;
- Demolition of Existing Vehicular Bridge;
- Footbridge Construction;
- Storm Drains Laying;
- Noise Barrier Construction;
- Pier / Pier Table Construction;
- Pile Cap Works;
- Portal Beam Construction;
- Retaining Wall Construction;

- Road Works;
- Sewer Works;
- Utilities Duct Laying;
- Viaduct Segment Erection;
- Water Main Laying;
- Extended Podium Construction;
- Construction of Remaining Base Slab of Box Culvert ID4;
- Abutment Construction;
- Construction of Boundary Wall for DSD Pumping Station;
- Extended Podium Construction; and
- Roundabout Modification Works.

1.3 Project Organisation

1.3.1 The project organization structure is shown in **Appendix B**. The key personnel contact names and numbers for the Project, together with the general enquiry hotline, are summarised in **Table 1.1**.

Table 1.1 Contact Information of Key Personnel

Party	Role	Position	Name	Telephone	Fax
AECOM	Engineer's Representative	Senior Resident Engineer	Mr. Alan Lee	2171 3303	2171 3498
		Resident Engineer (Environmental)	Mr. Perry Yam	2171 3350	
Mott MacDonald	Independent Environmental Checker (IEC)	IEC	Mr. Steven Tang	2828 5920	2827 1823
Chun Wo	Contractor	Site Agent	Mr. Daniel Ho	2638 6144	2638 7077
		Environmental Officer	Mr. Victor Huang	2638 6181	
Meinhardt	Environmental Team (ET)	ET Leader	Mr. Fredrick Leong	2859 1739	2540 1580
Enquiry Hotline	General Enquiry	--	Ms Helena Mak	6355 1731	--

1.4 Purpose of the Report

1.4.1 This is the Quarterly EM&A Report which summaries the impact monitoring results and audit findings for the Project during the reporting period between 1 November 2016 and 31 January 2017.

2 SUMMARY OF EM&A REQUIREMENTS

2.1 Monitoring Requirements

- 2.1.1 In accordance with the Updated EM&A Manual, environmental parameters including Air Quality and Noise have been monitored. The specific parameters, monitoring frequency and the respective Action and Limit Levels are given in **Table 2.1** and the location of the monitoring station is shown in the **Figure 2**.

Table 2.1 Monitoring Parameter

Parameter	Unit	Action Level	Limit Level	Frequency
Air Quality				
1-hour TSP	µg/m ³	292.7	500	Three times every 6 days
24-hour TSP	µg/m ³	170.3	260	Once every 6 days
Construction Noise				
Leq 30min	dB(A)	When one documented valid complaint is received	75	Once every Week

Temporary Suspension of Box Culvert Works and Water Quality Monitoring

- 2.1.2 The box culvert works have been partially completed by the end of March 2014 except the last construction activity, installation of a base slab at Box Culvert ID4. Due to the loading requirement of a fresh water main under the box culvert, installation of the base slab at Box Culvert ID4 has been commenced in December 2016.
- 2.1.3 The construction works at the box culvert ID4 are temporarily suspended until the utilities diversion works complete. The 4-week post construction water quality monitoring will be commenced after the installation of the base slab finishes, hence the completion of the box culvert works.

2.2 Environmental Mitigation Measures

- 2.2.1 Environmental mitigation measures have been recommended in the EM&A Manual and are given in **Appendix C**. The implementation status for the reporting quarter is also given in the Appendix.

3 SUMMARY OF EM&A MONITORING DATA

3.1 Monitoring Data

- 3.1.1 Monitoring has been conducted in accordance with the specification in the EM&A Manual in the reporting quarter. Meteorological data for the reporting quarter have been extracted from Hong Kong Observatory and are given in **Appendix D**. Monitoring data with graphical presentation for the reporting quarter have been given in **Appendix E**. A summary on the monitoring results has also been given in **Table 3.1**.

Table 3.1 Summary of Monitoring Data in the Reporting Quarter

Monitoring Location	Minimum	Maximum	Average
Air Quality			
1 hour Total Suspended Particulate			
SR77	83.1µg/m ³	199.7µg/m ³	153.5µg/m ³
24 hour Total Suspended Particulate			
SR77	47.6µg/m ³	137.5µg/m ³	92.5µg/m ³
Construction Noise			
SR77	59.0dB(A)	68.0dB(A)	65.4dB(A)
Water Quality			
Dissolved Oxygen			
I5	6mg/L	11.5mg/L	8.7mg/L
Suspended Solid			
I5	<2.5mg/L	16mg/L	5.7mg/L
Turbidity			
I5	3.9NTU	29.7NTU	7.8NTU

3.2 Summary of Monitoring Exceedances

3.2.1 The number of exceedances event recorded in the reporting quarter is summarized in **Table 3.2**.

Table 3.2 Summary of Exceedance Events in the Reporting Quarter

Parameter	Criteria	Number of Exceedances Events	Number of Project Related Exceedance Events
Air Quality			
1-hour Total Suspended Particulates	Action Level	0	0
	Limit Level	0	0
24-hour Total Suspended Particulates	Action Level	0	0
	Limit Level	0	0
Construction Noise			
Leq 30min	Action Level	0	0
	Limit Level	0	0
Water Quality			
Dissolved Oxygen	Action Level	1	0
	Limit Level	0	0
Suspended Solid	Action Level	0	0
	Limit Level	0	0
Turbidity	Action Level	0	0
	Limit Level	0	0

3.2.2 No exceedance of air monitoring was recorded at SR77 in the reporting quarter.

3.2.3 No exceedance of noise monitoring was recorded at SR77 in the reporting quarter.

3.2.4 One (1) exceedance of water quality monitoring was recorded at I5 in the reporting quarter.

3.2.5 The Contractor has been reminded to strengthen the mitigation measures including:

Air Quality

- All vehicles should be washed to remove any dusty materials before leaving the construction site.
- Ensure all vehicles are properly washed to remove mud and debris before leaving the site.

Chemical and Waste Management

- Good housekeeping should be maintained and stagnant water should be removed from secondary containment regularly.
- Provide proper chemical and chemical waste management.
- A spill response procedure shall be in place and absorption material available for minor spillages.

Water Quality

- Surface run-off, rainwater and waste water from construction site discharged into appropriate drains via adequately designed sand/ silt removal facilities (e.g. sand traps, silt traps and sedimentation basins) and pH adjusted before discharge.

4 WASTE MANAGEMENT

- 4.1.1 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.
- 4.1.2 During the reporting quarter, a total of 2,573m³ of excavated material has been generated. 1,628m³ of inert C&D materials was disposed of at public fill to Tuen Mun Area 38, while 471m³ of inert C&D materials was reused on site. 415m³ of general refuse was disposed of at North East New Territories (NENT) Landfill. 2m³ of plastics and no paper/cardboard packaging were collected by recycling contractor in the reporting quarter. 2m³ of metals were collected by recycling contractor in the reporting quarter. No chemical waste was collected by licensed contractor in the reporting quarter. Details of the waste management data are presented in **Appendix F**.

5 ENVIRONMENTAL NON-CONFORMANCE

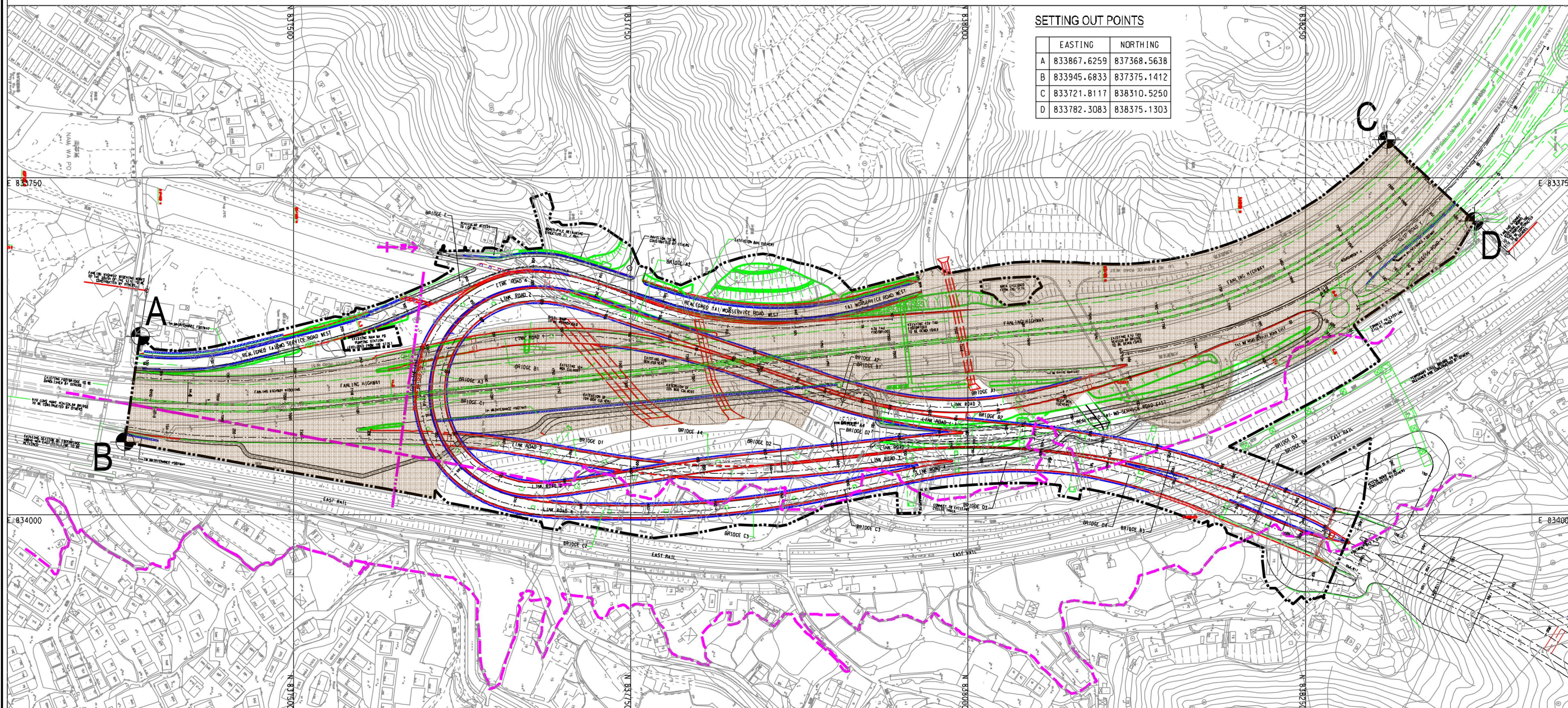
- 5.1.1 No environmental non-compliance was recorded in the reporting quarter. No environmental complaint was received. No environmental related prosecution or notification of summons was received in the reporting quarter. The summary for the non-compliance, complaints and prosecutions is provided in **Appendix G**.

6 CONCLUSION, COMMENTS AND RECOMMENDATIONS

- 6.1.1 The EM&A programme was carried out by the ET in accordance with the EM&A Manual requirements. It is concluded from the environmental monitoring and audit works that adequate environmental mitigation measures have been implemented by the civil works contractors where appropriate in the reporting quarter.
- 6.1.2 In the reporting quarter, one (1) exceedance event was recorded.

- 6.1.3 No environmental non-compliance was recorded in the reporting quarter. No environmental complaints were received in the reporting quarter. No environmental related prosecution or notification of summons was received in the reporting quarter.
- 6.1.4 The box culvert works have been partially completed by the end of March 2014 except the last construction activity, installation of a base slab at Box Culvert ID4. Due to the loading requirement of a fresh water main under the box culvert, installation of the base slab at Box Culvert ID4 has been commenced in December 2016.
- 6.1.5 The construction works at the box culvert ID4 are temporarily suspended until the utilities diversion works complete. The 4-week post construction water quality monitoring will be commenced after the installation of the base slab finishes, hence the completion of the box culvert works.

Figure



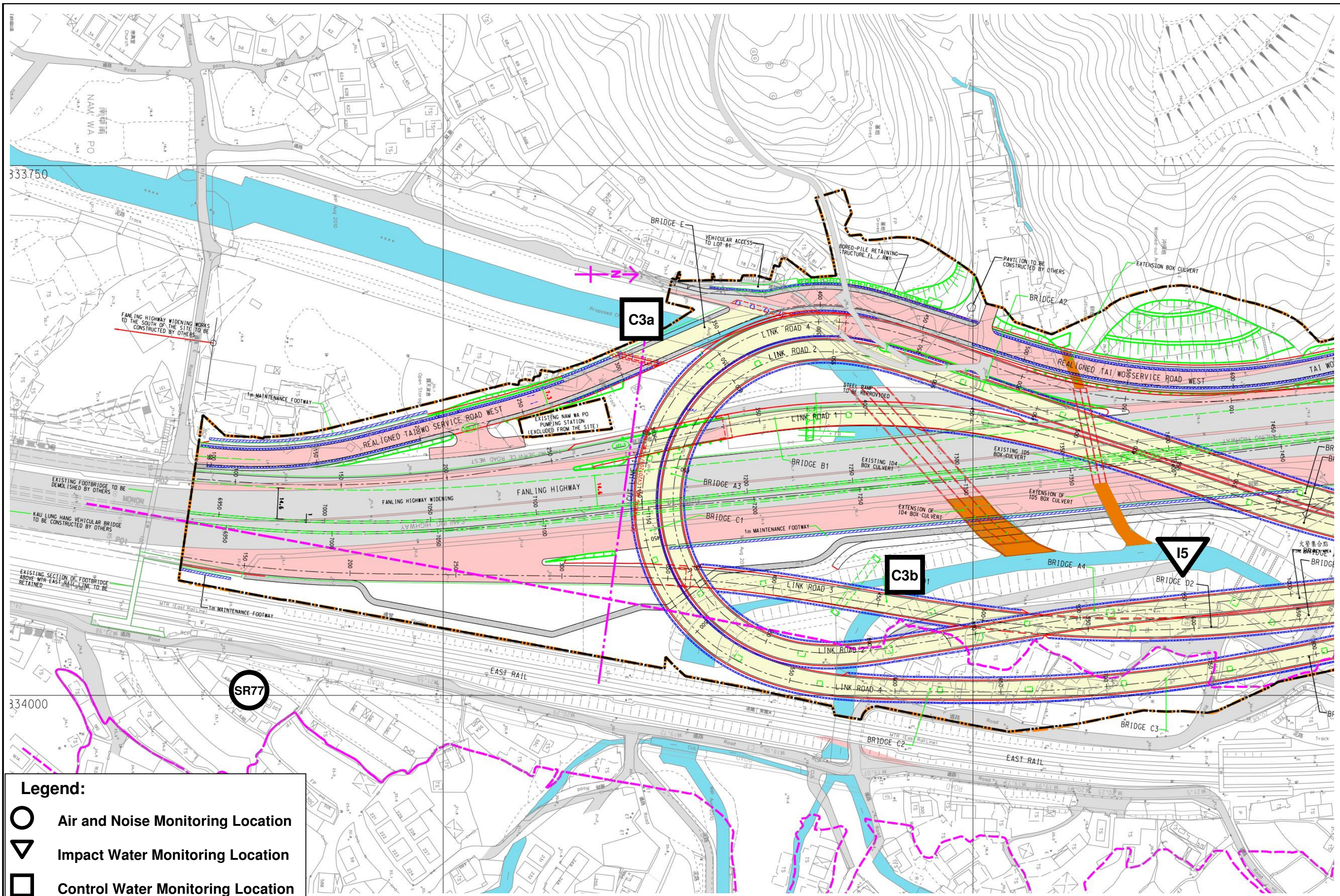
SETTING OUT POINTS

	EASTING	NORTHING
A	833867.6259	837368.5638
B	833945.6833	837375.1412
C	833721.8117	838310.5250
D	833782.3083	838375.1303

CV/201209-T-CWC-SK-001g_AD_edit.dgn 22/1/2014 17:10:34

Legend:

 Works Area for Entrusted Portion



- Legend:**
- Air and Noise Monitoring Location
 - ▽ Impact Water Monitoring Location
 - Control Water Monitoring Location

Figure 2: Environmental Monitoring Locations

Appendix A Construction Programme

Activity ID	Activity Name	OD	RD	Start	Finish	TF	2014					2015					2016					2017					2018					2019																																
							A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M
MS-3010	Commissioning of re-aligned TWSRE	0	0	22-Mar-17		0																										◆ Commissioning of re-aligned TWSRE																																
MS-3030	Completion of Utilities Diversion including connection to existing	0	0		24-Mar-16	0																										◆ Completion of Utilities Diversion including connection to existing																																
Major Procurement & Delivery		713	100	23-Aug-13 A	03-May-16	19																																																										
Water Supply Pipeworks		493	0	29-Oct-13 A	21-Jul-15 A																																																											
MM-1000	DN1200 MS pipe and pipe fittings	80	0	29-Oct-13 A	23-Dec-13 A		■ DN1200 MS pipe and pipe fittings																																																									
MM-1010	DN1400 MS pipe and pipe fittings	80	0	29-Oct-13 A	23-Dec-13 A		■ DN1400 MS pipe and pipe fittings																																																									
MM-1020	DN2200 MS pipe and pipe fittings	90	0	29-Oct-13 A	28-Apr-14 A		■ DN2200 MS pipe and pipe fittings																																																									
MM-1030	DN2300 MS pipe and pipe fittings	90	0	29-Oct-13 A	28-Apr-14 A		■ DN2300 MS pipe and pipe fittings																																																									
MM-1040	DN600 MS pipe and pipe fittings	80	0	29-Oct-13 A	23-Dec-13 A		■ DN600 MS pipe and pipe fittings																																																									
MM-1050	DN450 DI pipe and pipe fittings	60	0	21-Jun-14 A	26-Nov-14 A		■ DN450 DI pipe and pipe fittings																																																									
MM-1060	E&M equipment for the re-provisioned WSD Valve Control House	60	0	27-Apr-15 A	21-Jul-15 A		■ E&M equipment for the re-provisioned WSD Valve Control House																																																									
Precast Bridge Segment Lifting Frames and Precast Yard		520	0	23-Aug-13 A	08-May-15 A																																																											
MM-2000	Design and Submission of lifting frame	160	0	23-Aug-13 A	26-Jul-14 A		■ Design and Submission of lifting frame																																																									
MM-2020	Procurement and fabrication of lifting frame	105	0	05-May-14 A	27-Sep-14 A		■ Procurement and fabrication of lifting frame																																																									
MM-2040	Deliver to Site and assembly works	44	0	28-Sep-14 A	16-Jan-15 A		■ Deliver to Site and assembly works																																																									
MM-2050	Certification of lifting frame	12	0	17-Apr-15 A	08-May-15 A		■ Certification of lifting frame																																																									
Footbridge Steel Truss		100	100	23-Dec-15	03-May-16	19																																																										
MM-3050	Fabrication of footbridge steel truss (Kiu Tau Footbridge)	100	100	23-Dec-15	03-May-16	19	■ Fabrication of footbridge steel truss (Kiu Tau Footbridge)																																																									
Design and Submissions		1111	524	06-Aug-13 A	17-May-17	97																																																										
Statutory Approval		653	75	27-Aug-13 A	30-Oct-15	54																																																										
PRE-1000	Submission & approval of method statement for Box Culvert ID4 Extension - DSD	50	0	29-Aug-13 A	30-Oct-13 A		■ Submission & approval of method statement for Box Culvert ID4 Extension - DSD																																																									
PRE-1010	Submission & approval of method statement for Box Culvert ID5 Extension - DSD	50	0	29-Aug-13 A	30-Oct-13 A		■ Submission & approval of method statement for Box Culvert ID5 Extension - DSD																																																									
PRE-1020	Submission & approval of method statement for Box Culvert BC01 Extension to DSD	50	0	27-Aug-13 A	30-Oct-13 A		■ Submission & approval of method statement for Box Culvert BC01 Extension to DSD																																																									
PRE-1030	Submission & approval of method statement for Box Culvert BC02 Extension - DSD	50	0	27-Aug-13 A	30-Oct-13 A		■ Submission & approval of method statement for Box Culvert BC02 Extension - DSD																																																									
PRE-1040	Submission & approval of temporary works on nullah for construction of pad footing of Bridge E - DSD	40	0	11-Sep-14 A	08-Jan-15 A		■ Submission & approval of temporary works on nullah for construction of pad footing of Bridge E - DSD																																																									
PRE-1050	Submission & approval of CDIA report for construction of temporary platform for segment erection works	185	75	27-Nov-14 A	30-Oct-15	54	■ Submission & approval of CDIA report for construction of temporary platform for segment erection works. Submission & approval of CDIA report for construction of temporary platform for segment erection works. Submission & approval of CDIA report for construction of temporary platform for segment erection works.																																																									
PRE-1100	Submission & approval of ADMS plan within MTR East Rail Line Protection Zone - MTRCL	30	0	17-Mar-14 A	14-May-14 A		■ Submission & approval of ADMS plan within MTR East Rail Line Protection Zone - MTRCL																																																									
PRE-1110	Consent for Piling Works within MTRC Protection Zone (AA13, AC7) - MTRCL	45	0	15-Jan-14 A	17-May-14 A		■ Consent for Piling Works within MTRC Protection Zone (AA13, AC7) - MTRCL																																																									
PRE-1200	Consent for Dong Jiang watermain connection for DN2200, DN2300 - WSD	0	0		01-Sep-15*	0	◆ Consent for Dong Jiang watermain connection for DN2200, DN2300 - WSD																																																									
PRE-1210	Consent for Dong Jiang watermain connection for DN1400 - WSD	0	0		03-Apr-15 A		◆ Consent for Dong Jiang watermain connection for DN1400 - WSD																																																									
PRE-1230A	Consent for installation of bored pile within 60m from WSD Tau Pass Restricted Zone -WSD	90	0	15-Jan-14 A	09-Jul-14 A		■ Consent for installation of bored pile within 60m from WSD Tau Pass Restricted Zone -WSD																																																									
PRE-1230B	Consent for installation of bored pile within 30m from WSD Tau Pass Restricted Zone -WSD	90	0	15-Jan-14 A	14-Dec-14 A		■ Consent for installation of bored pile within 30m from WSD Tau Pass Restricted Zone -WSD																																																									
PRE-1240	Approval of Water Mains Alignment beside Fanling Highway (CH6935-7380) (incl. Twin DN1400, DN1200, DN600, DN2300) - WSD	45	0	19-Mar-14 A	31-Jul-14 A		■ Approval of Water Mains Alignment beside Fanling Highway (CH6935-7380) (incl. Twin DN1400, DN1200, DN600, DN2300) - WSD																																																									
PRE-1250	Approval of Water Mains Alignment beside existing TWSRE (incl. Twin DN1400, DN1200, DN600, DN2300) - WSD	45	0	19-Mar-14 A	16-Jul-14 A		■ Approval of Water Mains Alignment beside existing TWSRE (incl. Twin DN1400, DN1200, DN600, DN2300) - WSD																																																									
PRE-1260	Approval of Water Mains Alignment beside Fanling Highway (CH7380-7925) (incl. Twin DN1400, DN1200, DN600, DN2300) - WSD	45	0	19-Mar-14 A	11-Oct-14 A		■ Approval of Water Mains Alignment beside Fanling Highway (CH7380-7925) (incl. Twin DN1400, DN1200, DN600, DN2300) - WSD																																																									
PRE-1300	Liaison and approval for Utilities Diversion Plan - various utilities companies	150	0	19-Sep-13 A	25-Feb-14 A		■ Liaison and approval for Utilities Diversion Plan - various utilities companies																																																									
PRE-1400	Consent for Commencement of Works at the Potential Contaminative Land - EPD	60	0	15-Apr-14 A	31-Jul-14 A		■ Consent for Commencement of Works at the Potential Contaminative Land - EPD																																																									
Design Confirmation		390	0	16-Dec-13 A	26-Aug-15	0																																																										
PRE-1500	Confirmation of Noise Barrier Footing Design (NB71) (CH7150 to CH7290) (under VO.39, 43, 74, 79, 99, 101 & 111)	70	0	17-Apr-14 A	22-May-15 A		■ Confirmation of Noise Barrier Footing Design (NB71) (CH7150 to CH7290) (under VO.39, 43, 74, 79, 99, 101 & 111)																																																									



俊和建築工程有限公司
CHUN WO CONSTRUCTION & ENGINEERING CO., LTD.

- 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

Updated Master Works Programme (Revision 3B)
Programme ID: UMP03B (Data Date: 01-Aug-15) ____ Print Date: 23-Oct-15

Date	Revision	Checked	Approved
29-Jan-14	IWP04	Sam	Victor
08-Jan-15	UMP01	Sam	Victor
24-Apr-15	UMP02	Sam	Victor
01-Aug-15	UMP03	Sam	Victor
02-Oct-15	UMP03A	Sam	Victor
23-Oct-15	UMP03B	Sam	Victor

Activity ID	Activity Name	OD	RD	Start	Finish	TF	2014					2015					2016					2017					2018					2019																																
							A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M
PRE-1510	Confirmation of Revised Retaining Structure along Slope no. 3SW-C/C898 (under VO. 78)	0	0		16-Apr-15 A		◆ Confirmation of Revised Retaining Structure along Slope no. 3SW-C/C898 (under VO. 78)																																																									
PRE-1520	Confirmation of Noise Barrier Footing Design (NB1a) near WSD Tau Pass Restricted Zone (under VO.103)	0	0		20-Aug-15 A		◆ Confirmation of Noise Barrier Footing Design (NB1a) near WSD Tau Pass Restricted Zone (under VO.103)																																																									
PRE-1530	Confirmation of Noise Barrier Footing Design (NB3) (under VO. 95, 98 & 109)	0	0		26-Aug-15*	0	◆ Confirmation of Noise Barrier Footing Design (NB3) (under VO. 95, 98 & 109)																																																									
PRE-1540	Confirmation of details of Box Culvert (BC01) (under VO. 12)	0	0		16-Dec-13 A		◆ Confirmation of details of Box Culvert (BC01) (under VO. 12)																																																									
PRE-1550	Confirmation of construction details of permanent boundary wall for pumping station PST3 (under VO.15)	0	0		07-Jan-14 A		◆ Confirmation of construction details of permanent boundary wall for pumping station PST3 (under VO.15)																																																									
Method Statement and Design (Major) Approved by AECOM		947	524	20-Jan-14 A	17-May-17	97																																																										
PRE-2000	Submission of E&M design for the re-provisioned WSD Valve Control House	60	0	20-Jan-14 A	30-May-14 A		Submission of E&M design for the re-provisioned WSD Valve Control House																																																									
PRE-2010	Submission of irrigation systems for the proposed planting	60	60	02-Mar-17	17-May-17	97	Submission of irrigation systems for the proposed planting																																																									
PRE-2020	Submission of noise barrier design for absorptive panels, transparent panels and associated fixing details	60	7	11-Mar-14 A	08-Aug-15	155	Submission of noise barrier design for absorptive panels, transparent panels and associated fixing details; Submission of noise barrier design for absorptive panels, transparent panels and																																																									
PRE-2030	Submission of E&M design for lighting of Kiu Tau Footbridge	60	60	18-Dec-15	07-Mar-16	130	Submission of E&M design for lighting of Kiu Tau Footbridge																																																									
PRE-2040	Submission of E&M design for lighting inside viaduct structures of Bridge A, B, C & D	60	60	26-Apr-16	08-Jul-16	69	Submission of E&M design for lighting inside viaduct structures of Bridge A, B, C & D																																																									
PRE-2050	Submission of Shop Drawing for fabrication of Kiu Tau Footbridge Steelworks	30	30	18-Nov-15	22-Dec-15	19	Submission of Shop Drawing for fabrication of Kiu Tau Footbridge Steelworks																																																									
Contractor's Alternative Design (AD) Submission & Approval		687	0	06-Aug-13 A	04-Mar-15 A																																																											
PRE-4000	ACABAS submission & approval	50	0	03-Sep-13 A	17-Sep-13 A		ACABAS submission & approval																																																									
PRE-4010	Contractor's Alternative Design AIP	56	0	06-Aug-13 A	09-Oct-13 A		Contractor's Alternative Design AIP																																																									
PRE-4110	Foundation Design Package A (AA1, AB1, AC1, AD1, AB12/AD14)	36	0	03-Sep-13 A	11-Nov-13 A		Foundation Design Package A (AA1, AB1, AC1, AD1, AB12/AD14)																																																									
PRE-4120	Foundation Design Package B (AC4, AA5)	36	0	19-Sep-13 A	11-Nov-13 A		Foundation Design Package B (AC4, AA5)																																																									
PRE-4130	Foundation Design Package C (AA12, AB5, AC2, AC3)	36	0	19-Sep-13 A	04-Dec-13 A		Foundation Design Package C (AA12, AB5, AC2, AC3)																																																									
PRE-4140	Foundation Design Package D (AD2, AD3, AD4, AD5)	36	0	21-Nov-13 A	14-Jan-14 A		Foundation Design Package D (AD2, AD3, AD4, AD5)																																																									
PRE-4150	Foundation Design Package E (AA5, AA8, AA10, AA11, AA12, AA14, AA17, AB2, AB5, AC2-AC4, AC6-AC10, AD2, AD4-AD6)	48	0	26-Sep-13 A	30-Jan-14 A		Foundation Design Package E (AA5, AA8, AA10, AA11, AA12, AA14, AA17, AB2, AB5, AC2-AC4, AC6-AC10, AD2, AD4-AD6)																																																									
PRE-4160	Foundation Design Package F (AA2-AA4, AA6, AA7, AA15, AA16, AB3-AB4, AB8-AB11, AD7, AD10-AD13)	48	0	25-Dec-13 A	10-Mar-14 A		Foundation Design Package F (AA2-AA4, AA6, AA7, AA15, AA16, AB3-AB4, AB8-AB11, AD7, AD10-AD13)																																																									
PRE-4170	Foundation Design Package G (AA9, AA13, AA18, AB6-AB7, AC5, AC11-AC12, AD8-AD9)	48	0	28-Jan-14 A	16-Apr-14 A		Foundation Design Package G (AA9, AA13, AA18, AB6-AB7, AC5, AC11-AC12, AD8-AD9)																																																									
PRE-4170A	Foundation Re-design Package for Bridge B2/D3	0	0		03-Sep-14 A		◆ Foundation Re-design Package for Bridge B2/D3																																																									
PRE-4180	Pile Cap Design Package A (AA2-AA4, AA6-AA8, AA10-AA12, AA14-AA17, AB2-AB5, AC2-AC4, AC6-AC10, AD2-AD4, AD7)	48	0	02-Dec-13 A	30-Jan-14 A		Pile Cap Design Package A (AA2-AA4, AA6-AA8, AA10-AA12, AA14-AA17, AB2-AB5, AC2-AC4, AC6-AC10, AD2-AD4, AD7)																																																									
PRE-4190A	Pile Cap Design Package B (AA5, AB8-AB11, AD12-AD13)	48	0	28-Jan-14 A	10-Mar-14 A		Pile Cap Design Package B (AA5, AB8-AB11, AD12-AD13)																																																									
PRE-4190B	Pile Cap Design Package C (AA9, AA13, AA18, AB6-AB7, AC5, AC11, AC12, AD5-AD6, AD8-AD11)	48	0	28-Jan-14 A	16-Apr-14 A		Pile Cap Design Package C (AA9, AA13, AA18, AB6-AB7, AC5, AC11, AC12, AD5-AD6, AD8-AD11)																																																									
PRE-4210	Pier Design Package A (AA2-AA5, AA10-AA13, AB2-AB5, AC2-AC10, AD6-AD7)	46	0	28-Nov-13 A	10-Jun-14 A		Pier Design Package A (AA2-AA5, AA10-AA13, AB2-AB5, AC2-AC10, AD6-AD7)																																																									
PRE-4220	Pier Design Package B (AB6-AB11)	43	0	28-Nov-13 A	20-Nov-14 A		Pier Design Package B (AB6-AB11)																																																									
PRE-4230	Pier Design Package C (AD2-AD5)	31	0	28-Nov-13 A	11-Jun-14 A		Pier Design Package C (AD2-AD5)																																																									
PRE-4240	Pier Design Package D (AA6-AA9, AA14-AA18)	46	0	20-Jan-14 A	10-Jun-14 A		Pier Design Package D (AA6-AA9, AA14-AA18)																																																									
PRE-4250	Pier Design Package E (AC11-AC12)	50	0	28-Nov-13 A	11-Jun-14 A		Pier Design Package E (AC11-AC12)																																																									
PRE-4260	Pier Design Package F (AD8-AD13)	50	0	20-Jan-14 A	20-Nov-14 A		Pier Design Package F (AD8-AD13)																																																									
PRE-4270	Portal Beam Design Package 1 (AA2, AB6, AC11/AD8)	54	0	20-Jan-14 A	11-Jun-14 A		Portal Beam Design Package 1 (AA2, AB6, AC11/AD8)																																																									
PRE-4280	Portal Beam Design Package 2 (AB7/AD9/AC12, AB8, AD11)	38	0	23-Aug-14 A	20-Nov-14 A		Portal Beam Design Package 2 (AB7/AD9/AC12, AB8, AD11)																																																									
PRE-4290	Portal Beam Design Package 3 (AD3)	31	0	23-Aug-14 A	30-Sep-14 A		Portal Beam Design Package 3 (AD3)																																																									
PRE-4310A	Superstructure Design Package 9 for Bridge A1 (AA1-AA5)	118	0	16-May-14 A	12-Jan-15 A		Superstructure Design Package 9 for Bridge A1 (AA1-AA5)																																																									
PRE-4310B	Superstructure Design Package 10 for Bridge A2 (AA6-AA9)	154	0	16-May-14 A	12-Jan-15 A		Superstructure Design Package 10 for Bridge A2 (AA6-AA9)																																																									
PRE-4310C	Superstructure Design Package 3 for Bridge A3 (AA10-AA13)	158	0	04-Apr-14 A	12-Jan-15 A		Superstructure Design Package 3 for Bridge A3 (AA10-AA13)																																																									
PRE-4310D	Superstructure Design Package 6 for Bridge A4 (AA14-AA18)	108	0	16-May-14 A	12-Jan-15 A		Superstructure Design Package 6 for Bridge A4 (AA14-AA18)																																																									



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Activity ID	Activity Name	OD	RD	Start	Finish	TF	Gantt Chart (2014-2019)																																																																						
							2014													2015													2016													2017													2018													2019					
PRE-4320A	Superstructure Design Package 11 for Bridge B1 (AB1-AB6)	73	0	21-May-14 A	30-Sep-14 A		Superstructure Design Package 11 for Bridge B1 (AB1-AB6)																																																																						
PRE-4320B	Superstructure Design Package 7 for Bridge B2 (AB7-AB12)	196	0	21-May-14 A	12-Jan-15 A		Superstructure Design Package 7 for Bridge B2 (AB7-AB12)																																																																						
PRE-4330A	Superstructure Design Package 2 for Bridge C1 (AC1-AC5)	196	0	28-Mar-14 A	30-Sep-14 A		Superstructure Design Package 2 for Bridge C1 (AC1-AC5)																																																																						
PRE-4330B	Superstructure Design Package 1 for Bridge C2 (AC6-AC11)	134	0	06-Mar-14 A	27-Aug-14 A		Superstructure Design Package 1 for Bridge C2 (AC6-AC11)																																																																						
PRE-4340A	Superstructure Design Package 4 for Bridge D1 (AD1-AD5)	110	0	07-May-14 A	30-Sep-14 A		Superstructure Design Package 4 for Bridge D1 (AD1-AD5)																																																																						
PRE-4340B	Superstructure Design Package 8 for Bridge D2 (AD6-AD8)	56	0	30-Jul-14 A	12-Jan-15 A		Superstructure Design Package 8 for Bridge D2 (AD6-AD8)																																																																						
PRE-4340C	Superstructure Design Package 5 for Bridge D3 (AD9-AD14)	196	0	07-May-14 A	12-Jan-15 A		Superstructure Design Package 5 for Bridge D3 (AD9-AD14)																																																																						
PRE-4400	Abutments Design Package for AA1, AB1, AC1 & AD1	220	0	01-Apr-14 A	04-Mar-15 A		Abutments Design Package for AA1, AB1, AC1 & AD1																																																																						
Condition Survey		18	0	26-Aug-13 A	22-Oct-13 A																																																																								
PRE-5000	Condition Survey for EBS	18	0	26-Aug-13 A	22-Oct-13 A		Condition Survey for EBS																																																																						
Temporary Traffic Arrangement (TTA) Submission and Approval		358	0	12-Aug-13 A	06-Jun-14 A																																																																								
Forming of TMLG		50	0	12-Aug-13 A	13-Sep-13 A																																																																								
PRE-6000	Traffic consultant nomination & approval	25	0	20-Aug-13 A	29-Aug-13 A		Traffic consultant nomination & approval																																																																						
PRE-6020	TMLG establishment	50	0	12-Aug-13 A	13-Sep-13 A		TMLG establishment																																																																						
TTA for Tai Wo Service Road West		302	0	13-Sep-13 A	06-Jun-14 A																																																																								
PRE-6110	TTA submission & approval - Scheme W2 (for Piling Works & Retaining Structure)	40	0	13-Sep-13 A	15-Oct-13 A		TTA submission & approval - Scheme W2 (for Piling Works & Retaining Structure)																																																																						
PRE-6140	TTA submission & approval - Scheme W3 (for laying UU ductings)	40	0	28-May-14 A	06-Jun-14 A		TTA submission & approval - Scheme W3 (for laying UU ductings)																																																																						
Section IA & IB - Fanling Highway Widening (KD-1 & KD-2)		1419	906	12-Aug-13 A	31-Aug-18	0																																																																							
Fanling Highway South Portion between CH6935 and CH7470		1250	737	12-Aug-13 A	30-Jan-18	0																																																																							
Fanling Highway Zone 1 between CH6935 and CH7130 (within SBZ2)		1250	737	12-Aug-13 A	30-Jan-18	0																																																																							
At-Grade Roadworks (195m)		1250	737	12-Aug-13 A	30-Jan-18	0																																																																							
FHW-1100	Site Formation, Preparation Works & Tree Transplant	65	0	12-Aug-13 A	11-Aug-14 A		Site Formation, Preparation Works & Tree Transplant																																																																						
FHW-1110	Noise Barrier NB6 and NB7 - Footing adjacent to SB lane (184m)	280	0	29-Mar-14 A	16-Aug-14 A		Noise Barrier NB6 and NB7 - Footing adjacent to SB lane (184m)																																																																						
FHW-1120*	Pipe Laying - DN1200 Watermains (CHC) across Fanling Highway (total 80m for 2 shafts)	275	0	09-Jun-14 A	12-Feb-15 A		Pipe Laying - DN1200 Watermains (CHC) across Fanling Highway (total 80m for 2 shafts)																																																																						
FHW-1130*	Pipe Laying - DN1200 Watermains (CHC) along Fanling Highway (80m long, 4m depth)	182	76	20-Feb-14 A	31-Oct-15	155	Pipe Laying - DN1200 Watermains (CHC) along Fanling Highway (80m long, 4m depth)																																																																						
FHW-1140	Noise Barrier NB70 - Footing adjacent to SB lane (15m)	115	115	04-Feb-16	02-Jul-16	77	Noise Barrier NB70 - Footing adjacent to SB lane (15m)																																																																						
FHW-1150	Road Formation (FLH SB 1st lane)	48	48	04-Jul-16	27-Aug-16	77	Road Formation (FLH SB 1st lane)																																																																						
FHW-1160	Road Formation (FLH SB 2nd lane)	25	25	30-Sep-17	01-Nov-17	0	Road Formation (FLH SB 2nd lane)																																																																						
FHW-1170	Road Formation & Road Drainage (FLH SB 3rd lane)	50	50	02-Nov-17	02-Jan-18	0	Road Formation & Road Drainage (FLH SB 3rd lane)																																																																						
FHW-1180	Road Formation & Pavement (FLH SB 4th lane)	24	24	03-Jan-18	30-Jan-18	0	Road Formation & Pavement (FLH SB 4th lane)																																																																						
FHW-1210	Road Formation & Pavement (FLH NB 1st lane)	80	80	25-Aug-16	29-Nov-16	0	Road Formation & Pavement (FLH NB 1st lane)																																																																						
FHW-1220	Road Formation & Pavement (FLH NB 2nd lane)	33	33	30-Sep-17	10-Nov-17	0	Road Formation & Pavement (FLH NB 2nd lane)																																																																						
FHW-1230	Road Formation & Pavement (FLH NB 3rd lane)	33	33	11-Nov-17	19-Dec-17	0	Road Formation & Pavement (FLH NB 3rd lane)																																																																						
FHW-1240	Road Formation & Pavement (FLH NB 4th lane)	33	33	20-Dec-17	30-Jan-18	0	Road Formation & Pavement (FLH NB 4th lane)																																																																						
FHW-1300	Noise Barrier NB68 - Mini-Piling at central median (CSD: 24 nos)	80	80	08-Mar-16	16-Jun-16	0	Noise Barrier NB68 - Mini-Piling at central median (CSD: 24 nos)																																																																						
FHW-1310	Noise Barrier NB68 - Footing at central median (72m)	73	73	17-Jun-16	10-Sep-16	0	Noise Barrier NB68 - Footing at central median (72m)																																																																						
FHW-1320	Road Formation (Middle Part: FLH NB & SB Fast lanes), except CH6935 - CH7035	27	27	12-Sep-16	15-Oct-16	0	Road Formation (Middle Part: FLH NB & SB Fast lanes), except CH6935 - CH7035																																																																						
Fanling Highway Zone 2 between CH7130 and CH7290		1113	737	17-Apr-14 A	30-Jan-18	0																																																																							
At-Grade Roadworks (160m)		1113	737	17-Apr-14 A	30-Jan-18	0																																																																							



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							A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
FHW-2110A	Noise Barrier NB71 - Footing adjacent to SB lane (24m)	70	0	17-Apr-14 A	16-Aug-14 A		Noise Barrier NB71 - Footing adjacent to SB lane (24m)																																																									
FHW-2110B	Noise Barrier NB71 - Footing adjacent to SB lane (96m) (under VO.79)	341	88	26-Jul-14 A	14-Nov-15	0	Noise Barrier NB71 - Footing adjacent to SB lane (96m) (under VO.79), Noise Barrier NB71 - Footing adjacent to SB lane (96m) (under VO.79)																																																									
FHW-2120*	Pipe Laying - Twin DN1400 Watermains (CHE & G) along Fanling Highway (44m long, 6m depth)	85	0	09-Jul-14 A	19-Dec-14 A		Pipe Laying - DN1200 & DN600 Watermains (CHB & CHC) along Fanling Highway (183m long, 4m depth)																																																									
FHW-2130*	Pipe Laying - DN1200 & DN600 Watermains (CHB & CHC) along Fanling Highway (183m long, 4m depth)	144	154	13-Jul-15 A	03-Feb-16	77	Road Formation, Kerb and Pavement (Eastern Side: FLH SB Slow lane and hard should)																																																									
FHW-2140	Road Formation, Kerb and Pavement (Eastern Side: FLH SB Slow lane and hard should)	61	61	14-Oct-15	24-Dec-15	0	Footpath & DSD Access Track adjacent to SB lane																																																									
FHW-2190	Footpath & DSD Access Track adjacent to SB lane	108	108	04-Feb-16	23-Jun-16	172	Noise Barrier NB67 - Mini-Piling adjacent to NB lane (CSD: 36 nos) together with Pile Test																																																									
FHW-2200	Noise Barrier NB67 - Mini-Piling adjacent to NB lane (CSD: 36 nos) together with Pile Test	143	143	17-Feb-17	11-Aug-17	0	Noise Barrier NB67 - Footing adjacent to NB lane (83m)																																																									
FHW-2210	Noise Barrier NB67 - Footing adjacent to NB lane (83m)	105	105	27-Jul-17	29-Nov-17	0	Road Formation, Road Drainage & Kerb (Western Side: FLH NB hard shoulder and 1st lane)																																																									
FHW-2220	Road Formation, Road Drainage & Kerb (Western Side: FLH NB hard shoulder and 1st lane)	80	80	25-Oct-17	30-Jan-18	0	Noise Barrier NB68 - Mini-Piling at central median (CSD: 22 nos)																																																									
FHW-2300	Noise Barrier NB68 - Mini-Piling at central median (CSD: 22 nos)	80	80	08-Mar-16	16-Jun-16	0	Noise Barrier NB68A - Footing at central median (157m)																																																									
FHW-2310	Noise Barrier NB68A - Footing at central median (157m)	135	135	08-Mar-16	20-Aug-16	0	Road Formation & Central Barrier (Middle Part: FLH NB & SB 4th lanes)																																																									
FHW-2320	Road Formation & Central Barrier (Middle Part: FLH NB & SB 4th lanes)	90	90	29-Jun-16	15-Oct-16	0	Road Formation and Pavement (FLH NB 3rd lane)																																																									
FHW-2400	Road Formation and Pavement (FLH NB 3rd lane)	48	48	17-Oct-16	10-Dec-16	0	Road Formation and Pavement (FLH NB 2nd lane)																																																									
FHW-2410	Road Formation and Pavement (FLH NB 2nd lane)	48	48	12-Dec-16	15-Feb-17	0																																																										
Fanling Highway Zone 3 between CH7290 and CH7380		1230	737	05-Nov-13 A	30-Jan-18	0																																																										
Box Culvert Extension - ID4		614	45	05-Nov-13 A	23-Dec-15	616																																																										
ID4-3000	Demolition of existing box structure	7	0	14-Feb-14 A	01-Mar-14 A		Demolition of existing box structure																																																									
ID4-3010	Flow diversion of existing stream	4	0	05-Nov-13 A	16-Nov-13 A		Flow diversion of existing stream																																																									
ID4-3020	Installation of dowel bar for connection to existing box structure	4	0	03-Mar-14 A	07-Mar-14 A		Installation of dowel bar for connection to existing box structure																																																									
ID4-3030A	Bay 1 - Excavation	4	0	03-Mar-14 A	04-Mar-14 A		Bay 1 - Excavation																																																									
ID4-3030B	Bay 2 - Excavation	4	0	18-Nov-13 A	03-Dec-13 A		Bay 2 - Excavation																																																									
ID4-3030C	Bay 3 - Excavation	4	0	18-Nov-13 A	18-Dec-13 A		Bay 3 - Excavation																																																									
ID4-3040A	Bay 1 - Sub-base & Blinding	3	0	04-Mar-14 A	05-Mar-14 A		Bay 1 - Sub-base & Blinding																																																									
ID4-3040B	Bay 2 - Sub-base & Blinding	3	0	04-Dec-13 A	24-Dec-13 A		Bay 2 - Sub-base & Blinding																																																									
ID4-3040C	Bay 3 - Sub-base & Blinding	3	0	19-Dec-13 A	23-Dec-13 A		Bay 3 - Sub-base & Blinding																																																									
ID4-3050A	Bay 1 - Base Slab	7	0	07-Mar-14 A	12-Mar-14 A		Bay 1 - Base Slab																																																									
ID4-3050B	Bay 2 - Base Slab	7	0	27-Dec-13 A	04-Jan-14 A		Bay 2 - Base Slab																																																									
ID4-3050C	Bay 3 - Base Slab	7	0	27-Dec-13 A	04-Jan-14 A		Bay 3 - Base Slab																																																									
ID4-3060A	Bay 1 - Wall and Top Slab	13	0	13-Mar-14 A	26-Mar-14 A		Bay 1 - Wall and Top Slab																																																									
ID4-3060B	Bay 2 - Wall and Top Slab	21	0	07-Jan-14 A	21-Jan-14 A		Bay 2 - Wall and Top Slab																																																									
ID4-3060C	Bay 3 - Wall and Top Slab	21	0	07-Jan-14 A	21-Jan-14 A		Bay 3 - Wall and Top Slab																																																									
ID4-3070	Construction of Temporary Road for Site Access	12	0	24-Jan-14 A	14-Feb-14 A		Construction of Temporary Road for Site Access																																																									
ID4-3080	Construction of Wing Wall, Cascade and Head Wall	35	0	24-Dec-13 A	15-Feb-14 A		Construction of Wing Wall, Cascade and Head Wall																																																									
ID4-3090	Bay 1 - Remaining Base Slab (To be carried out after diversion of DN1400 water mains)	45	45	02-Nov-15	23-Dec-15	269	Bay 1 - Remaining Base Slab (To be carried out after diversion of DN1400 water mains)																																																									
Box Culvert Extension - ID5		288	0	05-Nov-13 A	15-Mar-14 A																																																											
ID5-3000	Demolition of existing box structure	7	0	14-Feb-14 A	25-Feb-14 A		Demolition of existing box structure																																																									
ID5-3010	Flow Diversion of Existing Stream	4	0	05-Nov-13 A	12-Nov-13 A		Flow Diversion of Existing Stream																																																									
ID5-3020	Installation of Dowel Bar for Connection to Existing Box Structure	4	0	26-Feb-14 A	26-Feb-14 A		Installation of Dowel Bar for Connection to Existing Box Structure																																																									
ID5-3030A	Bay 1 - Excavation	4	0	26-Feb-14 A	28-Feb-14 A		Bay 1 - Excavation																																																									



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24-Apr-15	UMP02	Sam	Victor
01-Aug-15	UMP03	Sam	Victor
02-Oct-15	UMP03A	Sam	Victor
23-Oct-15	UMP03B	Sam	Victor

Activity ID	Activity Name	OD	RD	Start	Finish	TF	2014 2015 2016 2017 2018 2019																																																																							
							2014												2015												2016												2017												2018												2019											
							A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul
FHW-4130*	Pipe Laying - DN600 & DN1200 Watermains (CHB &CHC) along Fanling Highway (90m long, 3m depth)	60	0	27-Nov-14 A	18-May-15 A																																																																									
FHW-4140	Footpath, DSD Access Track adjacent to SB lane	60	60	02-Nov-16	13-Jan-17	172																																																																								
FHW-4150	Permanent Road Drainage, Road Formation and Pavement (Eastern Side: FLH SB 1st & 2nd lane and hard shoulder)	124	124	22-Nov-16	29-Apr-17	10																																																																								
FHW-4200	Demolition of Existing Central Barrier and Make Good of Road Pavement for further Traffic Diversion	46	46	15-May-17	08-Jul-17	0																																																																								
FHW-4210	Noise Barrier NB68A - Footing at central median (40m)	90	90	08-Mar-16	28-Jun-16	0																																																																								
FHW-4220	Road Formation & Central Barrier (Middle Part: FLH SB 4th lanes)	90	90	29-Jun-16	15-Oct-16	0																																																																								
FHW-4300	Permanent Road Drainage, Road Formation and Pavement (Western Side: FLH NB 1st & 2nd and hard shoulder)	88	88	10-Jul-17	21-Oct-17	0																																																																								
Fanling Highway Zone 5 between CH7470 and CH7600 (Provision of Kiu Tau Footbridge)		1099	694	15-Apr-14 A	30-Jan-18	0																																																																								
Kiu Tau Footbridge Re provision (East)		630	311	05-Aug-14 A	13-Oct-16	6																																																																								
FHW-5000A1	KT-AB1 - Piling Works (7 out of 12 nos of Pile) - Phase 1	60	0	29-Sep-14 A	14-Jan-15 A																																																																									
FHW-5000A2	KT-AB1 - Piling Works (5 out of 12 nos of Pile) - Phase 2, conflict with temp cycle track/ existing tree	25	25	10-Nov-15	08-Dec-15	36																																																																								
FHW-5000B	KT-AB2 - Piling Works (4 out of 4 nos of Pile) - Phase 1	20	0	24-Sep-14 A	27-Nov-14 A																																																																									
FHW-5000C1	KT-P2 - Piling Works (3 out of 6 nos of Pile) - Phase 1	30	0	04-Oct-14 A	20-Dec-14 A																																																																									
FHW-5000C2	KT-P2 - Piling Works (3 out of 6 nos of Pile) - Phase 2, conflict with existing TWSRE	15	15	21-Dec-15	09-Jan-16	26																																																																								
FHW-5000D1	KT-P3 - Piling Works (5 out of 6 nos of Pile) - Phase 1	40	0	06-Oct-14 A	24-Dec-14 A																																																																									
FHW-5000D2	KT-P3 - Piling Works (1 out of 6 nos of Pile) - Phase 2, conflict with temp cycle track/ existing tree	6	0	02-Dec-14 A	24-Dec-14 A																																																																									
FHW-5000E	KT-P4 - Piling Works (8 out of 8 nos of Pile) - Phase 2, conflict with temp cycle track/ existing tree	40	40	21-Sep-15	09-Nov-15	36																																																																								
FHW-5010A	KT-AB1 - Pile Cap & Abutment	75	75	03-Feb-16	12-May-16	11																																																																								
FHW-5010B	KT-AB2 - Pile Cap & Abutment	60	60	04-Mar-16	19-May-16	6																																																																								
FHW-5010C	KT-P2 - Pile Cap & Pier	60	60	11-Jan-16	30-Mar-16	26																																																																								
FHW-5010D	KT-P3 - Pile Cap & Pier	60	60	03-Feb-16	23-Apr-16	6																																																																								
FHW-5010E	KT-P4 - Pile Cap & Pier	75	75	10-Nov-15	15-Feb-16	81																																																																								
FHW-5020	Steel Truss Installation at TWSR East	12	12	20-May-16	02-Jun-16	6																																																																								
FHW-5030	Steel Truss Installation across Fanling Highway	7	7	18-Jun-16	25-Jun-16	6																																																																								
FHW-5040	Installation of Bridge Decking and Cladding	56	56	27-Jun-16	31-Aug-16	6																																																																								
FHW-5050	Installation of Drainage and Lighting Facilities (Overall)	40	40	09-Aug-16	24-Sep-16	6																																																																								
FHW-5060	Testing and Commissioning (Overall)	14	14	26-Sep-16	13-Oct-16	6																																																																								
FHW-5070	Predrilling works for Socket H-Piles	45	0	05-Aug-14 A	14-Aug-14 A																																																																									
FHW-5080	Additional BFA Facilities - Piling Works (4 out of 4 nos of Pile) - Phase 1 (covered by VO no. 59)	20	0	30-Dec-14 A	14-Jan-15 A																																																																									
FHW-5090	Additional BFA Facilities - Pile Cap & Sump Pit, to be covered by VO	45	45	11-Jan-16	09-Mar-16	61																																																																								
FHW-5110	Inspection & Remedial Works for the 3nos. suspected defected piles (AB1-7, AB2-4, P3-9)	35	35	21-Dec-15	02-Feb-16	6																																																																								
At-Grade Road Works (130m)		1099	649	15-Apr-14 A	30-Jan-18	0																																																																								
FHW-5100	Demolition of Existing Structure and Site Clearance	45	0	15-Apr-14 A	13-May-14 A																																																																									
FHW-5120A	Preparation Works for Implementation of TTA Scheme E2	51	0	11-Apr-15 A	08-Jun-15 A																																																																									
FHW-5120B	Implementation of TTA - Scheme E2 (shifting TWSR East towards Pier AA4 for pipe laying works at crossing)	0	0	09-Jun-15 A																																																																										
FHW-5120C	Preparation Works for Implementation of TTA Scheme E3A	30	30	16-Nov-15	19-Dec-15	6																																																																								
FHW-5120D	Implementation of TTA - Scheme E3A (shifting TWSR East westward, at the existing ramp of Kiu Tau Footbridge)	0	0	21-Dec-15																																																																										
FHW-5120E	Preparation Works for Implementation of TTA Scheme E4	6	6	25-Apr-16	30-Apr-16	86																																																																								
FHW-5120F	Implementation of TTA - Scheme E4 (shifting TWSR East to original alignment)	0	0	03-May-16																																																																										



- Actual Work
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CEDD Contract No. CV/2012/09
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Updated Master Works Programme (Revision 3B)
Programme ID: UMP03B (Data Date: 01-Aug-15) ____ Print Date: 23-Oct-15
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Date	Revision	Checked	Approved
29-Jan-14	IWP04	Sam	Victor
08-Jan-15	UMP01	Sam	Victor
24-Apr-15	UMP02	Sam	Victor
01-Aug-15	UMP03	Sam	Victor
02-Oct-15	UMP03A	Sam	Victor
23-Oct-15	UMP03B	Sam	Victor

Activity ID	Activity Name	OD	RD	Start	Finish	TF	Gantt Chart (2014-2019)																																																																						
							2014													2015													2016													2017													2018													2019					
TWSRW-1100	Tree Survey, Tree Felling and Transplanting	81	0	16-Oct-13A	08-Mar-15 A		Tree Survey, Tree Felling and Transplanting																																																																						
TWSRW Zone 1 between CH100 and CH155		774	345	07-Jan-14 A	11-Nov-16	344																																																																							
At-Grade Roadworks		774	345	07-Jan-14 A	11-Nov-16	344																																																																							
TWSRW-1110	Site Clearance	35	0	07-Jan-14 A	11-Mar-14 A		Site Clearance																																																																						
TWSRW-1120	Noise Barrier NB4 - Footing adjacent to Realigned TWSR West	85	0	12-Apr-14 A	23-Sep-14 A		Noise Barrier NB4 - Footing adjacent to Realigned TWSR West																																																																						
TWSRW-1130	Laying of Southern Trunk Sewer (West)	95	0	23-Apr-14 A	12-Nov-14 A		Laying of Southern Trunk Sewer (West)																																																																						
TWSRW-1140*	Pipe Laying - DN450 & DN1200 Watermains (CHA & CHC)	80	80	08-Aug-16	11-Nov-16	344	Pipe Laying - DN450 & DN1200 Watermains (CHA & CHC)																																																																						
TWSRW-1150	Installation of Cable Ducts for Utilities Diversion Works at Zone 1 & Zone 2 (Approx. 100m) (by utilities undertakers)	167	0	22-Oct-14 A	18-Jul-15 A		Installation of Cable Ducts for Utilities Diversion Works at Zone 1 & Zone 2 (Approx. 100m) (by utilities undertakers)																																																																						
TWSRW-1160	Road Formation, Road Drainage, DN150 watermain, Kerb, Planter & Pavement	286	106	15-Nov-14 A	18-Jan-16	0	Road Formation, Road Drainage, DN150 watermain, Kerb, Planter & Pavement, Road Formation, Road Drainage, DN150 watermain, Kerb, Planter & Pavement																																																																						
TWSRW Zone 2 between CH155 and CH280		573	139	26-Feb-14 A	18-Jan-16	0																																																																							
At-Grade Roadworks		573	139	26-Feb-14 A	18-Jan-16	0																																																																							
TWSRW-2110	Noise Barrier NB4 - Footing adjacent to Realigned TWSR West	85	0	26-Feb-14 A	20-May-14 A		Noise Barrier NB4 - Footing adjacent to Realigned TWSR West																																																																						
TWSRW-2120	Road Formation, Road Drainage, DN150 watermain, Kerb, Planter & Pavement	165	139	16-Oct-14 A	18-Jan-16	0	Road Formation, Road Drainage, DN150 watermain, Kerb, Planter & Pavement, Road Formation, Road Drainage, DN150 watermain, Kerb, Planter & Pavement																																																																						
TWSRW-2130	Noise Barrier NB1a - Footing adjacent Realigned TWSR West (Covered by VO 103) (Approx. 60.2m)	85	85	14-Sep-15	24-Dec-15	0	Noise Barrier NB1a - Footing adjacent Realigned TWSR West (Covered by VO 103) (Approx. 60.2m)																																																																						
TWSRW Zone 3 between CH280 and CH315		181	140	22-Jun-15 A	18-Jan-16	0																																																																							
At-Grade Roadworks		181	140	22-Jun-15 A	18-Jan-16	0																																																																							
TWSRW-3100	Noise Barrier NB1a - Footing adjacent Realigned TWSR West (Covered by VO 103) (Approx. 35.1m)	45	45	06-Nov-15	30-Dec-15	1	Noise Barrier NB1a - Footing adjacent Realigned TWSR West (Covered by VO 103) (Approx. 35.1m)																																																																						
TWSRW-3110	Installation of Cable Ducts for Utilities Diversion Works at Zone 2 (Approx. 120m) (by utilities undertakers)	111	127	21-Jul-15 A	05-Dec-15	1	Installation of Cable Ducts for Utilities Diversion Works at Zone 2 (Approx. 120m) (by utilities undertakers), Installation of Cable Ducts for Utilities Diversion Works at Zone 2																																																																						
TWSRW-3120	Road Formation, Road Drainage, Kerb, Planter and Pavement	181	140	22-Jun-15 A	18-Jan-16	0	Road Formation, Road Drainage, Kerb, Planter and Pavement, Road Formation, Road Drainage, Kerb, Planter and Pavement																																																																						
TWSRW-3130	Retaining Structure RW3 (to be covered by VO)	85	84	18-Jul-15 A	10-Nov-15	0	Retaining Structure RW3 (to be covered by VO), Retaining Structure RW3 (to be covered by VO)																																																																						
TWSRW Zone 4 between CH315 and CH376		706	186	15-Oct-13 A	18-Mar-16	8																																																																							
Construction of Bridge E		706	186	15-Oct-13 A	18-Mar-16	8																																																																							
TWSRW-4000	Implementation of TTA - Scheme W2	0	0	15-Oct-13 A			Implementation of TTA - Scheme W2																																																																						
TWSRW-4000A	Cable Detection & CLP Underground 11KV Cable Diversion at Area A	10	0	19-Oct-13 A	31-Oct-13 A		Cable Detection & CLP Underground 11KV Cable Diversion at Area A																																																																						
TWSRW-4000B	CLP Overhead 11KV Cable Diversion at Area B (Phase 2)	140	0	04-Nov-13 A	12-Dec-14 A		CLP Overhead 11KV Cable Diversion at Area B (Phase 2)																																																																						
TWSRW-4010A	Pre-Drilling for AE1 (refer to conditions of WSD)	15	0	15-Dec-14 A	19-Dec-14 A		Pre-Drilling for AE1 (refer to conditions of WSD)																																																																						
TWSRW-4010B	Pre-Drilling for AE2	12	0	17-Apr-14 A	02-May-14 A		Pre-Drilling for AE2																																																																						
TWSRW-4020A	Plant Mobilization for piling works at AE2	2	0	19-Jul-14 A	24-Jul-14 A		Plant Mobilization for piling works at AE2																																																																						
TWSRW-4030A	Bored Pile Works for AE1	63	0	17-Dec-14 A	19-Jan-15 A		Bored Pile Works for AE1																																																																						
TWSRW-4030B	Bored Pile Works for AE2	60	0	25-Jul-14 A	23-Sep-14 A		Bored Pile Works for AE2																																																																						
TWSRW-4040A	Pile Test for AE1	7	0	27-Jan-15 A	10-Feb-15 A		Pile Test for AE1																																																																						
TWSRW-4040B	Pile Test for AE2	7	0	03-Oct-14 A	20-Oct-14 A		Pile Test for AE2																																																																						
TWSRW-4050A	Pile Cap for AE1	55	0	11-Feb-15 A	01-Apr-15 A		Pile Cap for AE1																																																																						
TWSRW-4050B	Pile Cap for AE2	55	0	13-Oct-14 A	06-Jan-15 A		Pile Cap for AE2																																																																						
TWSRW-4050C	Diversion of existing DN150 water mains at Abutment AE2	5	0	29-Jan-15 A	12-Feb-15 A		Diversion of existing DN150 water mains at Abutment AE2																																																																						
TWSRW-4050D	Trim Down the existing retaining wall for construction of AE2	29	0	28-Feb-15 A	19-Mar-15 A		Trim Down the existing retaining wall for construction of AE2																																																																						
TWSRW-4060	Construction of Temporary Support at DSD nullah (Work in dry season)	55	0	22-Jan-15 A	31-Mar-15 A		Construction of Temporary Support at DSD nullah (Work in dry season)																																																																						
TWSRW-4070	Bridge Segment (North Bay & Middle Bay)	80	68	01-Apr-15 A	22-Oct-15	-1	Bridge Segment (North Bay & Middle Bay), Bridge Segment (North Bay & Middle Bay)																																																																						
TWSRW-4080	Bridge Segment (South Bay)	80	68	01-Apr-15 A	22-Oct-15	-1	Bridge Segment (South Bay), Bridge Segment (South Bay)																																																																						



俊和建築工程有限公司
CHUN WO CONSTRUCTION & ENGINEERING CO., LTD.

- Actual Work
- Remaining Work
- Summary Bar
- Critical Remaining Work
- Milestone

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Liantang / Heung Yuen Wai BCP - Site Formation & Infrastructure Works, Contract 3

Updated Master Works Programme (Revision 3B)
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29-Jan-14	IWP04	Sam	Victor
08-Jan-15	UMP01	Sam	Victor
24-Apr-15	UMP02	Sam	Victor
01-Aug-15	UMP03	Sam	Victor
02-Oct-15	UMP03A	Sam	Victor
23-Oct-15	UMP03B	Sam	Victor

Activity ID	Activity Name	OD	RD	Start	Finish	TF	Gantt Chart (2014-2019)																																																																
							2014												2015												2016												2017												2018												2019				
TWSRW-4090	Permanent Prestressing & Abutment Wall	28	28	23-Oct-15	24-Nov-15	-1	[Gantt bar: Permanent Prestressing & Abutment Wall]																																																																
TWSRW-4100	Remove Scaffold System and Temporary Work together with Slope Reinstatement	110	110	02-Nov-15*	18-Mar-16*	8	[Gantt bar: Remove Scaffold System and Temporary Work together with Slope Reinstatement]																																																																
At-Grade Roadworks							45	45	25-Nov-15	19-Jan-16	-1	[Summary bar: At-Grade Roadworks]																																																											
TWSRW-4200	Cast Parapet, Lay Surfacing and Road Furniture for Footpath and Carriageway	45	45	25-Nov-15	19-Jan-16	-1	[Gantt bar: Cast Parapet, Lay Surfacing and Road Furniture for Footpath and Carriageway]																																																																
TWSRW Zone 5 between CH376 and CH520							779	259	15-Oct-13 A	20-Jun-16	478	[Summary bar: TWSRW Zone 5 between CH376 and CH520]																																																											
Construction of Retaining Structures							608	60	15-Oct-13 A	12-Oct-15	45	[Summary bar: Construction of Retaining Structures]																																																											
TWSRW-5000	Implementation of TTA - Scheme W2	0	0	15-Oct-13 A			◆ Implementation of TTA - Scheme W2																																																																
TWSRW-5030	CLP Overhead 11KV Cable Diversion at Area B (Phase 1)	140	0	04-Nov-13 A	21-May-14 A		[Gantt bar: CLP Overhead 11KV Cable Diversion at Area B (Phase 1)]																																																																
TWSRW-5040	Forming of Earth Platform	40	0	03-Dec-13 A	28-Jan-14 A		[Gantt bar: Forming of Earth Platform]																																																																
TWSRW-5050A	Construction of Bored Pile Wall (4 no. Piles) (with existing access road)	48	0	24-Dec-13 A	11-Mar-14 A		[Gantt bar: Construction of Bored Pile Wall (4 no. Piles) (with existing access road)]																																																																
TWSRW-5050B	Construction of Bored Pile Wall (10 no. Piles) (with earth platform provided)	80	0	12-Mar-14 A	13-Jun-14 A		[Gantt bar: Construction of Bored Pile Wall (10 no. Piles) (with earth platform provided)]																																																																
TWSRW-5050C	Construction of Bored Pile Wall (8 no. Piles) (conflict with overhead cable)	94	0	22-May-14 A	13-Aug-14 A		[Gantt bar: Construction of Bored Pile Wall (8 no. Piles) (conflict with overhead cable)]																																																																
TWSRW-5050D	Construction of Remaining Portion of Bored Pile Wall at formation level	85	0	02-Sep-14 A	05-Nov-14 A		[Gantt bar: Construction of Remaining Portion of Bored Pile Wall at formation level]																																																																
TWSRW-5060	Removal of grave at Portion FH8 (incl. Archaeological Survey)	25	0	30-Nov-13 A	16-Jan-14 A		[Gantt bar: Removal of grave at Portion FH8 (incl. Archaeological Survey)]																																																																
TWSRW-5070	Construction of Mass Concrete Wall (FL/RW4)	70	39	15-Jun-15 A	15-Sep-15	66	[Gantt bar: Construction of Mass Concrete Wall (FL/RW4), Construction of Mass Concrete Wall (FL/RW4)]																																																																
TWSRW-5070a	Temporary Slope Works for Construction of Mass Concrete Wall (FL/RW4)	14	0	01-Jun-15 A	13-Jun-15 A		[Gantt bar: Temporary Slope Works for Construction of Mass Concrete Wall (FL/RW4)]																																																																
TWSRW-5080	Retaining Structure along Slope no. 3SW-C/C898 (to be covered by VO. 78)	50	60	29-Jun-15 A	12-Oct-15	45	[Gantt bar: Retaining Structure along Slope no. 3SW-C/C898 (to be covered by VO. 78), Retaining Structure along Slope no. 3SW-C/C898 (to be covered by VO. 78)]																																																																
TWSRW-5090	Lagging Wall Construction and Capping Beam	160	0	06-Nov-14 A	03-Jun-15 A		[Gantt bar: Lagging Wall Construction and Capping Beam]																																																																
At-Grade Roadworks							259	259	27-Apr-15 A	20-Jun-16	478	[Summary bar: At-Grade Roadworks]																																																											
TWSRW-5100	Retaining Wall RW7 & RW8 - adjacent to Realigned TWSR West (66m)	70	70	17-Oct-15	11-Jan-16	0	[Gantt bar: Retaining Wall RW7 & RW8 - adjacent to Realigned TWSR West (66m)]																																																																
TWSRW-5110A	Road Formation, DN150 watermain, Kerb, Planter and Pavement	35	35	05-Dec-15	18-Jan-16	0	[Gantt bar: Road Formation, DN150 watermain, Kerb, Planter and Pavement]																																																																
TWSRW-5110B	Road Drainage SMH800-SMH801 (Covered by VO No.81)	36	36	03-Sep-15	16-Oct-15	14	[Gantt bar: Road Drainage SMH800-SMH801 (Covered by VO No.81)]																																																																
TWSRW-5110C	Road Drainage SMH801-803 (Covered by VO No.81)	80	105	27-Apr-15 A	04-Dec-15	0	[Gantt bar: Road Drainage SMH801-803 (Covered by VO No.81), Road Drainage SMH801-803 (Covered by VO No.81)]																																																																
TWSRW-5120	Permanent Vehicular Access to Lot 81	125	125	12-Jan-16	20-Jun-16	478	[Gantt bar: Permanent Vehicular Access to Lot 81]																																																																
TWSRW Zone 6 between CH520 and CH530							1136	737	07-Jan-14 A	30-Jan-18	0	[Summary bar: TWSRW Zone 6 between CH520 and CH530]																																																											
Box Culvert Extension - BC01							1136	31	07-Jan-14 A	30-Jan-18	0	[Summary bar: Box Culvert Extension - BC01]																																																											
TWSRW-6000	Flow Diversion of Existing Stream	4	0	07-Jan-14 A	07-Jan-14 A		I Flow Diversion of Existing Stream																																																																
TWSRW-6010A	Excavation and Sub-base for construction of Bay 1	5	0	07-Jan-14 A	25-Jan-14 A		[Gantt bar: Excavation and Sub-base for construction of Bay 1]																																																																
TWSRW-6010B	Excavation and Sub-base for construction of Bay 2	18	0	04-Mar-14 A	12-Mar-14 A		[Gantt bar: Excavation and Sub-base for construction of Bay 2]																																																																
TWSRW-6020	Bay 1 - Base Slab	14	0	11-Feb-14 A	28-Feb-14 A		[Gantt bar: Bay 1 - Base Slab]																																																																
TWSRW-6030	Bay 2 - Base Slab	14	0	13-Mar-14 A	18-Mar-14 A		[Gantt bar: Bay 2 - Base Slab]																																																																
TWSRW-6030B	Bay 2 - Remaining Base Slab (To be carried out in next dry season)	31	31	22-Dec-17*	30-Jan-18*	0	[Gantt bar: Bay 2 - Remaining Base Slab (To be carried out in next dry season)]																																																																
TWSRW-6040	Bay 1 - Wall and Top Slab	18	0	01-Mar-14 A	10-Mar-14 A		[Gantt bar: Bay 1 - Wall and Top Slab]																																																																
TWSRW-6050	Bay 2 - Wall and Top Slab	11	0	19-Mar-14 A	25-Mar-14 A		[Gantt bar: Bay 2 - Wall and Top Slab]																																																																
TWSRW-6060	Backfilling to existing road level	55	0	25-Mar-14 A	09-Jun-14 A		[Gantt bar: Backfilling to existing road level]																																																																
TWSRW-6070	Inlet structure of the box culvert BC01 (Covered by VO. 41)	70	0	17-Dec-14 A	19-Mar-15 A		[Gantt bar: Inlet structure of the box culvert BC01 (Covered by VO. 41)]																																																																
TWSRW-6080	Backfilling to existing road level after completion of inlet structure	72	0	20-Mar-15 A	21-May-15 A		[Gantt bar: Backfilling to existing road level after completion of inlet structure]																																																																
At-Grade Roadworks							137	103	22-May-15 A	02-Dec-15	8	[Summary bar: At-Grade Roadworks]																																																											
TWSRW-6100	Preparation Works for Implementation of TTA (shifting TWSRW traffic towards the edge of extended box culvert)	21	21	09-Nov-15	02-Dec-15	0	[Gantt bar: Preparation Works for Implementation of TTA (shifting TWSRW traffic towards the edge of extended box culvert)]																																																																



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CEDD Contract No. CV/2012/09
Liantang / Heung Yuen Wai BCP - Site Formation & Infrastructure Works, Contract 3

Updated Master Works Programme (Revision 3B)
Programme ID: UMP03B (Data Date: 01-Aug-15) Print Date: 23-Oct-15

Date	Revision	Checked	Approved
29-Jan-14	IWP04	Sam	Victor
08-Jan-15	UMP01	Sam	Victor
24-Apr-15	UMP02	Sam	Victor
01-Aug-15	UMP03	Sam	Victor
02-Oct-15	UMP03A	Sam	Victor
23-Oct-15	UMP03B	Sam	Victor

Activity ID	Activity Name	OD	RD	Start	Finish	TF	2014					2015					2016					2017					2018					2019																																
							A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M
TWSRE Zone 1 between CH100 and CH270							940	447	07-Nov-13 A	09-Feb-17	34																																																					
Box Culvert Extension - BC02							111	0	07-Nov-13 A	29-Jan-14 A																																																						
TWSRE-1000	Flow Diversion of Existing Stream	7	0	07-Nov-13 A	14-Nov-13 A		■ Flow Diversion of Existing Stream																																																									
TWSRE-1010	Excavation, Sub-base and Blinding	40	0	15-Nov-13 A	14-Dec-13 A		■ Excavation, Sub-base and Blinding																																																									
TWSRE-1020	Bay 1 - Base Slab	21	0	09-Dec-13 A	30-Dec-13 A		■ Bay 1 - Base Slab																																																									
TWSRE-1030	Bay 2 - Base Slab	21	0	23-Dec-13 A	09-Jan-14 A		■ Bay 2 - Base Slab																																																									
TWSRE-1040	Bay 1 - Wall and Top Slab	35	0	03-Jan-14 A	22-Jan-14 A		■ Bay 1 - Wall and Top Slab																																																									
TWSRE-1050	Bay 2 - Wall and Top Slab	35	0	06-Jan-14 A	29-Jan-14 A		■ Bay 2 - Wall and Top Slab																																																									
At-Grade Roadworks							800	447	16-May-14 A	09-Feb-17	34																																																					
TWSRE-1100	Installation of Mini-Pile for PC01 & PC02 (22nos)	66	0	16-May-14 A	07-Aug-14 A		■ Installation of Mini-Pile for PC01 & PC02 (22nos)																																																									
TWSRE-1110	Noise Barrier NB3 - PC01 & PC02 Pile Cap Construction	55	0	19-Jan-15 A	18-Jun-15 A		■ Noise Barrier NB3 - PC01 & PC02 Pile Cap Construction																																																									
TWSRE-1120	Noise Barrier NB3 - Footing adjacent to Realigned TWSR East (96m)	110	25	29-Dec-14 A	29-Aug-15	391	■ Noise Barrier NB3 - Footing adjacent to Realigned TWSR East (96m), Noise Barrier NB3 - Footing adjacent to Realigned TWSR East (96m)																																																									
TWSRE-1130	Retaining Wall Construction for FL/RW5	45	0	10-Jul-14 A	13-Sep-14 A		■ Retaining Wall Construction for FL/RW5																																																									
TWSRE-1140*	Pipe laying - DN1400 Watermains (CHKA) along Realigned TWSR East	55	55	04-Dec-15	27-Jan-16	298	■ Pipe laying - DN1400 Watermains (CHKA) along Realigned TWSR East																																																									
TWSRE-1150	Construct no fine concrete, U-channel and filling to required level for pipe laying works	30	55	06-Jan-15 A	06-Oct-15	286	■ Construct no fine concrete, U-channel and filling to required level for pipe laying works, Construct no fine concrete, U-channel and filling to required level for pipe laying works																																																									
TWSRE-1160	Road Formation, Road Drainage, Kerb, Planter and Pavement (Incl. FL/F8A, FL/F9)	95	95	12-Oct-16	09-Feb-17	34	■ Road Formation, Road Drainage, Kerb, Planter and Pavement (Incl. FL/F8A, FL/F9)																																																									
TWSRE-1170	Remaining Noise Barrier NB3 Stem Wall (a total of 24m long)	30	30	11-May-16	16-Jun-16	225	■ Remaining Noise Barrier NB3 Stem Wall (a total of 24m long)																																																									
TWSRE Zone 2 between CH270 and CH380							672	432	05-Nov-14 A	22-Mar-17	242																																																					
At-Grade Roadworks							672	432	05-Nov-14 A	22-Mar-17	242																																																					
TWSRE-2010	Noise Barrier NB3 - Footing adjacent to Realigned TWSR East (48m)	110	0	03-Mar-15 A	09-Jun-15 A		■ Noise Barrier NB3 - Footing adjacent to Realigned TWSR East (48m)																																																									
TWSRE-2020	Retaining Wall Construction for FL/RW6	45	0	05-Nov-14 A	05-Jan-15 A		■ Retaining Wall Construction for FL/RW6																																																									
TWSRE-2030A*	Pipe laying - DN600 & DN1200 Watermains (CHB & CHC) along Realigned TWSR East	30	30	22-Dec-16	04-Feb-17	280	■ Pipe laying - DN600 & DN1200 Watermains (CHB & CHC) along Realigned TWSR East																																																									
TWSRE-2030B*	Pipe laying - DN1400 Watermains (CHK) along Realigned TWSR East	55	55	29-Sep-15	03-Dec-15	237	■ Pipe laying - DN1400 Watermains (CHK) along Realigned TWSR East																																																									
TWSRE-2040	Road Formation, Kerb, Footpath, Cycle Track, Planter and Pavement	90	90	04-Dec-15	31-Mar-16	287	■ Road Formation, Kerb, Footpath, Cycle Track, Planter and Pavement																																																									
TWSRE-2050	Completion of New Vehicular Bridge by Other Contractor	0	0	25-Aug-16	0		◆ Completion of New Vehicular Bridge by Other Contractor																																																									
TWSRE-2060	Erection of Scaffolding for Demolition Works	60	60	16-Jun-16	25-Aug-16	0	■ Erection of Scaffolding for Demolition Works																																																									
TWSRE-2070	Demolition of Existing Vehicular Bridge	98	98	26-Aug-16	21-Dec-16	0	■ Demolition of Existing Vehicular Bridge																																																									
TWSRE-2080	Commissioning of Realigned TWSR East	0	0	22-Mar-17	0		◆ Commissioning of Realigned TWSR East																																																									
TWSRE-2090	Remaining Noise Barrier NB3 Stem Wall (total 2 bays)	30	30	22-Dec-16	04-Feb-17	0	■ Remaining Noise Barrier NB3 Stem Wall (total 2 bays)																																																									
TWSRE-2100	Remaining Section of Carriageway, Footpath and Cycle Track beside Noise Barrier NB3	38	38	06-Feb-17	21-Mar-17	0	■ Remaining Section of Carriageway, Footpath and Cycle Track beside Noise Barrier NB3																																																									
TWSRE Zone 3 between CH380 and CH456							426	235	20-Jun-14 A	21-May-16	181																																																					
At-Grade Roadworks							426	235	20-Jun-14 A	21-May-16	181																																																					
TWSRE-3010	Noise Barrier NB3 - Footing adjacent to Realigned TWSR East (75.6m)	85	25	19-Mar-15 A	29-Aug-15	391	■ Noise Barrier NB3 - Footing adjacent to Realigned TWSR East (75.6m), Noise Barrier NB3 - Footing adjacent to Realigned TWSR East (75.6m)																																																									
TWSRE-3020A*	Pipe Laying - DN600 & DN1200 Watermains (CHB & CHC) along Realigned TWSR East	78	70	07-Jul-15 A	24-Oct-15	9	■ Pipe Laying - DN600 & DN1200 Watermains (CHB & CHC) along Realigned TWSR East																																																									
TWSRE-3020B*	Pipe laying - DN2300 Watermains (CHU) along Realigned TWSR East	75	0	20-Jun-14 A	24-Sep-14 A																																																											
TWSRE-3030	Road Drainage	55	0	24-Oct-14 A	16-Feb-15 A		■ Road Drainage																																																									
TWSRE-3040	Road Formation, Kerb, Footpath, Cycle Track, Planter and Pavement (Incl. FL/F10)	165	165	26-Oct-15	21-May-16	9	■ Road Formation, Kerb, Footpath, Cycle Track, Planter and Pavement (Incl. FL/F10)																																																									
Roundabout A, Slip Road and Access Road							637	244	10-Mar-14 A	01-Jun-16	117																																																					
TWSRE-4010	Filling Works at the abandoned water channel	115	0	10-Mar-14 A	17-Sep-14 A		■ Filling Works at the abandoned water channel																																																									



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CHUN WO CONSTRUCTION & ENGINEERING CO., LTD.

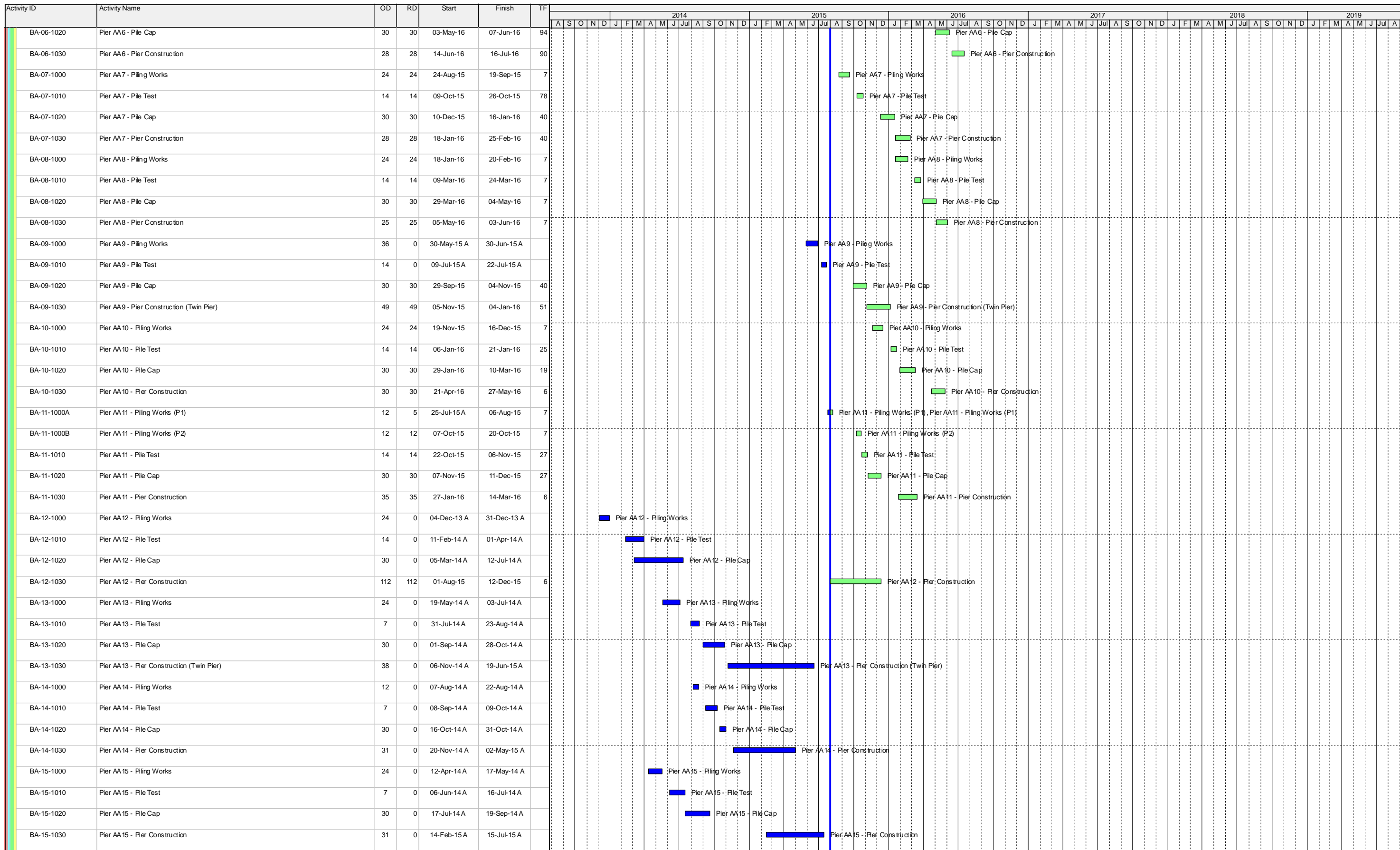
- Actual Work
- Remaining Work
- Summary Bar
- Critical Remaining Work
- ◆ Milestone

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29-Jan-14	IWP04	Sam	Victor
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	Actual Work
	Remaining Work
	Critical Remaining Work
	Milestone

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Liantang / Heung Yuen Wai BCP - Site Formation & Infrastructure Works, Contract 3

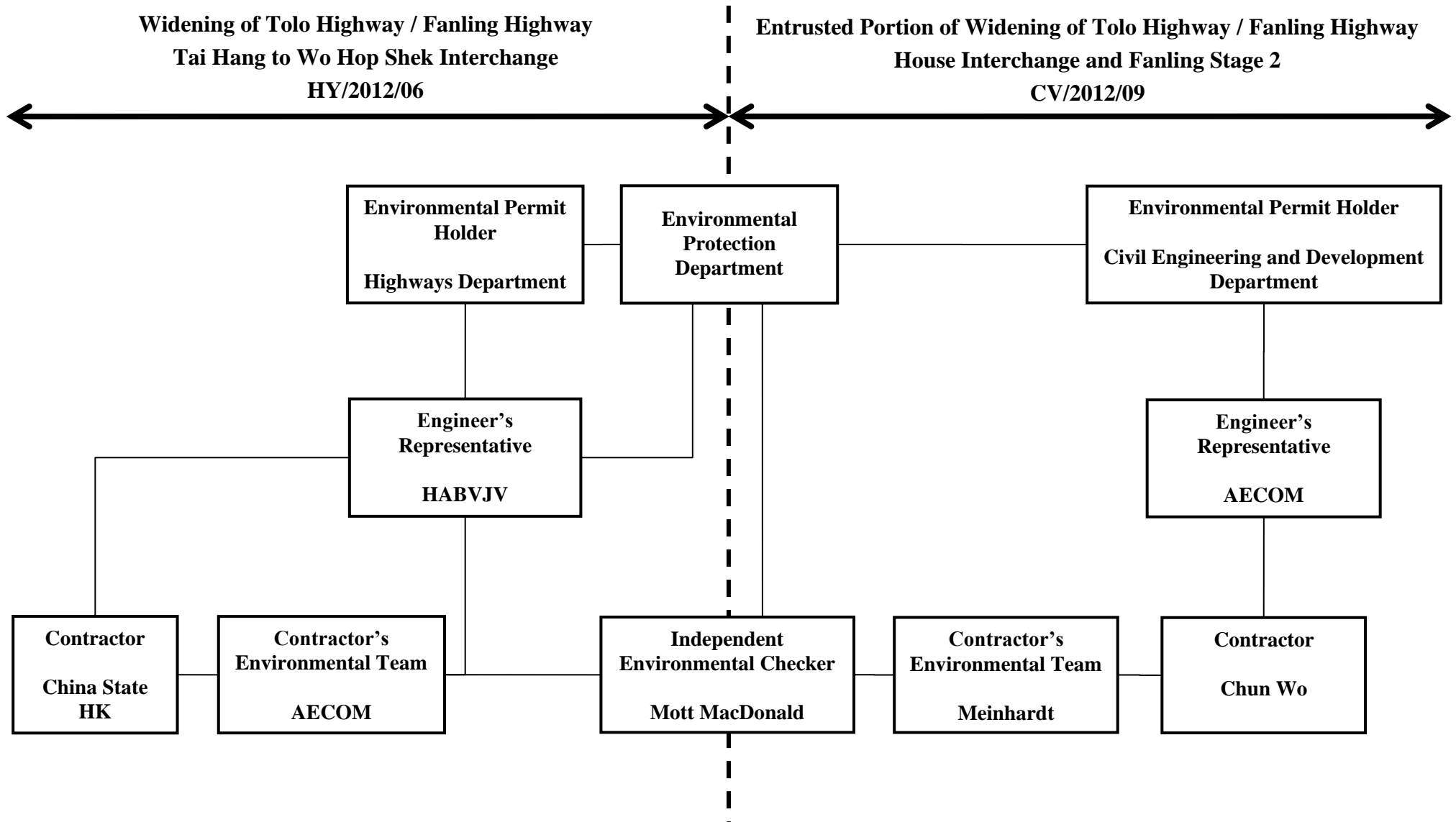
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02-Oct-15	UMP03A	Sam	Victor
23-Oct-15	UMP03B	Sam	Victor

Appendix B

Project Organization Structure



Appendix C Implementation Schedule of Environmental Mitigation Measures (EMIS)

Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status #
Air Quality				
Air Quality during Construction	<ul style="list-style-type: none"> Restricting heights from which materials are dropped, as far as practicable to minimize the fugitive dust arising from unloading/loading. All stockpiles of excavated materials or spoil of more than 50m³ shall be enclosed, covered or dampened during dry or windy conditions. 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. 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. 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. 	During Construction	Contractor	✓ Rem Rem ✓ ✓ ✓ ✓ ✓
Air Quality during Operation	Not required	N/A	N/A	N/A
Noise				
Noise during Construction	<ul style="list-style-type: none"> Use of silenced plant or plant equipped with mufflers or dampers in substitute of ordinary plant. Reduce the number of equipment and their percentage on-time. 	During Construction	Contractor	✓ ✓
Noise during Operation	Not required	N/A	N/A	N/A
Water Quality				
Water Quality during Construction	<u>Road Widening Works, Earthworks and Culvert Extension Works</u> <ul style="list-style-type: none"> Wastewater generated from any concrete batching washdown of equipment or similar activities should be discharged into foul sewers, after the removal of settleable 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. Sand traps, oil interceptors and other pollution prevention installations should be provided, properly cleaned and maintained. 	During Construction	Contractor	✓ ✓

Notes (#): ✓ – Compliance; Rem – Reminder; Obs – Observation; N/C – Non Compliance; N/A – Not Applicable

Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status #
	<ul style="list-style-type: none"> • 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. • 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. • 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. 			Obs./ Rem ✓ ✓ ✓ Rem ✓
Water Quality during Operation	Not required	N/A	N/A	N/A
Waste Management				
Waste Management during Construction	<u>General Waste</u> <ul style="list-style-type: none"> • Transport of wastes off site as soon as possible. • 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. <u>Vegetation from site clearance</u> <ul style="list-style-type: none"> • Segregation of materials to facilitate disposal. • Mulching to reduce bulk and where possible review opportunities for the possible beneficial use within landscaping areas. <u>Demolition Wastes</u> <ul style="list-style-type: none"> • Segregation of materials to facilitate disposal. • Appropriate stockpile management. 	During Construction During Construction During Construction	Contractor Contractor Contractor	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

Notes (#): ✓ – Compliance; Rem – Reminder; Obs – Observation; N/C – Non Compliance; N/A – Not Applicable

Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status #
	<p><u>Excavated Materials</u></p> <ul style="list-style-type: none"> • Segregation of materials to facilitate disposal / reuse. • 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. <p><u>Construction Wastes</u></p> <ul style="list-style-type: none"> • Segregation of materials to facilitate recycling/reuse (within designated area in appropriate containers/stockpiles). • 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) • For material which cannot be re-used/recycled, collection should be carried out by an approved waste contractor for landfill disposal. <p><u>Bentonite Slurries</u></p> <ul style="list-style-type: none"> • Bentonite slurries should be reused as far as possible. • Disposal in accordance with Practice Note For Professional Persons ProPECC PN 1/94. <p><u>Chemical Wastes</u></p> <ul style="list-style-type: none"> • Storage within locked, covered and bunded area. • The storage area shall not be located adjacent to sensitive receivers e.g. drains. • Minimise waste production and recycle oils/solvents where possible. • A spill response procedure shall be in place and absorption material available for minor spillages. • Use appropriate and labelled containers. 	<p>During Construction</p> <p>During Construction</p> <p>During Construction</p> <p>During Construction</p>	<p>Contractor</p> <p>Contractor</p> <p>Contractor</p> <p>Contractor</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>N/A</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>N/A</p> <p>N/A</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>

Notes (#): ✓ – Compliance; Rem – Reminder; Obs – Observation; N/C – Non Compliance; N/A – Not Applicable

Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status #
	<ul style="list-style-type: none"> • Educate site workers on site cleanliness/waste management procedures. • 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. <p><u>Municipal Wastes</u></p> <ul style="list-style-type: none"> • Waste shall be stored within a temporary refuse collection facility, in appropriate containers prior to collection and disposal. • Regular, daily collections are required by an approved waste collector. 	During Construction	Contractor	✓ ✓ ✓ ✓ ✓
Waste Management during Operation	Not required.	N/A	N/A	N/A
Ecology				
Ecology during Construction	<p><u>Accurate Delineation of Works Area</u></p> <ul style="list-style-type: none"> • Boundaries of proposed works areas shall be clearly identified and separated from external areas by a physical barrier to prevent encroachment of adjacent habitats. • 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. <p><u>Dust generation</u></p> <p>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:</p> <ul style="list-style-type: none"> • vehicle washing facilities to be provided at every discernible or designated vehicle exit point; • 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 	During Construction	Contractor	✓ ✓ ✓ ✓ ✓

Notes (#): ✓ – Compliance; Rem – Reminder; Obs – Observation; N/C – Non Compliance; N/A – Not Applicable

Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status #
	<ul style="list-style-type: none"> all debris should be covered entirely by impervious sheeting or stored in a sheltered debris collection area. <p><u>Surface Run-off</u></p> <p>In general, mitigation measures shall be in accordance with ProPECC PN1/94 on 'Construction Site Drainage'. Key measures include:</p> <ul style="list-style-type: none"> Bund and cover stockpiles to avoid run-off; 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). 	During Construction	Contractor	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>
Ecology during Operation	<ul style="list-style-type: none"> 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)	N/A
Landscape and Visual				
Landscape and Visual during Construction	<p><u>Preservation of Existing Vegetation</u></p> <ul style="list-style-type: none"> Trees identified for retention within the project limit would be protected during the works The tree transplanting and planting works shall be implemented by approved Landscape Contractors 	During Construction	Contractor	<p>✓</p> <p>✓</p>

Impact	Environmental Protection Measures	Timing	Responsibility	Implementation Status #
	<p><u>Temporary Works Areas</u></p> <ul style="list-style-type: none"> 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. <p><u>Hoarding</u></p> <ul style="list-style-type: none"> A hoarding would be erected where practicable in the most visually sensitive locations to screen the temporary construction works from the local VSRs. <p><u>Top Soils</u></p> <ul style="list-style-type: none"> 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. <p><u>Protection of Important Landscape Features</u></p> <ul style="list-style-type: none"> 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	✓
		During Construction	Contractor	✓
		During Construction	Contractor	N/A
		During Construction	Contractor	N/A
Landscape and Visual during Operation	Not required.	N/A	N/A	N/A

Appendix D

Meteorological Data Extracted from Hong Kong Observatory

Daily Extract of Meteorological Observations , November 2016

Day	Hong Kong Observatory								King's Park	Waglan Island [^]	
	Mean Pressure (hPa)	Air Temperature			Mean Dew Point (deg. C)	Mean Relative Humidity (%)	Mean Amount of Cloud (%)	Total Rainfall (mm)	Total Bright Sunshine (hours)	Prevailing Wind Direction (degrees)	Mean Wind Speed (km/h)
		Absolute Daily Max (deg. C)	Mean (deg. C)	Absolute Daily Min (deg. C)							
01	1019.7	25.3	23.9	22.5	18.0	69	76	0.0	5.2	020	31.2
02	1020.3	24.8	22.8	21.0	16.6	68	63	0.0	7.2	020	31.2
03	1019.3	24.8	21.8	20.1	15.0	66	54	0.0	7.5	010	28.2
04	1015.2	25.3	22.4	19.6	16.1	68	22	0.0	10.3	010	13.3
05	1013.0	26.9	23.8	21.7	19.6	77	56	0.0	7.5	100	13.4
06	1015.1	26.9	24.2	22.4	20.4	79	44	0.0	8.0	080	19.5
07	1016.6	28.4	25.3	23.4	21.8	81	52	0.0	10.1	070	21.6
08	1017.4	28.1	24.6	22.1	20.9	80	61	4.8	3.7	070	19.5
09	1019.5	22.1	20.7	19.0	17.3	81	88	1.3	0.0	020	33.0
10	1020.1	19.0	17.7	17.0	14.6	82	88	1.9	0.0	010	28.5
11	1018.8	22.3	20.0	17.1	16.5	80	92	Trace	0.1	020	20.6
12	1017.9	25.1	23.3	21.6	20.4	84	78	0.2	4.1	070	27.4
13	1016.9	26.9	24.7	23.8	21.9	85	65	0.0	3.5	070	19.3
14	1015.4	28.1	25.4	23.3	22.3	83	38	0.0	9.0	060	9.1
15	1015.8	29.2	25.7	23.8	22.2	81	38	Trace	9.7	080	13.7
16	1017.2	26.1	24.6	23.9	21.0	81	68	Trace	3.8	080	33.1
17	1016.6	27.5	24.8	23.6	20.7	78	59	Trace	9.0	070	26.7
18	1014.2	26.8	24.8	23.5	21.6	83	81	Trace	1.5	070	26.2
19	1013.1	28.0	25.8	24.0	21.6	78	80	1.4	5.4	060	24.4
20	1012.9	26.8	25.6	25.0	21.4	78	87	Trace	2.0	070	32.6
21	1012.9	25.3	24.7	24.0	21.9	85	87	0.3	0.4	080	36.7
22	1013.3	24.5	22.7	21.6	21.9	95	95	36.5	0.0	070	40.3
23	1016.2	21.6	20.5	16.7	19.3	93	92	25.9	0.0	050	42.1
24	1018.6	19.8	17.3	15.0	13.0	76	84	Trace	3.1	020	35.5
25	1016.4	22.3	20.0	17.4	16.0	78	88	0.1	2.9	050	35.1
26	1015.9	21.1	17.6	13.3	15.7	89	88	50.3	0.0	360	36.5
27	1016.9	19.9	16.2	12.8	13.1	83	75	8.6	5.6	360	27.5
28	1020.9	20.1	18.1	16.1	12.1	68	44	0.0	8.9	010	31.9
29	1022.3	20.5	19.2	17.5	12.6	66	82	0.0	1.3	020	27.0
30	1022.3	22.0	19.7	17.4	12.7	64	31	0.0	8.5	020	25.8
Mean/Total	1017.0	24.5	22.3	20.3	18.3	79	68	131.3	138.3	070	27.0
Normal [§]	1017.7	24.1	21.8	19.8	16.0	71	54	37.6	180.1	080	27.0

[^] Information of wind direction and wind speed for Waglan Island are based on automatic weather station data since January 1989

Trace means rainfall less than 0.05 mm

[§] 1981-2010 Climatological Normal, unless otherwise specified

Daily Extract of Meteorological Observations , December 2016 - Sheung Shui

Day	Mean Pressure (hPa)	Air Temperature			Mean Dew Point (deg. C)	Mean Relative Humidity (%)	Total Rainfall (mm)	Prevailing Wind Direction (degrees)	Mean Wind Speed (km/h)
		Absolute Daily Max (deg. C)	Mean (deg. C)	Absolute Daily Min (deg. C)					
01	1022.5	23.8	18.1	14.9	11.9	68	0.0	***	***
02	1022.7	24.3#	18.8	15.9#	14.0	75	0.0	***	***
03	1021.0	22.8	20.2	17.7	15.8	76	0.0	***	***
04	1018.1	26.7	21.3	17.9	18.0	83	0.0	***	***
05	1017.5	29.6	22.5	19.5	18.9	82	0.0	***	***
06	1021.0	22.2	19.5	18.0	9.6	53	0.0	***	***
07	1019.2	24.6#	18.7	16.2#	11.1	63	0.0	***	***
08	1016.5	23.3	17.3	14.0	10.7	67	0.0	***	***
09	1015.4	24.9#	16.7	10.9#	12.3	79	0.0	***	***
10	1016.4	26.9#	19.3	13.9#	15.1	79	0.0	***	***
11	1016.4	24.0	20.2	18.1	15.8	76	0.0	***	***
12	1014.9	25.7#	21.1	17.7#	16.6	76	0.0	***	***
13	1014.4	28.0#	21.9	17.9#	18.4	82	0.0	***	***
14	1018.6	23.4#	19.9	16.8#	12.5	63	0.0	***	***
15	1023.2	20.4	16.4	13.1	8.6	60	0.0	***	***
16	1026.1	18.2	13.1	10.1	5.8	63	0.0	***	***
17	1023.5	19.0	14.2	8.2	9.3	74	0.0	***	***
18	1021.5	26.3	18.7	14.7	14.6	78	0.0	***	***
19	1018.2	27.2	20.3	16.1	14.8	73	0.0	***	***
20	1017.1	26.3#	21.1	18.0#	16.9	78	0.0	***	***
21	1016.7	22.0	20.9	19.2	20.0	94	4.5	***	***
22	1017.2	26.0	21.2	16.6	16.1	75	0.0	***	***
23	1019.3	23.5#	18.5	15.8#	13.1	71	0.0	***	***
24	1019.2	18.9	16.8	14.6	14.5	87	5.0	***	***
25	1018.3	20.7	19.1	17.1	16.3	84	0.0	***	***
26	1016.9	26.9	20.9	18.7	17.9	84	0.0	***	***
27	1021.6	19.4	15.1	10.8	7.6	62	0.0	***	***
28	1023.8	15.4	12.5	9.0	4.3	58	0.0	***	***
29	1024.6	17.6	14.3	12.0	4.2	51	0.0	***	***
30	1024.7	18.7	14.6	11.9	6.8	61	0.0	***	***
31	1022.9	23.9	16.7	10.9	11.8	75	0.0	***	***

*** una vailable

data incomplete

Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

Daily Extract of Meteorological Observations , January 2017 - Sheung Shui

Day	Mean Pressure (hPa)	Air Temperature			Mean Dew Point (deg. C)	Mean Relative Humidity (%)	Total Rainfall (mm)	Prevailing Wind Direction (degrees)	Mean Wind Speed (km/h)
		Absolute Daily Max (deg. C)	Mean (deg. C)	Absolute Daily Min (deg. C)					
01	1021.7	23.7#	19.3	17.4#	15.6	80	0.0	***	***
02	1020.1	27.9	19.7	15.8	16.2	83	0.0	***	***
03	1019.5	24.9	19.2	15.1	16.7	86	0.0	***	***
04	1018.4	26.4#	20.5	17.3#	16.3	78	0.0	***	***
05	1016.7	24.2	20.0	16.4	17.7	88	0.0	***	***
06	1015.1#	28.3#	20.5#	17.3#	17.5#	84#	0.0	***	***
07	1013.5	26.7	21.2	18.9	17.3	79	0.0	***	***
08	1013.3	28.0#	21.9	17.8#	17.8	79	0.0	***	***
09	1016.2	24.9	20.0	17.1	15.3	75	0.0	***	***
10	1017.9	23.1	19.5	18.2	15.5	78	0.0	***	***
11	1017.9	20.8#	19.0	17.6#	15.4	80	0.0	***	***
12	1015.9	18.7#	17.0	13.0#	13.6	80	0.5	***	***
13	1016.6	15.0#	13.4	11.9#	10.3	82	0.0	***	***
14	1018.6	14.6	13.2	11.4	11.4	89	0.5	***	***
15	1021.0	14.4	13.3	11.9	11.8	91	2.5	***	***
16	1020.7	16.9	14.7	12.1	12.0	84	0.5	***	***
17	1021.1	20.8#	17.6	14.9#	13.5	77	0.0	***	***
18	1021.1	20.0#	18.3	17.2#	16.4	89	0.0	***	***
19	1020.0	24.4#	19.8	17.6#	17.7	88	0.0	***	***
20	1023.1	21.2#	16.5	13.5#	9.6	64	0.0	***	***
21	1025.6	22.5#	15.7	12.5#	8.7	64	0.0	***	***
22	1026.3	22.6	15.1	11.7	6.0	56	0.0	***	***
23	1025.7	23.0#	15.3	10.3#	9.8	73	0.0	***	***
24	1025.2	22.6	17.2	14.9	11.4	70	0.0	***	***
25	1025.4	24.8	17.8	14.4	12.8	74	0.0	***	***
26	1024.3	22.9#	16.7	12.9#	11.0	71	0.0	***	***
27	1022.7	25.3	16.9	12.0	10.5	70	0.0	***	***
28	1018.5	20.2	16.6	13.7	13.2	81	0.0	***	***
29	1016.3	23.0	19.4	17.0	17.5	89	1.5	***	***
30	1018.1	22.8	19.8	16.6	18.3	91	0.0	***	***
31	1020.3	18.3	16.1	14.0	13.3	84	0.5	***	***

*** unavailable

data incomplete

Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

Appendix E

Environmental Monitoring Data for Air, Noise and Water Quality

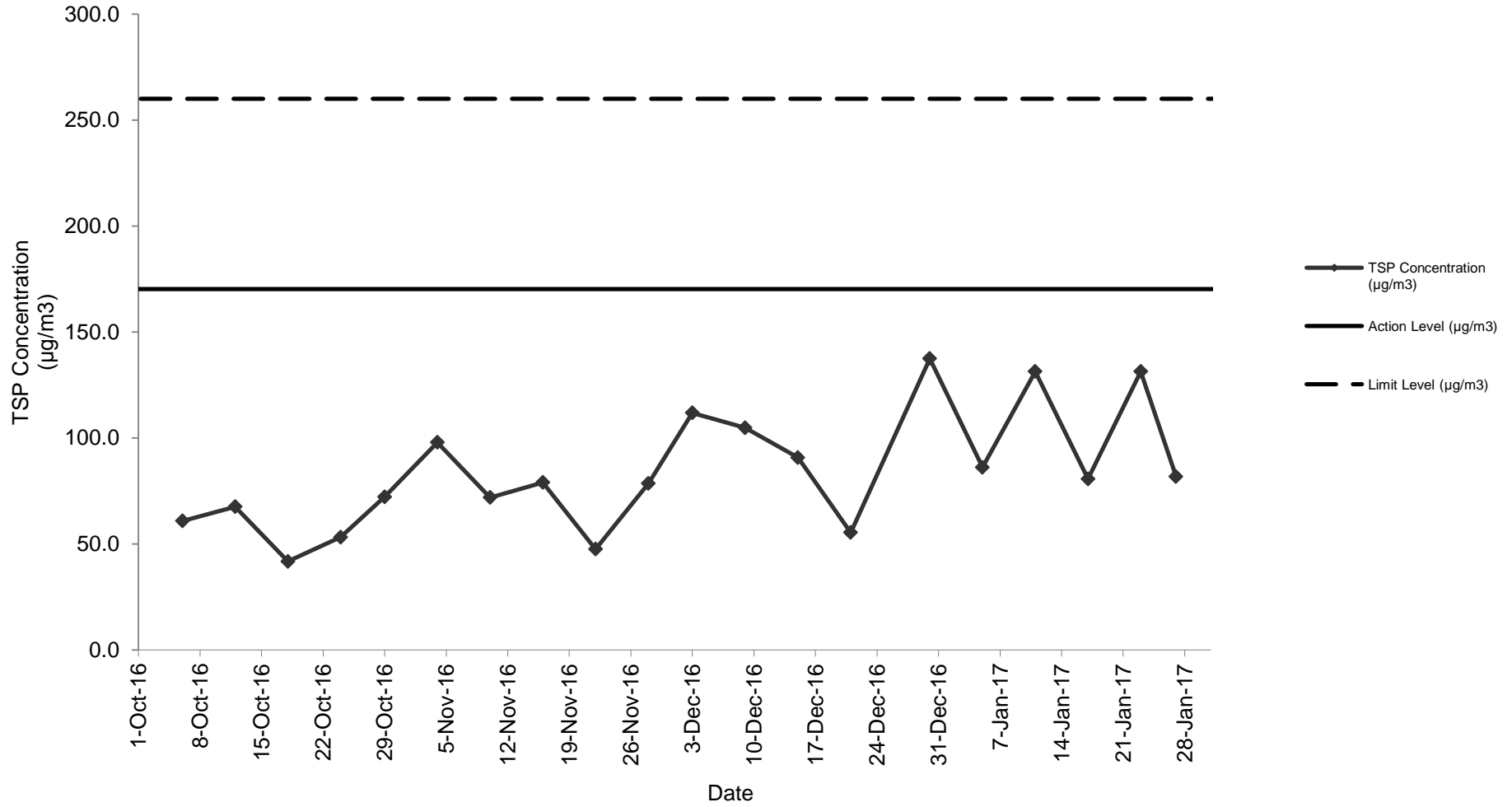
Appendix E
Air Quality Monitoring Results and their Graphical Presentation

24-Hour TSP Monitoring Result at Station: SR77

Sampling Date	Weather Condition	Paper No.	Wt. of paper (g)			Elapse Time			Flow Rate (CFM)			Flow Rate (m ³ /min)			Total Volume (m ³)	TSP Concentration (µg/m ³)	Action Level (µg/m ³)	Limit Level (µg/m ³)	Wind speed m/s	Wind direction
			Initial Wt.	Final Wt.	Wt. of Dust	Initial	Final	Sampling Hour	Initial	Final	Avg Flow Rate	Initial	Final	Avg Flow Rate						
6-Oct-16	Fine	240	2.8401	2.9667	0.1266	5413.67	5437.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	60.9	170.3	260.0	<5	N
12-Oct-16	Sunny	242	2.8534	2.9939	0.1405	5440.67	5464.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	67.6	170.3	260.0	<5	N
18-Oct-16	Rainy	244	2.9016	2.9885	0.0869	5467.67	5491.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	41.8	170.3	260.0	<5	N
24-Oct-16	Sunny	246	2.8571	2.9678	0.1107	5494.67	5518.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	53.2	170.3	260.0	<5	N
29-Oct-16	Fine	248	2.8900	3.0403	0.1503	5521.67	5545.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	72.3	170.3	260.0	<5	N
4-Nov-16	Sunny	250	2.8834	3.0870	0.2036	5548.67	5572.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	97.9	170.3	260.0	<5	N
10-Nov-16	Cloud	252	2.9190	3.0686	0.1496	5575.67	5599.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	71.9	170.3	260.0	<5	N
16-Nov-16	Sunny	254	2.8624	3.0267	0.1643	5602.67	5626.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	79.0	170.3	260.0	<5	N
22-Nov-16	Rainy	256	2.8370	2.9359	0.0989	5629.67	5653.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	47.6	170.3	260.0	<5	N
28-Nov-16	Sunny	258	2.8753	3.0388	0.1635	5656.67	5680.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	78.6	170.3	260.0	<5	N
3-Dec-16	Sunny	260	2.8577	3.0903	0.2326	5683.67	5707.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	111.8	170.3	260.0	<5	N
9-Dec-16	Fine	262	2.8545	3.0725	0.2180	5710.67	5734.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	104.8	170.3	260.0	<5	N
15-Dec-16	Sunny	264	2.8553	3.0441	0.1888	5737.67	5761.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	90.8	170.3	260.0	<5	N
21-Dec-16	Cloudy	266	2.8910	3.0062	0.1152	5764.67	5788.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	55.4	170.3	260.0	<5	N
30-Dec-16	Cloudy	270	2.8749	3.1608	0.2859	5818.67	5842.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	137.5	170.3	260.0	<5	N
5-Jan-17	Cloudy	272	2.9021	3.0813	0.1792	5845.67	5869.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	86.2	170.3	260.0	<5	N
11-Jan-17	Cloudy	274	2.9053	3.1785	0.2732	5872.67	5896.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	131.4	170.3	260.0	<5	N
17-Jan-17	Cloudy	276	2.8730	3.0408	0.1678	5899.67	5923.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	80.7	170.3	260.0	<5	N
23-Jan-17	Sunny	278	2.9053	3.1785	0.2732	5926.67	5950.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	131.4	170.3	260.0	<5	N
27-Jan-17	Cloudy	CC5	2.8708	3.0409	0.1701	5953.67	5977.67	24.00	51	51	51.0	1.44	1.44	1.44	2079.59	81.8	170.3	260.0	<5	N

Summary For the Reporting Quarter (November 2016 - January 2017)	
Average	92.5
Minimum	47.6
Maximum	137.5

24-Hour TSP Monitoring Result at Station: SR77 (October 2016 - January 2017)



Appendix E
Air Quality Monitoring Results and their Graphical Presentation

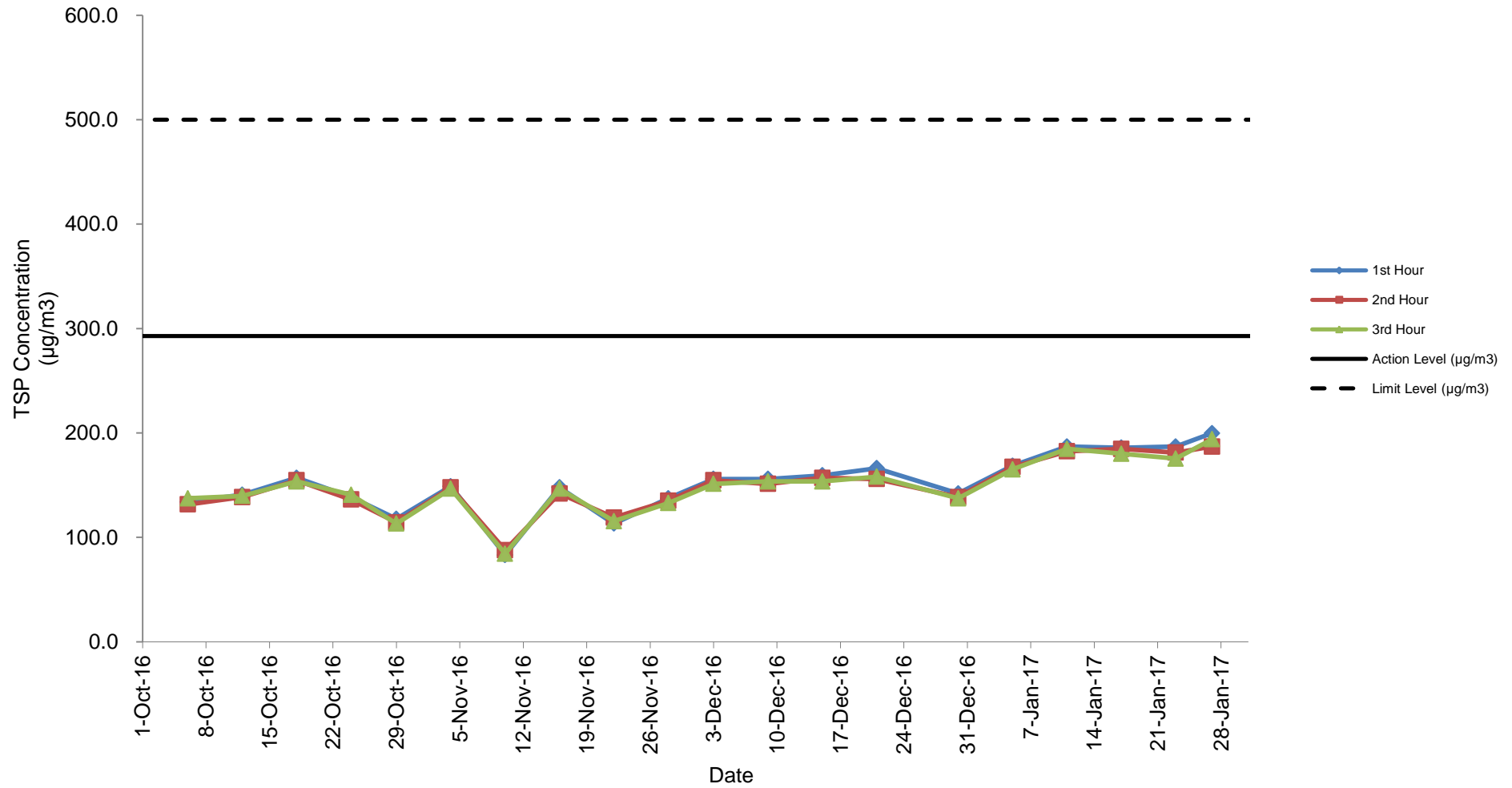
1-Hour TSP Monitoring Result at Station: SR77

Date	Weather Condition	Time	Conc.(µg/m ³)			Action Level (µg/m ³)	Limit Level (µg/m ³)
			1 st Hour	2 nd Hour	3 rd Hour		
6-Oct-16	Fine	9:00 - 12:07	133.9	131.6	137.3	292.7	500.0
12-Oct-16	Sunny	9:00 - 12:06	140.8	138.5	139.6	292.7	500.0
18-Oct-16	Rainy	9:00 - 12:07	157.0	154.6	153.5	292.7	500.0
24-Oct-16	Sunny	9:00 - 12:06	138.5	136.2	140.8	292.7	500.0
29-Oct-16	Fine	9:00 - 12:06	117.7	114.3	113.1	292.7	500.0
4-Nov-16	Sunny	9:00 - 12:06	148.9	147.7	146.6	292.7	500.0
10-Nov-16	Cloudy	9:00 - 12:07	83.1	87.7	84.2	292.7	500.0
16-Nov-16	Sunny	9:00 - 12:07	147.7	142.0	146.6	292.7	500.0
22-Nov-16	Rainy	9:00 - 12:06	113.1	118.9	115.4	292.7	500.0
28-Nov-16	Sunny	9:00 - 12:07	137.3	135.0	132.7	292.7	500.0
3-Dec-16	Sunny	9:00 - 12:07	155.8	154.6	151.2	292.7	500.0
9-Dec-16	Fine	9:00 - 12:06	155.8	151.2	153.5	292.7	500.0
15-Dec-16	Sunny	9:00 - 12:07	159.3	157.0	153.5	292.7	500.0
21-Dec-16	Cloudy	9:00 - 12:05	166.2	155.8	158.1	292.7	500.0
30-Dec-16	Cloudy	9:00 - 12:08	142.0	138.5	137.3	292.7	500.0
5-Jan-17	Cloudy	9:00 - 12:07	168.5	167.3	165.0	292.7	500.0
11-Jan-17	Cloudy	9:00 - 12:07	187.0	182.3	184.7	292.7	500.0
17-Jan-17	Cloudy	9:00 - 12:06	185.8	184.7	180.0	292.7	500.0
23-Jan-17	Sunny	9:00 - 12:06	187.0	181.2	175.4	292.7	500.0
27-Jan-17	Cloudy	9:00 - 12:07	199.7	187.0	193.9	292.7	500.0

Summary For the Reporting Quarter (November 2016 - January 2017)	
Average	153.5
Minimum	83.1
Maximum	199.7

Note: No major dust source observed during the monitoring period

1-Hour TSP Monitoring Result at station: SR77 (October 2016 - January 2017)

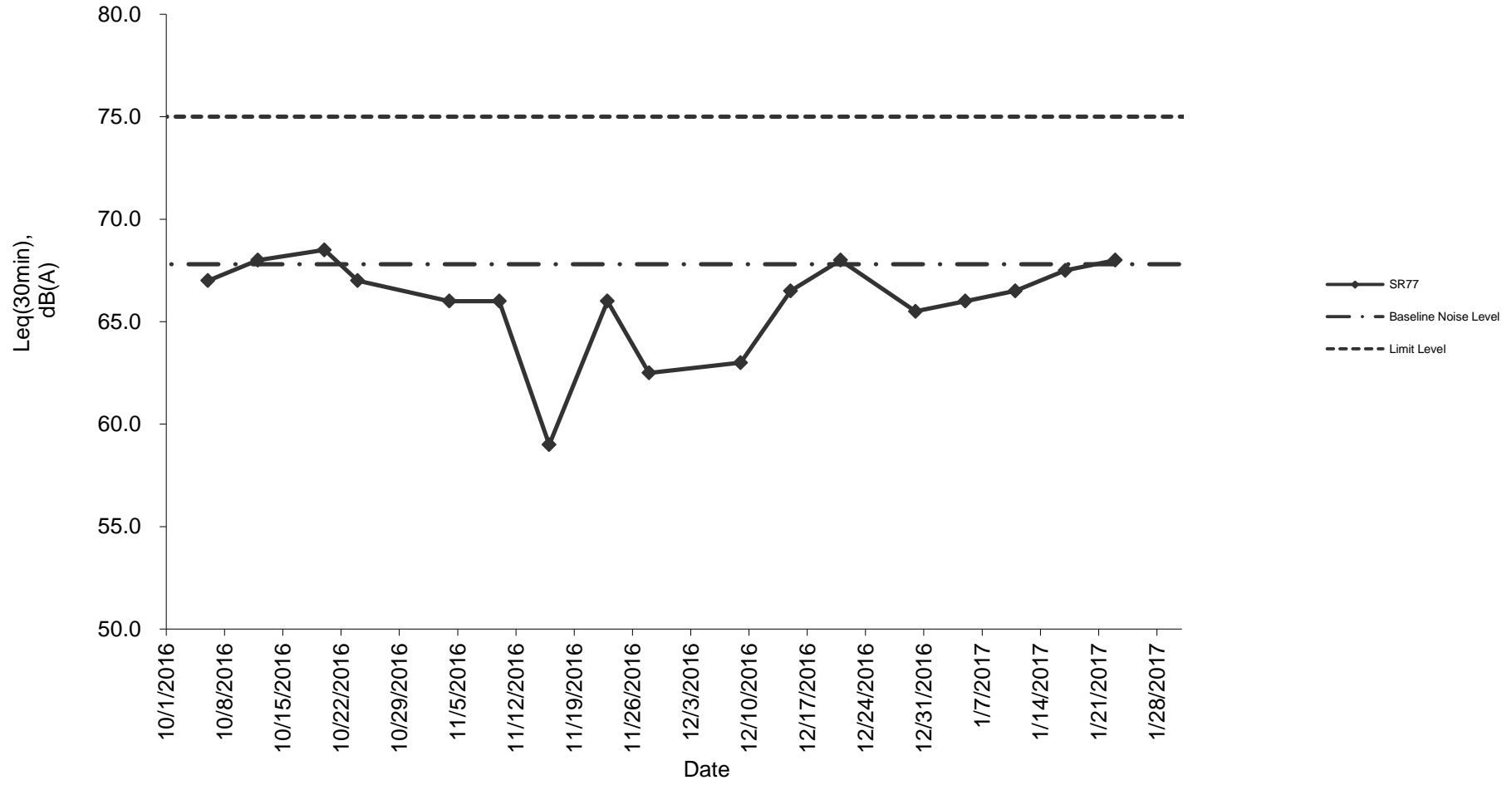


Noise Monitoring Result at SR77

Date	Weather Condition	Start Time	End Time	Measured Noise Level (dB(A))*			Baseline Corrected Level, dB(A)**	Baseline Noise Level (dB(A)), Leq(30min)	Limit Level dB(A)	Exceedance (Y / N)
				L10(30min)	L90(30min)	Leq(30min)				
2016/10/06	Fine	13:30	14:00	85.0	63.0	67.0	-	67.8	75.0	N
2016/10/12	Sunny	11:30	12:00	91.0	63.0	68.0	-	67.8	75.0	N
2016/10/20	Fine	10:30	11:00	86.5	62.0	68.5	-	67.8	75.0	N
2016/10/24	Sunny	11:30	12:00	88.0	62.5	67.0	-	67.8	75.0	N
2016/11/04	Sunny	11:30	12:00	92.0	59.5	66.0	-	67.8	75.0	N
2016/11/10	Cloudy	11:30	12:00	92.0	62.0	66.0	-	67.8	75.0	N
2016/11/16	Sunny	13:30	14:00	87.0	54.0	59.0	-	67.8	75.0	N
2016/11/23	Rainy	16:30	17:00	91.0	63.0	66.0	-	67.8	75.0	N
2016/11/28	Sunny	11:30	12:00	88.0	67.0	62.5	-	67.8	75.0	N
2016/12/09	Fine	11:30	12:00	89.0	56.0	63.0	-	67.8	75.0	N
2016/12/15	Sunny	11:30	12:00	95.0	57.0	66.5	-	67.8	75.0	N
2016/12/21	Cloudy	11:30	12:00	86.0	65.0	68.0	-	67.8	75.0	N
2016/12/30	Cloudy	11:30	12:00	90.0	60.5	65.5	-	67.8	75.0	N
2017/01/05	Cloudy	11:30	12:00	90.5	54.0	66.0	-	67.8	75.0	N
2017/01/11	Cloudy	11:30	12:00	90.0	63.5	66.5	-	67.8	75.0	N
2017/01/17	Cloudy	11:30	12:00	85.5	66.5	67.5	-	67.8	75.0	N
2017/01/23	Sunny	11:30	12:00	91.0	66.0	68.0	-	67.8	75.0	N

Summary For the Reporting Quarter (November 2016 - January 2017)	
Average	65.4
Minimum	59.0
Maximum	68.0

**Noise monitoring result: SR77
(October 2016 - January 2017)**



Project Name: Contract No. CV/2012/09 Liantang / Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure works - Contract 3
 Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling - Stage 2

Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:07	<0.5	20.7	20.7	6.5	6.5	6.5	6.5	73.0	73.0	18.4	16.4	<0.1	<0.1	15.0	15.0
			20.7		6.5		6.5		73.0		16.4					
C3b	11:25	<0.5	20.0	20.0	6.8	6.8	7.8	7.8	86.1	86.1	7.8	7.8	<0.1	<0.1	6.6	6.7
			20.0		6.8		7.8		86.1		7.8					
I5	11:34	<0.5	20.6	20.6	7.1	7.1	9.9	9.9	110.5	110.5	8.4	8.4	<0.1	<0.1	5.3	5.3
			20.6		7.1		9.9		110.5		8.4					

Date of Monitoring 12/28/2016 Weather : Cloudy

Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:12	<0.5	17.2	17.2	6.9	6.9	8.3	8.3	86.7	86.7	9.8	9.8	<0.1	<0.1	9.0	8.6
			17.2		6.9		8.3		86.7		9.8					
C3b	11:32	<0.5	16.5	16.5	7.0	7.0	8.8	8.8	89.7	89.7	10.4	10.4	<0.1	<0.1	5.8	5.0
			16.5		7.0		8.8		89.7		10.4					
I5	11:46	<0.5	16.7	16.7	7.1	7.1	10.9	10.9	112.2	112.2	5.2	5.2	<0.1	<0.1	5.3	4.7
			16.7		7.1		10.9		112.2		5.2					

Date of Monitoring 12/30/2016 Weather : Cloudy

Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:19	<0.5	20.1	20.1	6.5	6.5	7.8	7.8	86.1	86.1	20.2	20.2	<0.1	<0.1	15.0	15.5
			20.1		6.5		7.8		86.1		20.2					
C3b	11:41	<0.5	17.6	17.6	6.7	6.7	8.8	8.8	92.7	92.7	5.8	5.8	<0.1	<0.1	3.6	4.0
			17.6		6.7		8.8		92.7		5.8					
I5	11:52	<0.5	19.5	19.5	6.9	6.9	9.2	9.2	100.4	100.4	20.9	20.9	<0.1	<0.1	15.0	15.0
			19.5		6.9		9.2		100.4		20.9					

NOTE:
 Data in **Bold** denotes exceedance of respective Action Level
 Data in **Bold Underline** denotes exceedance of respective Limit Level

Project Name: Contract No. CV/2012/09 Liantang / Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure works - Contract 3
 Suspended Solid (October 20 Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling - Stage 2

Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:10	<0.5	19.6	19.6	6.3	6.3	6.9	6.9	75.5	75.5	12.7	12.7	<0.1	<0.1	7.0	7.8
			19.6		6.3		6.9		75.5		12.7		<0.1			
			18.3		6.7		8.2		87.4		10.5		<0.1			
C3b	11:32	<0.5	18.3	18.3	6.7	6.7	8.2	8.2	87.4	87.4	10.5	10.5	<0.1	<0.1	11.0	9.2
			18.3		6.7		8.2		87.4		10.5		<0.1			
			18.8		7.0		8.4		90.4		7.0		<0.1			
I5	11:43	<0.5	18.8	18.8	7.0	7.0	8.4	8.4	90.4	90.4	7.0	7.0	<0.1	<0.1	4.5	3.8
			18.8		7.0		8.4		90.4		7.0		<0.1			
			18.8		7.0		8.4		90.4		7.0		<0.1			

Date of Monitoring 1/25/2017 Weather : Sunny

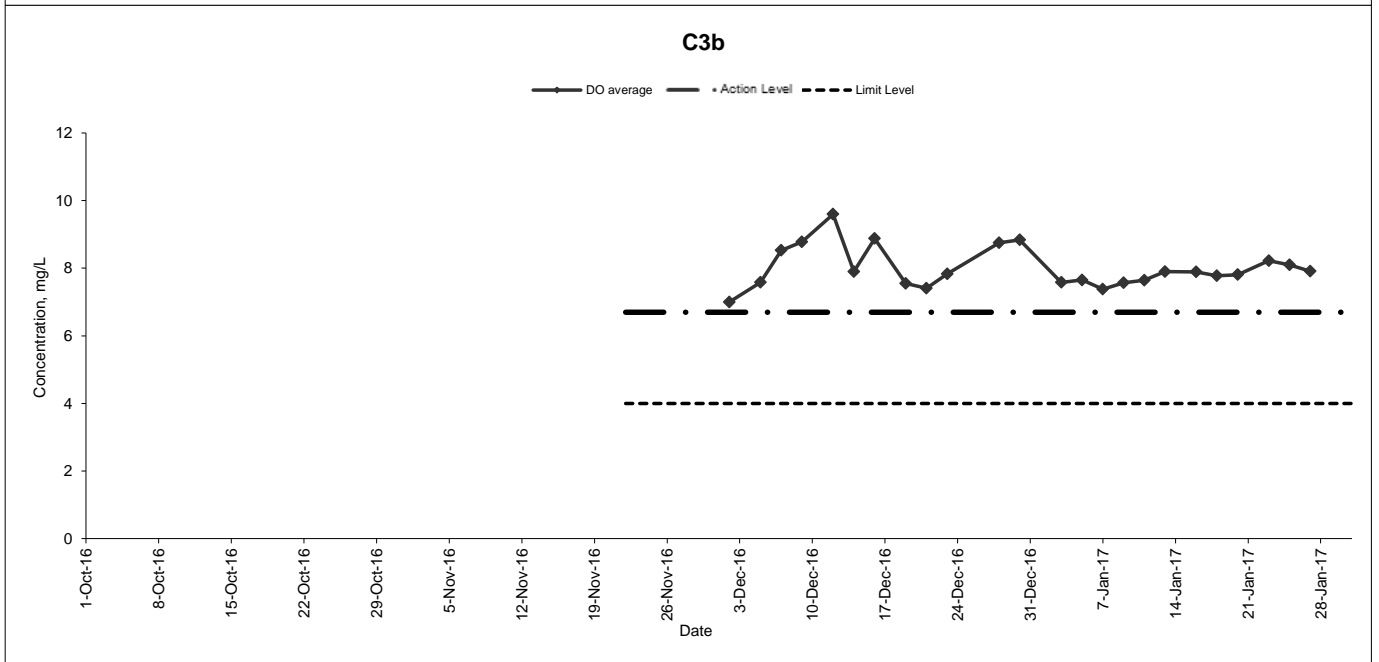
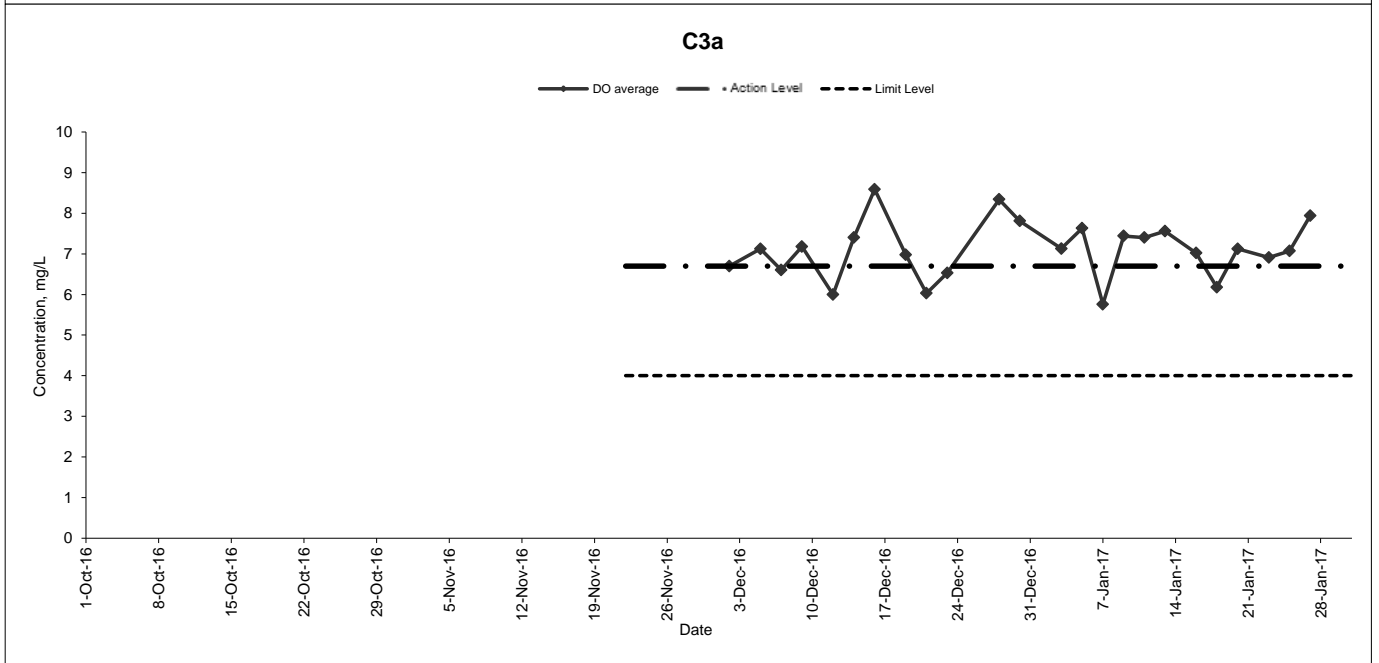
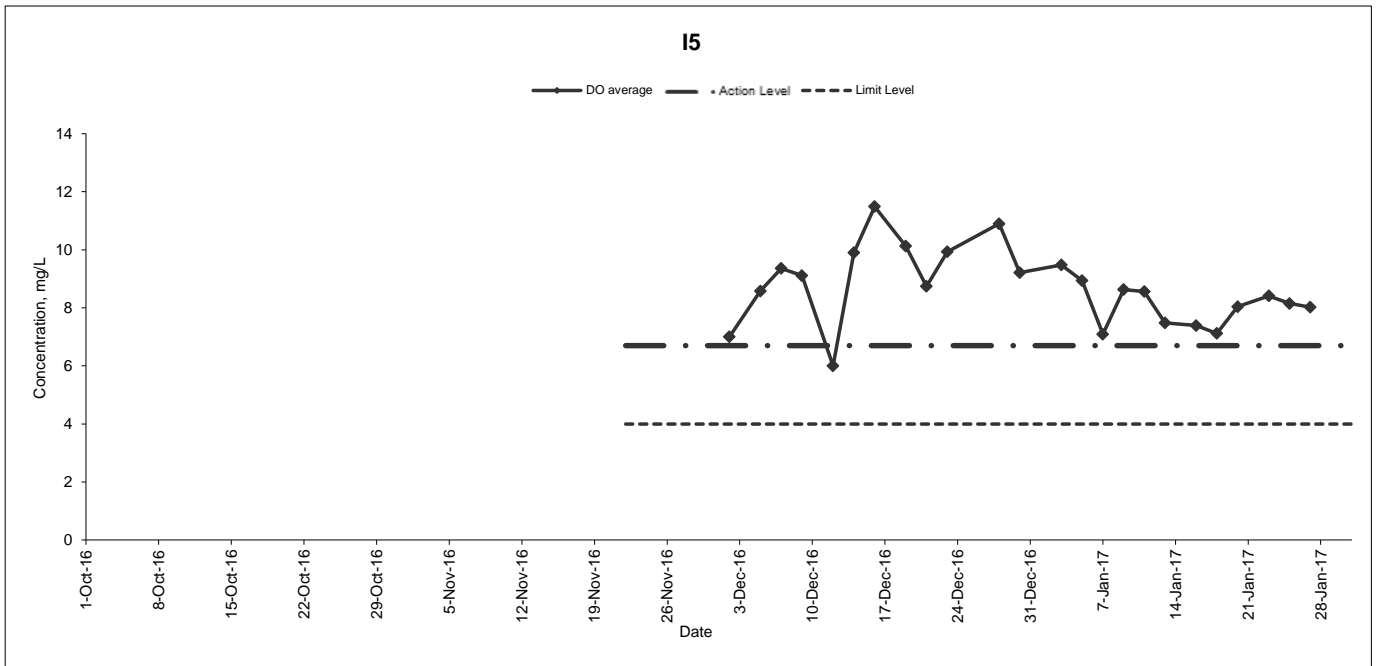
Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:07	<0.5	20.9	20.9	6.4	6.4	7.1	7.1	79.2	79.2	13.1	13.1	<0.1	<0.1	6.9	6.9
			20.9		6.4		7.1		79.2		13.1		<0.1			
			19.7		6.8		8.1		88.6		7.5		<0.1			
C3b	11:29	<0.5	19.7	19.7	6.8	6.8	8.1	8.1	88.6	88.6	7.5	7.5	<0.1	<0.1	3.7	3.8
			19.7		6.8		8.1		88.6		7.5		<0.1			
			20.5		7.0		8.2		90.7		6.9		<0.1			
I5	11:43	<0.5	20.5	20.5	7.0	7.0	8.2	8.2	90.7	90.7	6.9	6.9	<0.1	<0.1	3.0	3.2
			20.5		7.0		8.2		90.7		6.9		<0.1			
			20.5		7.0		8.2		90.7		6.9		<0.1			

Date of Monitoring 1/25/2017 Weather : Sunny

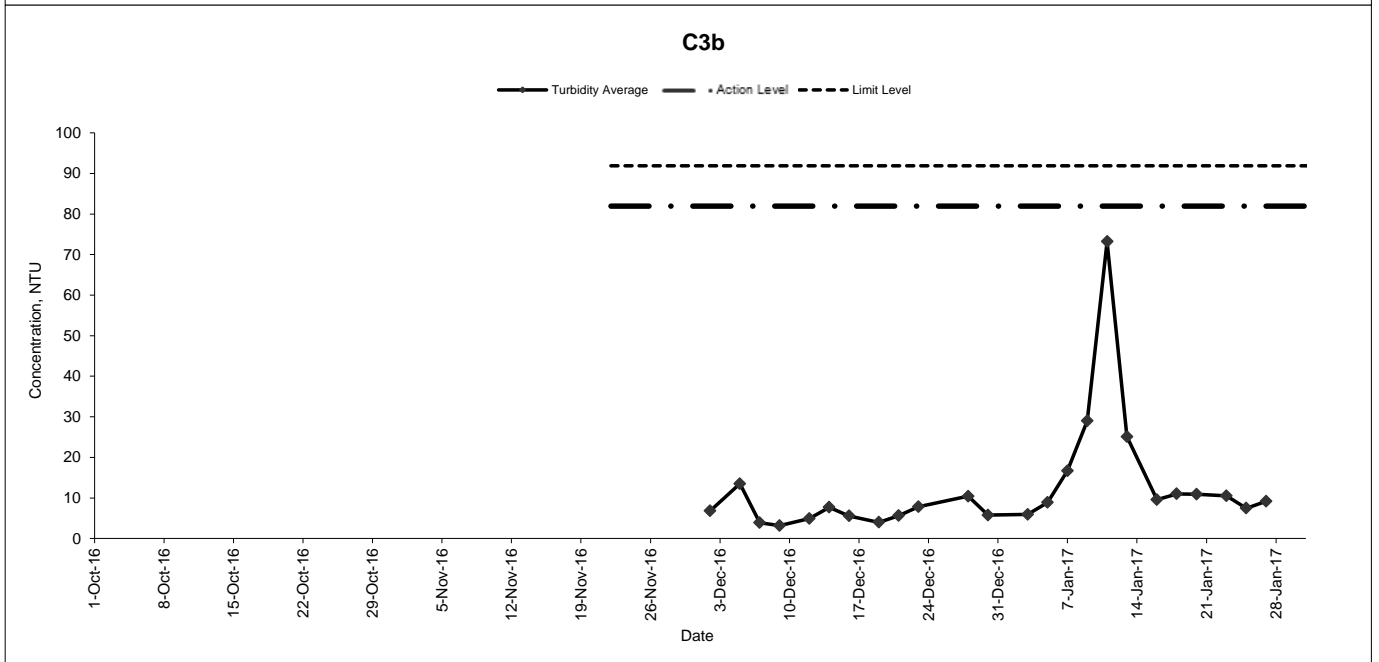
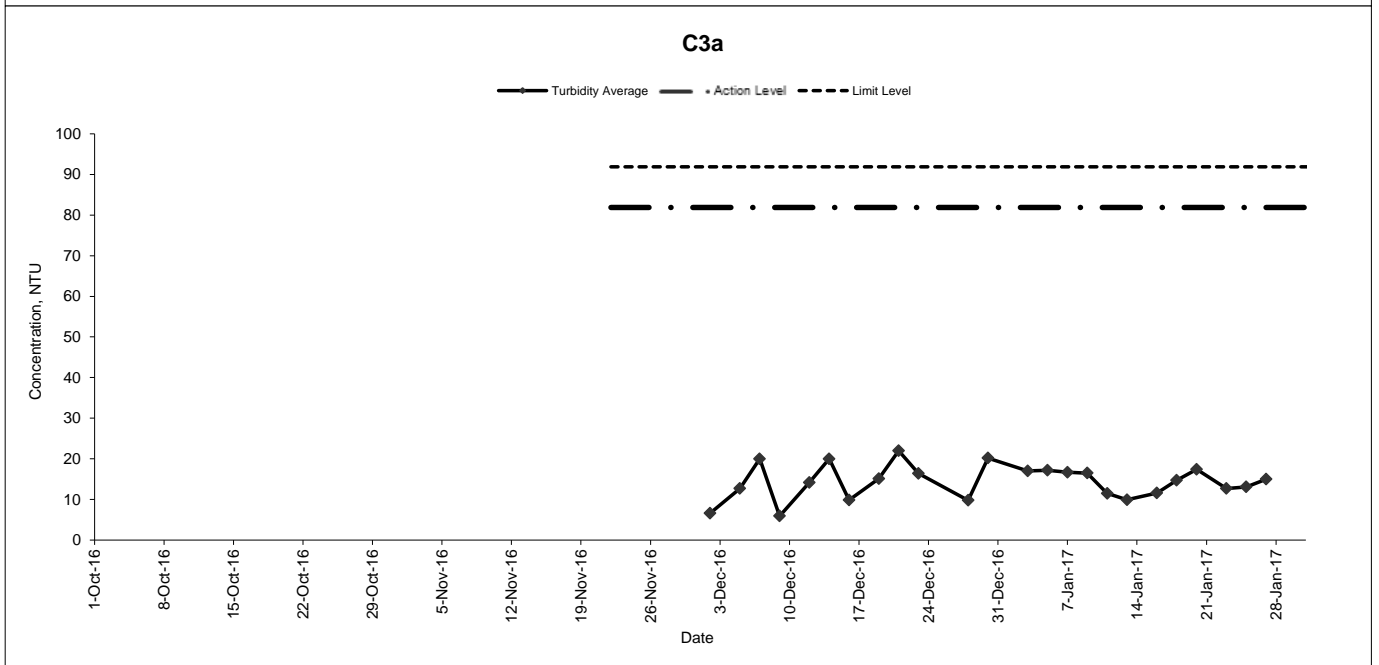
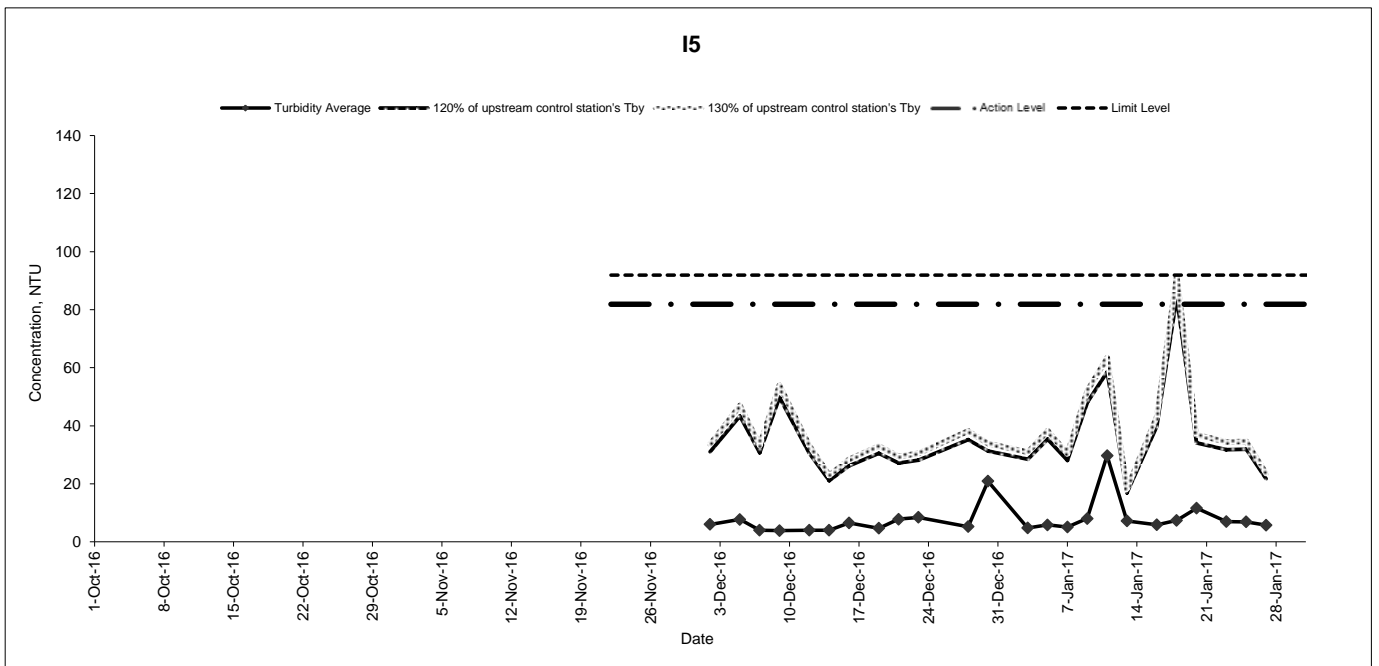
Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:06	<0.5	19.9	19.9	6.4	6.4	7.9	7.9	87.1	87.1	15.0	15.0	<0.1	<0.1	14.0	14.5
			19.9		6.4		7.9		87.1		15.0		<0.1			
			18.9		6.7		7.9		85.2		9.2		<0.1			
C3b	11:32	<0.5	18.9	18.9	6.7	6.7	7.9	7.9	85.2	85.2	9.2	9.2	<0.1	<0.1	4.6	4.3
			18.9		6.7		7.9		85.2		9.2		<0.1			
			19.6		6.9		8.0		87.7		5.7		<0.1			
I5	11:47	<0.5	19.6	19.6	6.9	6.9	8.0	8.0	87.7	87.7	5.7	5.7	<0.1	<0.1	<2.5	2.8
			19.6		6.9		8.0		87.7		5.7		<0.1			
			19.6		6.9		8.0		87.7		5.7		<0.1			

NOTE:
 Data in **Bold** denotes exceedance of respective Action Level
 Data in **Bold Underline** denotes exceedance of respective Limit Level

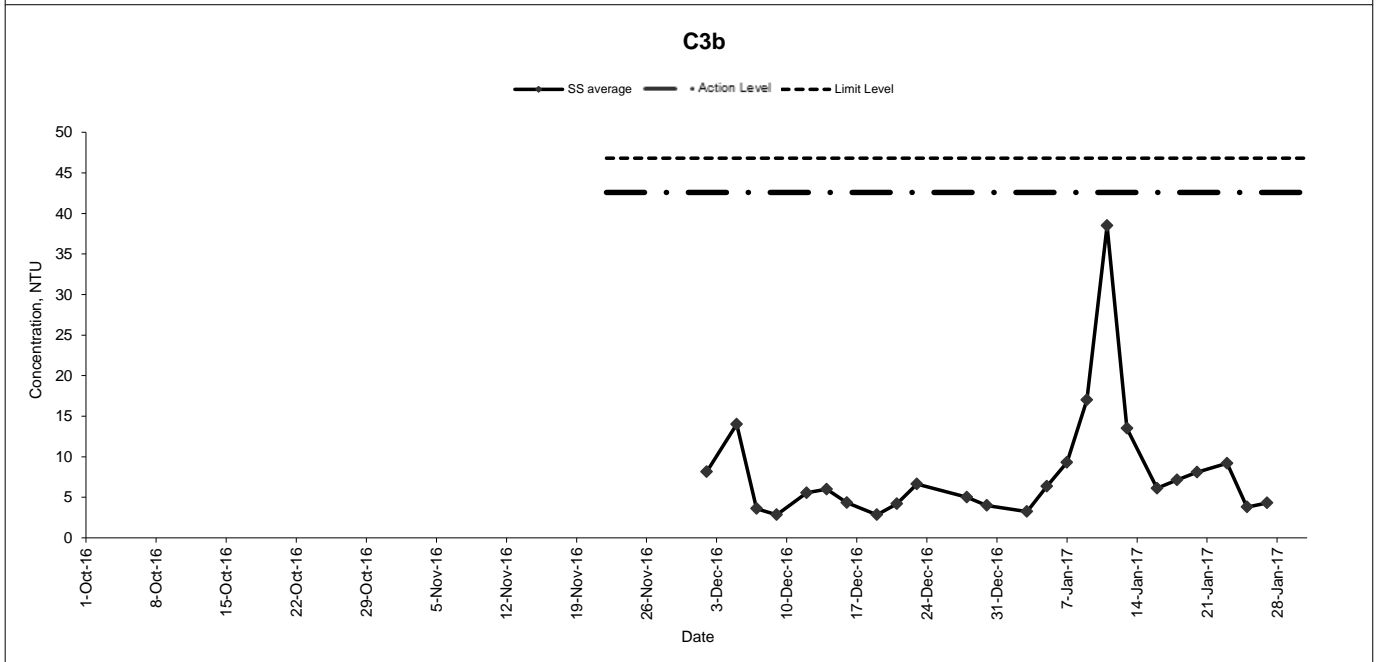
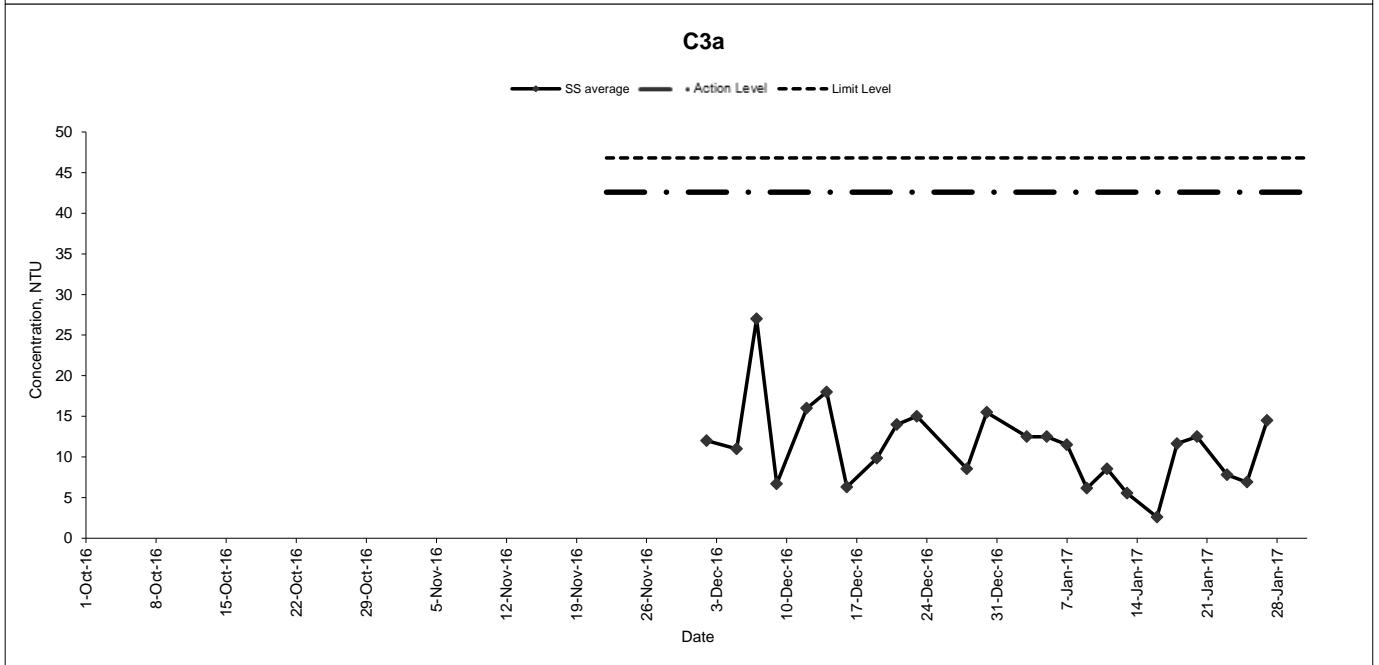
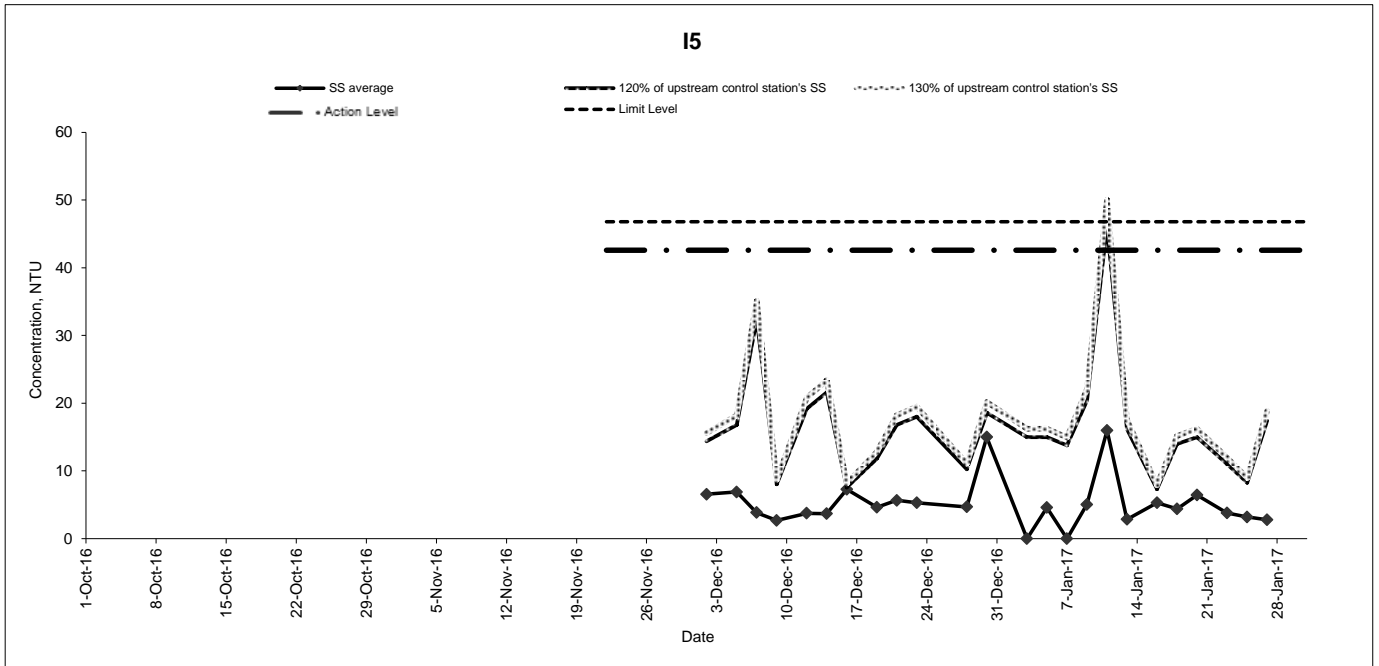
Dissolved Oxygen (October 2016 - January 2017)



Turbidity (October 2016 - January 2017)



Suspended Solid (October 2016 - January 2017)



Appendix F

Waste Flow Table

Monthly Summary Waste Flow Table

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Soil	Soil Reused in the Contract	Soil Reused in other Projects	Soil Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging (Note 3)	Plastics	Chemical Waste	General Refuse (Note 2)
Unit	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in m ³)	(in '000m ³)
Nov-16	0.748	0.140	0.608	0.201	-	0.407	0.714	0.001	-	0.001	-	0.125
Dec-16	0.675	0.130	0.545	0.120	-	0.425	0.353	0.001	-	-	-	0.120
Jan-17	1.150	0.204	0.946	0.150	-	0.796	1.150	-	-	0.001	-	0.170
Total	2.573	0.474	2.099	0.471	-	1.628	2.217	0.002	-	0.002	-	0.415

- Note:
1. Assume the density of soil fill is 2 ton/m³.
 2. Assume the density of rock and broken concrete is 2.5 ton/m³.
 3. Assume each truck of C&D wastes is 5m³.
 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 kg/m³.

Appendix G 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	<p>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.</p> <p>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.</p> <p>The complaint is considered an invalid complaint under this Project.</p>	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)	<p>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.</p> <p>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.</p> <p>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.</p>	Completed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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</p> <p>The complaint is considered unlikely due to the construction works of this project.</p>	



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