CONTRACT NO: HK/2015/01

WANCHAI DEVELOPMENT PHASE II AND CENTRAL WANCHAI BYPASS SAMPLING, FIELD MEASUREMENT AND TESTING WORK (STAGE 3)

ENVIRONMENTAL PERMIT NO. EP-356/2009, FURTHER EVIRONMENTAL PERMIT NOS. FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009 FEP-06/356/2009, FEP-07/356/2009 AND FEP-08/356/2009

QUARTERLY ENVIRONMENTAL MONITORING AND AUDIT REPORT

- MARCH 2017 TO MAY 2017 -

CLIENTS:

Civil Engineering and Development Department

and

Highways Department

PREPARED BY:

Lam Geotechnics Limited

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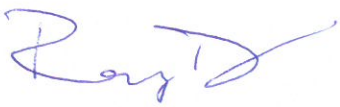

Raymond Dai
Environmental Team Leader

DATE:

24 June 2017

RAMBOLL ENVIRON

Ref.: AACWBIECEM00_0_9492L.17

28 June 2017

AECOM Asia Company Limited
Engineer's Representative's Office
25 Hung Hing Road,
Causeway Bay,
Hong Kong

By Post and Fax (2691 2649)

Attention: Mr. Peter Poon

Dear Sirs,

Re: Contract No. HK/2015/01
Wan Chai Development Phase II - Central-Wan Chai Bypass
Sampling, Field Measurement and Testing Works (Stage 3)

Quarterly EM&A Report (March to May 2017) for
EP-356/2009, FEP-02/356/2009. FEP-03/356/2009, FEP-04/356/2009, FEP-06/356/2009, FEP-07/356/2009 and FEP-08/356/2009

Reference is made to the Environmental Team's submission of the captioned Quarterly Environmental Monitoring and Audit (EM&A) Report for March to May 2017 received by e-mail on 24 June 2017.

Please be informed that we have no adverse comment on the captioned submission and thereby write to verify the captioned submission.

Thank you very much for your kind attention and please do not hesitate to contact the undersigned should you have any queries.

Yours sincerely,

David Yeung
Independent Environmental Checker

Encl.

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Ramboll Environ Hong Kong Limited 英環香港有限公司
21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899
www.Ramboll-Environ.com

c.c.

HyD	Attn: Mr. Eddy Wu	by fax: 2714 5289
CEDD	Attn: Mr. L K Tsang	by fax: 2577 5040
AECOM	Attn: Mr. Francis Leong/Stephen Lai	by fax: 2691 2649
AECOM	Attn: Mr. Conrad Ng	by fax: 2691 2649
Lam	Attn: Mr. Raymond Dai	by fax: 2882 3331

CONTRACT NO: HK/2015/01

WANCHAI DEVELOPMENT PHASE II AND CENTRAL WANCHAI BYPASS SAMPLING, FIELD MEASUREMENT AND TESTING WORK (STAGE 3)

**ENVIRONMENTAL PERMIT NO. EP-356/2009,
FURTHER EVIRONMENTAL PERMIT NOS. FEP-02/356/2009,
FEP-03/356/2009, FEP-04/356/2009
FEP-06/356/2009, FEP-07/356/2009 AND FEP-08/356/2009**

QUARTERLY ENVIRONMENTAL MONITORING AND AUDIT REPORT

- MARCH 2017 TO MAY 2017 -

CLIENTS:

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and

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DATE:

June 2017

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EXECUTIVE SUMMARY

i. This is the Quarterly Environmental Monitoring and Audit (EM&A) Report – March 2017 to May 2017 prepared for the Project of Wan Chai Development Phase II and Central-Wanchai Bypass under Environmental Permit no. EP-356/2009 and Further Environmental permit nos. FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-06/356/2009 and FEP-07/356/2009. This report presents the environmental monitoring and audit findings and information during the period from 27th February 2017 to 26th May 2017. The cut-off date of reporting is at 26th of each reporting period.

Construction Activities for the Reported Period

ii. Contract no HK/2009/01 was commenced on 23 July 2010. During this reporting period, the principal work activities for Contract no. HK/2009/01 are summarized as below:

Table I Principal Work Activities for Contract no. HK/2009/01

March 2017	April 2017	May 2017
• Nil	• Nil	• Nil

iii. Contract no. HK/2009/02 was commenced on 5 July 2010. During this reporting period, the principal work activities for Contract no. HK/2009/02 are summarized as below:

Table II Principal Work Activities for Contract no. HK/2009/02

March 2017	April 2017	May 2017
• Nil	• Nil	• Nil

iv. Contract no. HY/2009/15 was commenced on 10 November 2010. During this reporting period, the principal work activities for Contract no. HY/2009/15 are summarized as below:

Table III Principal Work Activities for Contract no. HY/2009/15

March 2017	April 2017	May 2017
• Reinstate the seawall of Eastern Breakwater	• Nil	• Nil

v. Contract no. HY/2009/19 was commenced on 24 March 2011. During this reporting period, the principal work activities for Contract no. HY/2009/19 are summarized as below:

Table IV Principal Work Activities for Contract no. HY/2009/19

March 2017	April 2017	May 2017
• Nil	• Nil	• Nil

vi. Contract no. HK/2012/08 was commenced on 5 March 2013. During this reporting period, the principal work activities for Contract no. HK/2012/08 are summarized as below:

Table V Principal Work Activities for Contract no. HK/2012/08

March 2017	April 2017	May 2017
• Installation of Box 1 unit • Construction of culvert L Bay 8	• Installation of Box 1 unit • Construction of culvert L Bay 8	• Construction of Box 1 unit

vii. Contract no. HY/2010/08 was commenced on 21 March 2013. During this reporting period, the principal work activities for Contract no. HY/2010/08 are summarized as below:

Table VI Principal Work Activities for Contract no. HY/2010/08

March 2017	April 2017	May 2017
• Diversion pipe maintenance • Preparation for Diaphragm Wall Removal Works • Removal of reclamation at TS3W	• Diversion pipe maintenance • Preparation for Diaphragm Wall Removal Works • Removal of reclamation at TS3W	• Diversion pipe maintenance • Preparation for Diaphragm Wall Removal Works • Removal of reclamation at TS3W

Noise Monitoring

viii. With respect to the shift in major construction site portions at Wan Chai North, the noise monitoring station M1a – Harbour Sports Centre was finely adjusted from East of Harbour Road Sports Centre to West of Harbour Road Sports Centre on 21 June 2016.

ix. Noise monitoring during day time and evening time were conducted at the M1a, M2b, M3a, M4b, M5b and M6 on a weekly basis in the reporting period. The Action and Limit level exceedances recorded in the reporting period are listed below. Investigation found that exceedances were not related to the Project. Investigation found that exceedances were not related to the Project.

i. With respect to the demolition of Ex-Harbour Road Sports Centre, the respective noise monitoring station M1a – Harbour Road Sports Centre were finely adjusted on 16 and 25 May 2017 and thereafter to the Footbridge at Harbour Road Sports Centre for noise monitoring.

ii. School examination was scheduled to be taken place at Henrietta Secondary School on 3, 10, 25 and 26 April 2017, the limit level of noise monitoring at station M6 was adjusted to 65dB(A) during examination period accordingly.

iii. No action or limit level exceedance was recorded in March reporting month.

iv. Three limit level exceedances were recorded at M6 – HK Baptist Church Henrietta Secondary School on 03, 10 and 26 April 2017 in April reporting month. The exceedances were concluded as non-Project related.

v. One limit level exceedance was recorded at M5b – City Garden on 18 April 2017 in April reporting month. The exceedance was concluded as Project related.
Two limit level exceedances were recorded at M1a – Footbridge at Ex-Harbour Road Sports Centre on 16 and 25 May 2017 in May reporting month. The exceedances were concluded as non-Project related.

Air Quality Monitoring

vi. Due to interruption of electricity supply, the 24hr TSP was rescheduled as follows:
24 TSP monitoring at CMA3a was rescheduled from 06 April 2017 to 07 April 2017

24 TSP monitoring at CMA4a was rescheduled from 06 and 28 April 2017 to 07 and 29 April 2017 respectively

24 TSP monitoring at CMA6a was rescheduled from 12 and 18 April 2017 to 13 and 19 April 2017 respectively

24 TSP monitoring at CMA5b was rescheduled from 16 May 2017 to 13 and 17 May 2017

vii. One 24hr TSP limit level exceedance was recorded at CMA5b – Pedestrian Plaza on 2 March 2017 in March reporting month. The exceedance was concluded to be non-Project related.

viii. Two 1hr TSP action level and one 1hr limit level exceedances were recorded at CMA5b – Pedestrian Plaza on 3 March 2017 in March reporting month. The exceedances were concluded to be non-Project related.

ix. One 1hr TSP limit level exceedance was recorded at CMA4a –Society for the Prevention of Cruelty to Animals on 3 March 2017 in March reporting month. The exceedance was concluded to be non-Project related.

x. One 1hr TSP limit level exceedance was recorded at CMA1b – Oil Street Site Office on 27 March 2017 in March reporting month. The exceedance concluded to be non-Project related.

xi. No action or limit level exceedance was recorded in April reporting month.

xii. No action or limit level exceedance was recorded in May reporting month.

xiii. With respect to the proposed demolition of eastern podium of Oil Street Site Office, the respective air quality monitoring station CMA1b – Oil Street Site Office was finely adjusted from East podium of the Oil Street Site Office to the West podium of the Oil Street Site Office on 21 December 2016

xiv. The location ID of air monitoring station CMA1b was updated as Oil Street Site Office in April 2013.

xv. With respect to the area handover, the air quality monitoring station CMA5a at Children Playgrounds opposite to the Pedestrian Plaza was relocated to the Pedestrian Plaza on 3 December 2014. The station reference and location ID of the air quality monitoring station CMA5a was updated as CMA5b and Pedestrian Plaza respectively.

xvi. 1hr and 24hr TSP monitoring were conducted at CMA1b, CMA2a, CMA3a, CMA4a, CMA5b and CMA6a in the reporting period.

Water Quality Monitoring

xvii. Due to the hoisting of amber rainstorm warning signal, the scheduled water quality monitoring event on 24 May 2017 during both ebb and flood tide were cancelled.

xviii. Action and Limit level of water quality monitoring was transited from dry season to wet season from 1 April 2017.

xix. Referring to CWB RSS confirmation on the completion of marine construction activities within the Ex-PCWA area and the completion of the post construction water quality monitoring, the respective Enhance DO Monitoring within Ex-PCWA for monitoring station Ex-PCWA SE and Ex-PCWA SW was temporarily suspended since 07 March 2017 ebb tide onwards.

xx. With respect to the reinstatement of the silt screen system for Cooling Water Intakes P7, P8, P9 and WSD Water Intake RW21, the respective water quality monitoring was reverted to the previous monitoring location for Water Quality Monitoring Station RW21-P789 from water quality stations RW21-P789 East (RW21-P789E) and RW21-P789 West (RW21-P789W) from 25 January 2017 onwards.

xxi. With respect to the removal of silt screen at WQM station RW21-P789 on 26 November 2016, the respective water quality monitoring at RW21-P789 was adjusted to RW21-P789E and RW21-P789W since 28 November 2016 ebb-tide.

xxii. With respect to the temporarily suspension of marine construction works at WCR3 Area by Contract HK/2009/02, the installed silt screen for intake group (P7, P8, P9 and WSD21) was removed on 26 November 2016.

xxiii. As advised by the Contractor of HK/2009/01, all silt screen remains removal works at P1, P3, P4, P5 and C1 water quality monitoring stations were completed on 8 May 2016.

xxiv. With respect to the marine works undertaken at WCR3 by Contract HK/2009/02, the respective water quality monitoring station C1 associated with Contract HK/2009/01 was updated as in association with Contract HK/2009/01 and Contract HK/2009/02.

xxv. With respect to the marine works undertaken at CBTS by Contract HY/2010/08, the respective water quality monitoring station C7 associated with Contract HY/2009/15 was updated as in association with Contract HY/2009/15 and Contract HY/2010/08.

xxvi. With respect to the marine works undertaken at HKCEC2 by Contract HK/2012/08, the respective water quality monitoring station WSD19, P1, P3, P4, and P5 were associated with Contract HK/2012/08.

xxvii. There were 1 action level of turbidity exceedances and 2 limit level of suspended solid exceedances recorded in March reporting month. Investigation found that the 1 action level of turbidity and 1 limit level of suspended solid exceedances recorded at monitoring station P1 on 15 March 2017 in March reporting month were concluded as related to Project works. Investigation found that 1 limit level of suspended solid exceedance at monitoring station WSD19 recorded in March reporting month was not related to Project works

xxviii. No action or limit level exceedance was recorded in April reporting month.

xxix. There were two limit level of turbidity exceedances and one limit level of suspended solid exceedance were recorded in May reporting month. Investigation found that the turbidity and suspended solid exceedances were not related to Project works.

xxx. Enhanced DO monitoring at 3 monitoring stations in Causeway Bay Typhoon Shelter and Ex-Public Cargo Works Area was conducted three days per week during the reporting period.

xxxi. There was no action and limit level exceedance recorded for enhanced dissolved oxygen monitoring in this reporting quarter.

Complaints, Notifications of Summons and Successful Prosecutions

xxxii. No environmental complaint was received in this reporting quarter.

1. INTRODUCTION

1.1 Scope of the Report

1.1.1. Lam Geotechnics Limited (LGL) has been appointed to work as the Environmental Team (ET) under Environmental Permit no. EP-356/2009 and Further Environmental permit nos. FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-06/356/2009, FEP-07/356/2009 and FEP-08/356/2009 to implement the Environmental Monitoring and Audit (EM&A) programme as stipulated in the EM&A Manual of the approved Environmental Impact Assessment (EIA) Report for Wan Chai Development phase II and Central-Wan Chai Bypass (Register No.: AEIAR-125/2008) and in the EM&A Manual of the approved EIA Report for Central-Wan Chai Bypass and Island Eastern Corridor Link (Register No. AEIAR-041/2001).

1.1.2. This report presents the environmental monitoring and auditing work carried out in accordance to the Section 10.4 of EM&A Manual and "*Environmental Monitoring and Audit Requirements"* under Particular Specification Section 27.

1.1.3. This report documents the finding of EM&A works during the period from 27th February 2017 to 26th May 2017.

1.2 Structure of the Report

Section 1 ***Introduction*** – details the scope and structure of the report.

Section 2 ***Project Background*** – summarizes background and scope of the project, site description, project organization and contact details of key personnel during the reporting period.

Section 3 ***Monitoring Requirements*** – summarizes all monitoring parameters, monitoring locations, monitoring frequency, duration and action plan.

Section 4 ***Monitoring Results*** – summarizes the monitoring results obtained in the reporting period.

Section 5 ***Compliance Audit*** – summarizes the auditing of monitoring results, all exceedances environmental parameters.

Section 6 ***Complaints, Notification of summons and Prosecution*** – summarizes the cumulative statistics on complaints, notification of summons and prosecution

Section 7 ***Cumulative Construction Impact due to the Concurrent Projects*** – summarizes the relevant cumulative construction impact due to the concurrent activities of the concurrent Projects.

Section 8 ***Conclusion***

2. PROJECT BACKGROUND

2.1 Background

2.1.1. "Wan Chai Development phase II and Central-Wan Chai Bypass" and "Central-Wan Chai Bypass and Island Eastern Corridor Link" (hereafter called "the Project") are Designed Project (DP) under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO). The Environmental Impact Assessment (EIA) Reports for Central-Wan Chai Bypass and Island Eastern Corridor Link (Register No. AEIAR-041/2001) and Wan Chai Development phase II and Central-Wan Chai Bypass (Register No.: AEIAR-125/2008) have been approved on 31 August 2001 and 11 December 2008 respectively.

2.1.2. The key purpose of Wan Chai Development Phase II (WDII) is to provide land at Wan Chai North and North Point for construction of the Central-Wan Chai Bypass and Island Eastern Corridor Link (CWB). Land formed under the project will be developed as a world-class waterfront promenade joining that at the new Central waterfront for public enjoyment.

2.1.3. There is a compelling and present need for the CWB to provide relief to the very congested east-west Connaught Road Central/Harcourt Road / Gloucester Road Corridor (the Corridor) which is currently operating beyond its capacity. The CWB will provide relief to the existing congestion along the Corridor and cater for the anticipated growth of traffic on Hong Kong Island. Without the CWB and its access roads, there will not be sufficient capacity to serve the heavy traffic demands at both strategic and local levels.

2.2 Scope of the Project and Site Description

2.2.1. The Project is located mainly in Wan Chai North, Causeway Bay and North Point, and is demarcated by Gloucester Road and Victoria Park Road to the south, Fenwick Pier Street to the west and Tong Shui Road Interchange to the east, as shown in ***Figure 2.1***.

2.2.2. The study area encompasses existing developments along the Wan Chai, Causeway Bay and North Point shorelines. Major land uses include the Hong Kong Convention & Exhibition Centre (HKCEC) Extension, the Wan Chai Ferry Pier, the ex-Wan Chai Public Cargo Working Area (ex-PCWA), the Royal Hong Kong Yacht Club (RHKYC), the Police Officers' Club, the Causeway Bay Typhoon Shelter (CBTS) and commercial and residential developments.

2.2.3. The scope of the Project comprises:

- Land formation for key transport infrastructure and facilities, including the Trunk Road (i.e. CWB) and the associated slip roads for connection to the Trunk Road and for through traffic from Central to Wan Chai and Causeway Bay. The land formed for the above transport infrastructure will provide opportunities for the development of an attractive waterfront promenade for the enjoyment of the public
- Reprovisioning / protection of the existing facilities and structures affected by the land formation works mentioned above

- Extension, modification, reprovisioning or protection of existing storm water drainage outfalls, sewerage outfalls and watermains affected by the revised land use and land formation works mentioned above
- Upgrading of hinterland storm water drainage system and sewerage system, which would be rendered insufficient by the land formation works mentioned above
- Provision of the ground level roads, flyovers, footbridges, necessary transport facilities and the associated utility services
- Construction of the new waterfront promenade, landscape works and the associated utility services
- The Trunk Road (i.e. CWB) within the study area and the associated slip roads for connection to the Trunk Road.

2.2.4. The project also contains various Schedule 2 DPs that, under the EIAO, require Environmental Permits (EPs) to be granted by the DEP before they may be either constructed or operated. ***Table 2.1*** summarises the five individual DPs under this Project. ***Figure 2.1*** shows the locations of these Schedule 2 DPs.

Table 2.1 Schedule 2 Designated Projects under this Project

Item	Designated Project	EIAO Reference	Reason for inclusion
DP1	Central-Wanchai Bypass (CWB) including its road tunnel and slip roads	Schedule 2, Part I, A.1 and A.7	Trunk road and road tunnel more than 800 m in length
DP2	Road P2 and other roads which are classified as primary/district distributor roads	Schedule 2, Part I, A.1	Primary / district distributor roads
DP3	Reclamation works including associated dredging works	Schedule 2, Part I, C.1 and C.12	Reclamation more than 5 ha in size and a dredging operation less than 100 m from a seawater intake point
DP5	Wan Chai East Sewage Outfall	Schedule 2, Part I, F.5 and F.6	Submarine sewage pipelines with a total diameter more than 1,200 mm and include a submarine sewage outfall
DP6	Dredging for the Cross-harbour Water Mains from Wan Chai to Tsim Sha Tsui	Schedule 2, Part I, C.12	A dredging operation less than 100 m from a seawater intake point

2.3 Division of the Project Responsibility

2.3.1 Due to the multi-contract nature of the Project, the status of permits and/or licences under the individual contract(s) are presented as below:

Contract no. HK/2010/06 – Wan Chai Development Phase II – Central – Wan Chai Bypass over MTR Tsuen Wan Line under FEP-05/356/2009

2.3.2 The construction works were completed and the FEP-05/356/2009 was surrendered by the Contractor on 3 October 2014.

Contract no. HY/2009/11 – Wan Chai Development Phase II – Central – Wan Chai Bypass - North Point Reclamation

2.3.3 The construction works were completed and the FEP-01/356/2009 was surrendered by the Contractor on 22 October 2012.

2.3.4 Due to the multi-contract nature of the Project, there are a number of contracts sub-dividing the whole works area into different work areas to be commenced. Contractors of individual contracts will be required by the EP holder to apply Further Environmental Permits (FEP) such that the impact monitoring stations are sub-divided accordingly to facilitate the implementation of EM&A programme and to streamline the EM&A reporting for individual FEP holders correspondingly.

2.3.5 The details of individual contracts are summarized in ***Table2.2***.

Table 2.2 Details of Individual Contracts under the Project

Contract No.	Contract Title	Associated DP(s)	Construction Commencement Date
HK/2009/01	Wan Chai Development Phase II – Central –Wanchai Bypass at Hong Kong Convention and Exhibition Centre	DP3, DP6	23 July 2010
		DP1, DP2	25 August 2011
HK/2009/02	Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East	DP3, DP5	5 July 2010
		DP1	26 April 2011
HY/2009/11	Wan Chai Development Phase II and Central – Wan Chai Bypass – North Point Reclamation	DP3	17 March 2010 (Completed)
HY/2009/15	Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)	DP3	10 November 2010
		DP1	13 July 2011
HK/2010/06	Wan Chai Development Phase II-Central-Wan Chai Bypass over MTR Tsuen Wan Line	DP3	22 March 2011 (Completed)
04/HY/2006	Reconstruction of Bus Terminus near Man Yiu Street and Man Kwong Street	DP1	September 2010 (Completed)
HY/2009/17	Central - Wan Chai Bypass (CWB) at FEHD Whitfield Depot - Advanced piling works.	DP1	5 October 2010 (Completed)
HY/2009/18	Central - Wan Chai Bypass (CWB) – Central Interchange	DP1	10 March 2014
HY/2009/19	Central - Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link	DP1	24 March 2011
HK/2012/08	Wan Chai Development Phase II Central- Wan Chai Bypass at Wan Chai West	DP1,DP2, DP3	5 March 2013
HY/2011/08	Central-Wan Chai Bypass (CWB) – Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning	DP1	8 October 2014

2.4 Project Organization and Contact Personnel

2.4.1. Civil Engineering and Development Department and Highways Department are the overall project controllers for the Wan Chai Development Phase II and Central-Wan Chai Bypass respectively. For the construction phase of the Project, Project Engineer, Contractor(s), Environmental Team and Independent Environmental Checker are appointed to manage and control environmental issues.

2.4.2. The proposed project organization and lines of communication with respect to environmental protection works are shown in ***Figure 2.2***. Key personnel and contact particulars are summarized in ***Table 2.3***:

Table 2.3 Contact Details of Key Personnel

Party	Role	Post	Name	Contact No.	Contact Fax
AECOM	Engineer's Representative for WDII	Principal Resident Engineer	Mr. Frankie Fan	2587 1778	2587 1877
	Engineer's Representative for CWB	Principal Resident Engineer	Mr. Peter Poon	3912 3388	3912 3010
Chun Wo – Leader Joint Venture	Contractor under Contract no. HK/2009/01	Project Manager	Mr. Simon Liu	9304 8355	2587 1878
		Site Agent	Mr. Andy Yu	9648 4896	
		Construction Manager	Mr. Wyman Wong	9627 2467	
		Environmental Officer	Mr. Terry Tsang	6683 9394	
Chun Wo – CRGL Joint Venture	Contractor under Contract no. HK/2009/02	Project Manager	Mr. Paul Yu	3658 3085	2827 9996
		Quality & Environmental Manager	Mr. C.P. Ho	9191 8856	
China State Construction Engineering (HK) Ltd.	Contractor under Contract no. HY/2009/15	Project Director	Chris Leung	3557 6393	2566 2192
		Site Manager	Y Huo	3557 6368	
		Contractor's Representative	Rex Lau	3557 6405	
		Environmental Officer	Andy Mak	3557 6347	
Chun Wo - CRGL - MBEC_Joint Venture	Contractor under Contract no. HY/2009/19	Project Manager	Rayland Lee	3758 6788	2570 8013
		Site Agent	David Lau	3758 8879	
		Deputy Site Agent	Andy Chan	9879 4325	

Party	Role	Post	Name	Contact No.	Contact Fax
		Environmental Manager / Environmental Officer	M.H. Isa	9884 0810	
		Construction Manager (Marine)	Wingo Wong	9300 2625	
		Construction Manager (Land)	Ivan Wong	9200 7552	
China State-Build King Joint Venture	Contractor under Contract no. HK/2012/08	Project Director	C. N. Lai	9106 5806	2877 1522
		Project Manager	Eddie Chung	9189 8118	
		Site Agent	Keith Tse	9037 1839	
		Environmental Officer	James Ma	9130 9549	
China State	Contractor under Contract no. HY/2010/08	Project Director	Chris Leung	3467 4299	2566 8061
		Deputy Project Director	Thomas Lui	3557 6452	
		Project Manager	Chan Ying Lun	3418 3001	
		Site Agent	Francis Suen	6672 0311	
		Environmental Officer	Gabriel Wong	35576466	
		Environmental Supervisor	Desmond Ho Tsz Ho	3557 6466	
Ramboll Environ Hong Kong Limited	Independent Environmental Checker (IEC)	Independent Environmental Checker (IEC)	Mr. David Yeung	3465 2888	3465 2899
Lam Geotechnics Limited	Environmental Team (ET)	Environmental Team Leader (ETL)	Mr. Raymond Dai	2882 3939	2882 3331

2.5 Principal Work and Activities

2.5.1. During this reporting period, the principal work activities for Contract no. HK/2009/01 are summarized in ***Table 2.4***.

Table 2.4 Principal Work Activities for Contract no. HK/2009/01

March 2017	April 2017	May 2017
• Nil	• Nil	• Nil

2.5.2. During this reporting period, the principal work activities for Contract no. HK/2009/02 are summarized in ***Table 2.5***.

Table 2.5 Principal Work Activities for Contract no. HK/2009/02

March 2017	April 2017	May 2017
• Nil	• Nil	• Nil

2.5.3. Major construction activities for Contract no. HY/2009/15 was commenced on 10 November 2010. During this reporting period, the principal work activities for Contract no. HY/2009/15 are summarized as below:

Table 2.6 Principal Work Activities for Contract no. HY/2009/15

March 2017	April 2017	May 2017
• Reinstate the seawall of Eastern Breakwater	• Nil	• Nil

2.5.4. Contract no. HY/2009/19 was commenced on 24 March 2011. During this reporting period, the principal work activities for Contract no. HY/2009/19 are summarized as below:

Table 2.7 Principal Work Activities for Contract no. HY/2009/19

March 2017	April 2017	May 2017
• Nil	• Nil	• Nil

2.5.5. Contract no. HK/2012/08 was commenced on March 2013. During this reporting period, the principal work activities for Contract no. HK/2012/08 are summarized as below:

Table 2.8 Principal Work Activities for Contract no. HK/2012/08

March 2017	April 2017	May 2017
• Installation of Box 1 unit • Construction of culvert L Bay 8	• Installation of Box 1 unit • Construction of culvert L Bay 8	• Construction of Box 1 unit

2.5.6. Contract no. HY/2010/08 was commenced on 21 March 2013. During this reporting period, the principal work activities for Contract no. HY/2010/08 are summarized as below:

Table 2.9 Principal Work Activities for Contract no. HY/2010/08

March 2017	April 2017	May 2017
• Diversion pipe maintenance • Preparation for Diaphragm Wall Removal Works • Removal of reclamation at TS3W	• Diversion pipe maintenance • Preparation for Diaphragm Wall Removal Works • Removal of reclamation at TS3W	• Diversion pipe maintenance • Preparation for Diaphragm Wall Removal Works • Removal of reclamation at TS3W

2.5.7. Implementation status of the recommended mitigation measures during this reporting period is presented in ***Appendix 2.1***.

3. MONITORING REQUIREMENTS

3.1. Noise Monitoring

NOISE MONITORING STATIONS

3.1.1. The noise monitoring stations for the Project are listed and shown in ***Table 3.1*** and ***Figure 3.1***. ***Appendix 3.1*** shows the established Action/Limit Levels for the monitoring works.

Table 3.1 Noise Monitoring Stations

Station	Description
M1a	Footbridge at Ex-Harbour Road Sports Centre*
M2b	Noon Gun Area
M3a	Tung Lo Wan Fire Station
M4b	Victoria Centre
M5b	City Garden
M6	HK Baptist Church Henrietta Secondary School

Remarks*: With respect to the demolition of Ex-harbour Road Sports Centre, the respective noise monitoring station M1a- Harbour Road Sports Centre were finely adjusted on 16 and 25 May 2017 and thereafter to the Footbridge at Harbour Road Sports Centre for noise monitoring.

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

3.1.2. The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}). $L_{eq\ (30\ minutes)}$ shall be used as the monitoring parameter for the time period between 0700 and 1900 hours on normal weekdays. For all other time periods, $L_{eq\ (5\ minutes)}$ shall be employed for comparison with the Noise Control Ordinance (NCO) criteria. Supplementary information for data auditing, statistical results such as L10 and L90 shall also be obtained for reference.

3.1.3. Noise monitoring shall be carried out at all the designated monitoring stations. The monitoring frequency shall depend on the scale of the construction activities. The following is an initial guide on the regular monitoring frequency for each station on a weekly basis when noise generating activities are underway:

- one set of measurements between 0700 and 1900 hours on normal weekdays.

3.1.4. If construction works are extended to include works during the hours of 1900 – 0700 as well as public holidays and Sundays, additional weekly impact monitoring shall be carried out during respective restricted hours periods. Applicable permits under NCO shall be obtained by the Contractor.

3.1.5. Real time noise shall be carried out at the designated monitoring stations. The following is an initial guide on the regular monitoring frequency for each station on a 24 hours daily basis when noise generating activities are underway:

- One set of measurements between 0700 and 1900 hours on normal weekdays.
- One set of measurements between 1900 and 2300 hours on normal weekdays and 0700 and 2300 hours on public holidays.
- One set of measurements between 2300 and 0700 hours on next day on everyday.

MONITORING EQUIPMENT

3.1.6. As referred to in the Technical Memorandum ™ issued under the NCO, sound level meters in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications shall be used for carrying out the noise monitoring. Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration level from before and after the noise measurement agree to within 1.0 dB.

3.1.7. Noise measurements shall not be made in fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

3.2. Air Monitoring

AIR QUALITY MONITORING STATIONS

3.2.1. The air monitoring stations for the Project are listed and shown in ***Table 3.2*** and ***Figure 3.1***. ***Appendix 3.1*** shows the established Action/Limit Levels for the monitoring works.

Table 3.2 Air Monitoring Stations

Station ID	Monitoring Location	Description
CMA1b	Oil Street Site Office**	North Point
CMA2a	Causeway Bay Community Centre	Causeway Bay
CMA3a	CWB PRE Site Office *	Causeway Bay
CMA4a	Society for the Prevention of Cruelty to Animals	Wan Chai
CMA5b	Pedestrian Plaza***	Wan Chai
CMA6a	WDII PRE Site Office *	Wan Chai

Remarks*: As per the ENPC meeting in January 2011, the monitoring stations CMA3a - Future CWB site office at Wanchai Waterfront Promenade and CMA6a - Future AECOM site office at Work Area were renamed as remark.

Remarks**: The location ID of monitoring station CMA1b was updated as “Oil Street Site Office” in April 2013.

Remarks***: The station ID and monitoring location was updated in December 2014 with respect to monitoring station relocation.

AIR MONITORING PARAMETERS, FREQUENCY AND DURATION

3.2.2. One-hour and 24-hour TSP levels should be measured to indicate the impacts of construction dust on air quality. The 24-hour TSP levels shall be measured by following the standard high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50), Appendix B.

3.2.3. All relevant data including temperature, pressure, weather conditions, elapsed-time meter reading for the start and stop of the sampler, identification and weight of the filter paper, and any other local atmospheric factors affecting or affected by site conditions, etc., shall be recorded down in detail.

3.2.4. For regular impact monitoring, the sampling frequency of at least once in every six-days, shall be strictly observed at all the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six-days should be undertaken when the highest dust impact occurs.

SAMPLING PROCEDURE AND MONITORING EQUIPMENT

3.2.5 High volume samplers (HVSs) in compliance with the following specifications shall be used for carrying out the 1-hour and 24-hour TSP monitoring:

- 0.6 - 1.7 m3 per minute adjustable flow range;
- equipped with a timing / control device with +/- 5 minutes accuracy for 24 hours operation;
- installed with elapsed-time meter with +/- 2 minutes accuracy for 24 hours operation;
- capable of providing a minimum exposed area of 406 cm2;
- flow control accuracy: +/- 2.5% deviation over 24-hour sampling period;
- equipped with a shelter to protect the filter and sampler;
- incorporated with an electronic mass flow rate controller or other equivalent devices;
- equipped with a flow recorder for continuous monitoring;
- provided with a peaked roof inlet;
- incorporated with a manometer;
- able to hold and seal the filter paper to the sampler housing at horizontal position;
- easily changeable filter; and
- capable of operating continuously for a 24-hour period.

3.2.6 Initial calibration of dust monitoring equipment shall be conducted upon installation and thereafter at bi-monthly intervals. The transfer standard shall be traceable to the internationally recognized primary standard and be calibrated annually. The concern parties such as IEC shall properly document the calibration data for future reference. All the data should be converted into standard temperature and pressure condition.

LABORATORY MEASUREMENT / ANALYSIS

3.2.7 A clean laboratory with constant temperature and humidity control, and equipped with necessary measuring and conditioning instruments to handle the dust samples collected, shall be available for sample analysis, and equipment calibration and maintenance. The laboratory should be HOKLAS accredited.

3.2.8 An alternative non-HOKLAS accredited laboratory was set-up for carrying out the laboratory analysis, the laboratory equipment was approved by the ER on 8 February 2011 and the measurement procedures were witnessed by the IEC. Any measurement performed by the laboratory was be demonstrated to the satisfaction of the ER and IEC. IEC shall regularly audit to the measurement performed by the laboratory to ensure the accuracy of measurement results.

3.2.9 Filter paper of size 8" x 10" shall be labelled before sampling. It shall be a clean filter paper with no pinholes, and shall be conditioned in a humidity-controlled chamber for over 24-hours and be pre-weighed before use for the sampling.

3.2.10 After sampling, the filter paper loaded with dust shall be kept in a clean and tightly sealed plastic bag. The filter paper shall then be returned to the laboratory for reconditioning in the humidity controlled chamber followed by accurate weighing by an electronic balance with readout down to 0.1 mg. The balance shall be regularly calibrated against a traceable standard.

3.2.11 All the collected samples shall be kept in a good condition for 6 months before disposal.

IMPACT MONITORING FOR ODOUR PATROL

3.2.12 Odour patrols along the shorelines of Causeway Bay Typhoon Shelter and ex-Wan Chai Public Cargo Working Area when there is temporary reclamation in Causeway Bay Typhoon Shelter and/or in the ex-Wan Chai Public Cargo Working Area, or when there is dredging of the odorous sediment and slime at the south-western corner of the Causeway Bay Typhoon Shelter. Odour patrols will be carried out at bi-weekly intervals during July, August and September by a qualified person of the ET who shall:

- be at least 16 years of age;
- be free from any respiratory illnesses; and
- not be allowed to smoke, eat, drink (except water) or use chewing gum or sweets 30 min
- before and during odour patrol

3.2.13 Odour patrol shall be conducted by independent trained personnel / competent persons patrolling and sniffing around the shore as shown in ***Figure 3.1*** to detect any odour at the concerned hours (afternoon is preferred for higher daily temperature).

3.2.14 The qualified person will use the nose (olfactory sensor) to sniff odours at different locations. The main odour emission sources and the areas to be affected by the odour nuisance will be identified.

3.2.15 The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

- 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterized or described;
- 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
- 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
- 3 - Strong Identifiable, likely to have odour nuisance;
- 4 - Extreme Severe odour, and unacceptable odour level.

3.2.16 The findings including odour intensity, odour nature and possible odour sources, and also the local wind speed and direction at each location will be recorded. In addition, some relevant meteorological and tidal data such as daily average temperature, and daily average humidity, on that surveyed day will be obtained from the Hong Kong Observatory Station for reference. The Action and Limit levels for odour patrol are shown in ***Appendix 3.1***.

3.3 Water Quality Monitoring

3.3.1. The EIA Report has identified that the key water quality impact would be associated with the dredging works during the construction phase. Marine water quality monitoring for dissolved oxygen (DO), suspended solid (SS) and turbidity is therefore recommended to be carried out at selected WSD flushing water intakes. The impact monitoring should be carried out during the proposed dredging works to ensure the compliance with the water quality standards.

3.3.2. The updated EM&A Manual for EP-356/2009 (Version in March 2011) is approval by EPD on 29 April 2011. As such, the Action Level and Limit Level for the wet season (April – September) will be effected and applied to the water quality monitoring data from 30 April 2011.

Water Quality Monitoring Stations

3.3.3. Water quality monitoring was undertaken at WSD salt water intakes and cooling water intakes along the seafront of the Victoria Harbour. The proposed water quality monitoring stations of the Project are shown in ***Table 3.3*** and ***Figure 3.1***. ***Appendix 3.1*** shows the established Action/Limit Levels for the monitoring works.

Table 3.3 Marine Water Quality Stations for Water Quality Monitoring

Station Ref.	Location	Easting	Northing
WSD Salt Water Intake			
WSD19	Sheung Wan	833415.0	816771.0
Cooling Water Intake			
C1	HKCEC Extension	835885.6	816223.0
C7	Windsor House	837193.7	816150.0
P1	HKCEC Phase I	835774.7	816179.4
P3	The Academy of performing Arts	835824.6	816212.0
P4	Shui on Centre	835865.6	816220.0

Station Ref.	Location	Easting	Northing
P5	Government Buildings (Wanchai Tower / Revenue Tower / Immigration Tower)	835895.2	816215.2
Cooling Water Intake / WSD Salt Water Intake			
RW21-P789	Great Eagle Centre/ Sun Hung Kai Centre/ WSD Wanchai salt water intake	836268.0	816020.0

Remarks: - The cessation of seawater intake operation for C6 was confirmed on 17 May 2011, the water monitoring at C6 was then terminated since 17 May 2011.

- 4-week post construction water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8 and C9 were completed on 6 Feb 2012 and the water quality monitoring at WSD 10 and WSD15 were temporary suspended since 8 Feb 2012, and WSD9 and WSD17 was implemented with respect to HK/2009/02 from 8 Feb 2012 onwards.
- C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
- C8 & C9 were temporary suspended since 30 March 2013.
- WSD7 and WSD20 water quality monitoring were temporarily suspended from 27 Apr 2012.
- C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013
- C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013.
- WSD21 water quality monitoring station was temporarily suspended since 12 Mar 2014
- WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 Sep 2014 flood tide.
- The water quality monitoring station C1 shall be associated with Contract No. HK/2009/02 upon commencement of marine works under DP3 at WCR3 area
- The water quality monitoring station RW21-P789 was adjusted to RW21-P789E and RW21-P789W since 28 November 2016 ebb-tide.
- The water quality monitoring was reverted to previous monitoring station RW21-P789 from PW21-P789E and RW21-P789W from 25 January 2017 onwards.

WATER QUALITY PARAMETERS AND FREQUENCY

3.3.4. Monitoring of dissolved oxygen (DO), turbidity and suspended solids (SS) shall be carried out at WSD flushing water intakes and cooling water intakes. DO and Turbidity are measured in-situ while SS is determined in laboratory.

3.3.5. In association with the water quality parameters, other relevant data shall also be measured, such as monitoring location/position, time, sampling depth, water temperature, pH, salinity, dissolved oxygen (DO) saturation, weather conditions, sea conditions, tidal stage, and any special phenomena and work underway at the construction site etc.

3.3.6. The interval between two sets of monitoring should not be less than 36 hours except where there are exceedances of Action and/or Limit Levels, in which case the monitoring frequency will be increased. ***Table 3.4*** shows the proposed monitoring frequency and water quality parameters. Duplicate in-situ measurements and water sampling should be carried out in each sampling event. For selection of tides for in-situ measurement and water sampling, tidal range of individual flood and ebb tides should be not less than 0.5m.

Table 3.4 Marine Water Quality Monitoring Frequency and Parameters

Activities	**Monitoring Frequency[1]**	**Parameters[2]**
During the 4-week baseline monitoring period	Three days per week, at mid-flood and mid-ebb tides	Turbidity, Suspended Solids (SS), Dissolved Oxygen (DO), pH, Temperature, Salinity
During marine construction works	Three days per week, at mid-flood and mid-ebb tides	Turbidity, Suspended Solids (SS), Dissolved Oxygen (DO), pH, Temperature, Salinity
After completion of marine construction works	Three days per week, at mid-flood and mid-ebb tides	Turbidity, Suspended Solids (SS), Dissolved Oxygen (DO), pH, Temperature, Salinity

Notes:
1. For selection of tides for in-situ measurement and water sampling, tidal range of individual flood and ebb tides should be not less than 0.5m.
2. Turbidity should be measured in situ whereas SS should be determined by laboratory.

DISSOLVED OXYGEN AND TEMPERATURE MEASURING EQUIPMENT

3.3.7. The instrument should be a portable, weatherproof dissolved oxygen measuring instrument complete with cable, sensor, comprehensive operation manuals, and use a DC power source. It should be capable of measuring:

- a dissolved oxygen level in the range of 0-20 mg/l and 0-200% saturation
- a temperature of 0-45 degree Celsius

3.3.8. It should have a membrane electrode with automatic temperature compensation complete with a cable. Sufficient stocks of spare electrodes and cables should be available for replacement where necessary. (e.g. YSI model 59 meter, YSI 5739 probe, YSI 5795A submersible stirrer with reel and cable or an approved similar instrument).

3.3.9. Should salinity compensation not be build-in in the DO equipment, in-situ salinity shall be measured to calibrate the DO equipment prior to each DO measurement.

TURBIDITY MEASUREMENT INSTRUMENT

3.3.10 The instrument should be a portable, weatherproof turbidity-measuring instrument complete with comprehensive operation manual. The equipment should use a DC power source. It should have a photoelectric sensor capable of measuring turbidity between 0-1000 NTU and be complete with a cable (e.g. Hach model 2100P or an approved similar instrument).

SAMPLER

3.3.11 Water sampler comprises a transparent PVC cylinder, with a capacity of not less than 2 litres, and can be effectively sealed with latex cups at both ends. The sampler should have a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler is at the selected water depth (e.g. Kahlsico Water Sampler or an approved similar instrument).

SAMPLE CONTAINER AND STORAGE

3.3.12 Water samples for suspended solids measurement should be collected in high-density polythene bottles, packed in ice (cooled to 4°C without being frozen), and delivered to ALS Technichem (HK) Pty Ltd. as soon as possible after collection for analysis.

WATER DEPTH DETECTOR

3.3.13 A portable, battery-operated echo sounder shall be used for the determination of water depth at each designated monitoring station. This unit can either be handheld or affixed to the bottom of the workboat, if the same vessel is to be used throughout the monitoring programme.

SALINITY

3.3.14 A portable salinometer capable of measuring salinity in the range of 0-40 ppt shall be provided for measuring salinity of the water at each of monitoring location.

MONITORING POSITION EQUIPMENT

3.3.15 A hand-held or boat-fixed type digital Global Positioning System (GPS) with waypoint bearing indication or other equivalent instrument of similar accuracy shall be provided and used during monitoring to ensure the monitoring vessel is at the correct location before taking measurements.

CALIBRATION OF IN-SITU INSTRUMENTS

3.3.16 All in-situ monitoring instrument shall be checked, calibrated and certified by a laboratory accredited under HOKLAS or equivalent before use, and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring. Responses of sensors and electrodes should be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter shall be carried out before measurement at each monitoring location.

3.3.17 For the on site calibration of field equipment by the ET, the BS 127:1993, "Guide to Field and on-site test methods for the analysis of waters" should be observed.

3.3.18 Sufficient stocks of spare parts should be maintained for replacements when necessary. Backup monitoring equipment shall also be made available so that monitoring can proceed uninterrupted even when some equipment is under maintenance, calibration, etc.

LABORATORY MEASUREMENT / ANALYSIS

3.3.19 Analysis of suspended solids has been carried out in a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd. Water samples of about 1L shall be collected at the monitoring stations for carrying out the laboratory SS determination. The SS determination work shall

start within 24 hours after collection of the water samples. The SS determination shall follow APHA 19ed or equivalent methods subject to the approval of IEC and EPD.

ENHANCED WATER QUALITY MONITORING IN THE EX-WAN CHAI PUBLIC CARGO WORKING AREA AND THE CAUSEWAY BAY TYPHOON SHELTER

3.3.20 The enhanced water quality monitoring and audit programme is to avoid aggravation of odour nuisance from seawater arising from temporary reclamation in the ex-Wan Chai Public Cargo Working Area and the Causeway Bay Typhoon Shelter.

3.3.21 Dissolved oxygen monitoring at the intakes C6 and C7 in Causeway Bay Typhoon Shelter when there is temporary reclamation in Causeway Bay Typhoon Shelter and at the south-western and south-eastern corners of the ex-Wan Chai Public Cargo Working Area. The proposed water quality monitoring stations of the Project are shown in ***Table 3.5*** and ***Figure 3.1.***

Table 3.5 Marine Water Quality Stations for Enhanced Water Quality Monitoring

Station	Location
C6	Excelsior Hotel
C7	Windsor House
Ex-WPCWA-SW	South-western of the ex-Wan Chai Public Cargo Working Area
Ex-WPCWA-SE	South-eastern of the ex-Wan Chai Public Cargo Working Area

Remarks:

1. Enhanced DO monitoring at Windsor House Cooling (Station Ref: C7) was temporarily suspended since 22 October 2014 with respect to the formation of temporary reclamation zone TS3 and to be resumed upon removal of the respective temporary reclamation zone.
2. Enhanced DO monitoring at Monitoring station at Ex-WPCWA SE was temporarily suspended from 31 August 2015 with respect to seawall reinstatement works and formation of active works area. The Enhance DO monitoring at Ex-WPCWA SE was resumed on 11 May 2016 due to completed section of seawall reinstatement works are Ex-PCWA.

3.3.22 The monitoring of dissolved oxygen are to be carried out 3 days per week, at mid-flood and mid-ebb tides for 3 water depths (1m below water surface, mid-depth and 1m above sea bed, except where the water depth less than 6m, the mid-depth may be omitted. If the water depth be less than 3m, only the mid-depth will be monitored).

DAILY SS MONITORING AND 24 HOURS TURBIDITY MONITORING SYSTEM

3.3.23 During dredging of the sediment at the south-western corner of the Causeway Bay Typhoon Shelter, daily monitoring of suspended solids and 24 hour monitoring of turbidity at the cooling water intakes (C6 and C7) shall be conducted.

3.3.24 The 24 hours monitoring of turbidty at the cooling water intakes (C6 and C7) shall be established by setting up a continuous water quality monitoring station in front of the intakes during the dredging activities. The monitoring system include the turbidity sensor and data

logger which is capable of data capturing at every 5 minutes. The data shall be downloaded daily and compared with the Action and Limit level determined during the baseline water qualtiy monitoring at the cooling water intake locations.

ADDITIONAL DISSOVLED OXYGEN MONITORING FOR CULVERT L WATER DISCHARGE FLOW

3.3.25 In response to the Condition 2.18 of the Environmental Permit no. EP-356/2009 requiring that a silt curtain / impermeable barrier system be installed to channel water discharge flow from Culvert L to locations outside the embayment area, a proposed replacement of the requirement with additional dissolved oxygen monitoring has been conducted at three monitoring stations, namely A, B and C between the eastern seawall of Central Reclamation Phase III and the HKCEC Extension since November 2011 under EP-356/2009 so that DO level between the eastern seawall of Central Reclamation Phase II and the HKCEC extension could be continuously monitored.

3.3.26 With respect to the commencement of dredging works under HK/2012/08 and the installation of MTR precast protection unit, the enhanced water quality monitoring for Culvert L was temporarily suspended since 24 July 2013

3.3.27 The monitoring of dissolved oxygen are to be carried out once per week, at mid-flood and mid-ebb tides for 3 water depths (1m below water surface, mid-depth and 1m above sea bed, except where the water depth less than 6m, the mid-depth may be omitted. If the water depth be equal to or less than 3m, only the mid-depth will be monitored).

4. MONITORING RESULTS

4.0.1. The environmental monitoring will be implemented based on the division of works areas of each designed project managed under different contracts with separate FEP applied by individual contractors. Overall layout showing work areas of various contracts, latest status of work commencement and monitoring stations is shown in ***Figure 2.1*** and ***Figure 3.1***. The monitoring results are presented in according to the Individual Contract(s).

4.0.2 According to EP-364/2009/A Part B, "Scale and Scope of Designated Project", Remarks (c),"The permanent and temporary reclamation and associated dredging works related to the CWB construction are separately covered by environmental permit No. EP-356/2009 issued to Civil Engineering and Development Department", and marine piling works to be conducted by the Contractor of Contract no. HY/2009/19 from 28 January 2012 was considered to be governed under EP-356/2009. As the construction site area of Contract no. HY/2009/11 had already been handed over to Contract no. HY/2009/19, the designated noise, water and air quality monitoring stations for Contract no. HY/2009/11 would be shared with Contract no. HY/2009/19 from 28 January 2012.

4.1. Noise Monitoring Results

Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC and Contract no. HK/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East

4.1.1. The proposed divisions of noise monitoring stations are summarized in ***Table 4.1*** below.

Table 4.1 Noise Monitoring Station for Contract nos. HK/2009/01 and HK/2009/02

Station	Description
M1a	Footbridge at Ex-Harbour Road Sports Centre

4.1.2. No action or limit level exceedance was recorded in March reporting month.

4.1.3. No action or limit level exceedance was recorded in April reporting month.

4.1.4. Two limit level exceedances were recorded at M1a – Footbridge at Ex-Harbour Road Sports Centre on 16 and 25 May 2017 in May reporting month.

4.1.5. No Construction works was conducted under Contract HK/2009/01 around the monitoring station on 16 and 25 May 2017, non WDII-CWB Projects breaking and drilling works was observed on 16 May 2017 and non WDII-CWB Project bored pilling works was conducted on 25 May 2017 during monitoring period and observed as the major noise contribution. Hence, the exceedances were considered as non-Project related.

4.1.6. Despite rebar fixing, and formwork fixing works was conducted on 16 May 2017 and rebar fixing was conducted on 25 May 2017 under Contract HK/2009/02, non WDII-CWB Projects breaking and drilling works was observed on 16 May 2017 and non WDII-CWB Project bored pilling works was conducted on 25 May 2017 during monitoring period and observed as the major noise contribution. Hence, the exceedances were considered as non-Project related.

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

4.1.7. The noise monitoring for HY/2009/15 was commenced on 10 November 2010. The proposed division of noise monitoring stations are summarized in ***Table 4.2*** below.

Table 4.2 Noise Monitoring Station for Contract nos. HY/2009/15

Station	Description
M2b	Noon Gun Area
M3a	Tung Lo Wan Fire Station

4.1.8. No action or limit level exceedance was recorded in this reporting quarter.

Contract no. HY/2009/19 – Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

4.1.9. Noise quality monitoring at M4b and M5b have been implemented with respect to HY/2009/19 since the marine bore piling work started on 28 Jan 2012.

4.1.10. The proposed division of noise monitoring stations for Contract no. HY/2009/19 are summarized in ***Table 4.3*** below:

Table 4.3 Noise Monitoring Stations for Contract no. HY/2009/19

Station	Description
M4b	Victoria Centre
M5b	City Garden
M6	HK Baptist Church Henrietta Secondary School

4.1.11. No action or limit level exceedance was recorded in March reporting month.

4.1.12. School examination was scheduled to be taken place at Henrietta Secondary School on 3, 10, 25 and 26 April 2017, the limit level of noise monitoring at station M6 was adjusted to 65dB(A) during examination period accordingly.

4.1.13. Three limit level exceedances were recorded at M6 – HK Baptist Church Henrietta Secondary School on 03, 10 and 26 April 2017 in April reporting month.

4.1.14. Traffic noise was observed during monitoring on 03, 10 and 26 April 2017 and were considered as the major noise contribution. As such, the limit level exceedances were concluded as non-project related.

4.1.15. One limit level exceedance was recorded at M5b – City Garden on 18 April 2017 in April reporting month.

4.1.16. Starter bar fixing works and breaking works at marine pier under Contract HY/2009/19 was conducted during the measurement on 18 April 2017, it was observed that breaking operation was the major noise contribution during measurement. It is concluded that the exceedance was Project related and the contractor was requested to submit a proposal for remediation measures following the Event and Action Plan. Actions from the remediation plan including i) Closing the opening of the temporary noise barrier ii) provide physical wrapping of breaker to dampen noise emission and iii) conduct breaking works intermittently were implemented by the Contractor and no further exceedance was recorded upon implementation of the remedial actions.

4.1.17. No action or limit level exceedance was recorded in May reporting month.

Contract no. HY/2010/08-Central-Wanchi Bypass Tunnel (Slip Road 8 Section)

4.1.18. The proposed division of noise monitoring stations are summarized in **Table 4.4** below.

Table 4.4 Noise Monitoring Station for Contract no. HY/2010/08

Station	Description
M2b	Noon Gun Area
M3a	Tung Lo Wan Fire Station

4.1.19. No action or limit level exceedance was recorded in the reporting quarter.

4.1.20. All Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in **Appendix 4.1**.

4.2. Air Monitoring Results

4.2.1 1hr and 24hr TSP monitoring were conducted at CMA1b, CMA2a, CMA3a, CMA4a, CMA5b and CMA6a in the reporting period.

Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

4.2.2 Air monitoring was commenced on 1 April 2011 in response to the commencement of the land-filling work for Contract no. HK/2009/01. The proposed division of air monitoring stations are summarized in ***Table 4.5*** below.

Table 4.5 Air Monitoring Stations for Contract no. HK/2009/01

Station	Description
CMA5b	Pedestrian Plaza
CMA6a	WDII PRE Site Office *

4.2.3 One 24hr TSP limit level exceedance was recorded at CMA5b on 02 March 2017.

4.2.4 No construction works was undertaken on 02 March 2017 around Pedestrian Plaza under Contract HK/2009/01, no particular observation regarding air quality impact was observed during sampling. The exceedance was considered to be non-project related and potentially contributed by ambient air quality and other sources affecting local ambient condition such as road traffic next to the monitoring station.

4.2.5 Two 1hr TSP action level exceedances and one 1hr TSP limit level exceedance were recorded at CMA5b on 03 March 2017.

4.2.6 No construction works was undertaken on 03 March 2017 around Pedestrian Plaza under Contract HK/2009/01, no particular observation regarding air quality impact was observed during sampling. The exceedances were considered to be non-project related and potentially contributed by ambient air quality and other sources affecting local ambient condition such as road traffic next to the monitoring station.

4.2.7 No action or limit level exceedance was recorded in April reporting month.

4.2.8 No action or limit level exceedance was recorded in May reporting month.

Contract no. HK/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East

4.2.9 Air monitoring was commenced in mid-January 2011 for the land-filling work for Contract no. HK/2009/02. The proposed division of air monitoring stations is summarized in ***Table 4.6*** below.

Table 4.6 Air Monitoring Station for Contract no. HK/2009/02

Station	Description
CMA4a	Society for the Prevention of Cruelty to Animals

4.2.10 One 1hr TSP limit level exceedance was recorded at CMA4a on 03 March 2017.

4.2.11 Despite backfilling works at Portion 3&4 and tunnel structure works at Portion 5 were conducted on 03 March 2017 on the monitoring date around the monitoring station under Contractor of HK/2009/02, dust suppression measure including covering of stockpile and watering for haul road and during loading and unloading of material were implemented by the Contractor and no particular observation regarding air quality impact was observed during sampling. The exceedance was considered to be non-project related and potentially contributed by ambient air quality and the observed renovation works next to the monitoring station.

4.2.12 No action or limit level exceedance was recorded in April reporting month.

4.2.13 No action or limit level exceedance was recorded in May reporting month.

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

4.2.14 Air monitoring was commenced on 15 March 2011 for the land filling work for Contract no. HY/2009/15. The proposed division of air monitoring stations are summarized in ***Table 4.7*** below.

Table 4.7 Air Monitoring Station for Contract no. HY/2009/15

Station	Description
CMA3a	CWB PRE Site Office

4.2.15 No action or limit exceedance was recorded in this reporting quarter.

Contract no. HY/2009/19 –Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

4.2.16 Air monitoring at CMA1b and CMA2a have been implemented with respect to HY/2009/19 since the marine bore piling works started on 28 Jan 2012. No exceedance was recorded in the reporting period.

4.2.17 The proposed division of air monitoring stations is summarized in ***Table 4.8*** below.

Table 4.8 Air Monitoring Stations for Contract no. HY/2009/19

Station	Description
CMA1b	Oil Street Site Office
CMA2a	Causeway Bay Community Centre

4.2.18 One 1hr TSP limit level exceedance was recorded at CMA1b on 27 March 2017.

4.2.19 No construction works was undertaken under Contract HY/2009/19 on the monitoring date at around Oil Street Site Office while the haul road around the concerned location was observed maintained in dampened condition and no particular observation regarding air quality impact was observed during sampling. In view of the above, the limit level exceedance was considered to be non-project related and contributed by local ambient condition.

4.2.20 No action or limit level exceedance was recorded in April reporting month.

4.2.21 No action or limit level exceedance was recorded in May reporting month.

Contract no. HK/2012/08- Wan Chai Development Phase II – Central-Wan Chai Bypass at Wan Chai West

4.2.22 The proposed division of air monitoring stations are summarized in ***Table 4.9*** below.

Table 4.9 Air Monitoring Stations for Contract no. HK/2012/08

Station	Description
CMA5b	Pedestrian Plaza

4.2.23 One 24hr TSP limit level exceedance was recorded at CMA5b on 02 March 2017.

4.2.24 Despite concreting, formwork erection and rebar fixing were undertaken on the monitoring date at around Pedestrian Plaza under Contractor of HK/2012/08, dust suppression measure including haul road maintained in dampened condition was implemented and no particular observation regarding air quality impact was observed during sampling. The exceedance was considered to be non-project related and potentially contributed by ambient air quality and other sources affecting local ambient condition such as road traffic next to the monitoring station.

4.2.25 Two 1hr TSP action level exceedances and one 1hr TSP limit level exceedance were recorded at CMA5b on 03 March 2017.

4.2.26 Despite concreting, formwork erection and rebar fixing were undertaken on the monitoring date at around Pedestrian Plaza under Contractor of HK/2012/08, dust suppression measure including haul road maintained in dampened condition was implemented and no particular observation regarding air quality impact was observed during sampling. The exceedances were considered to be non-project related and potentially contributed by ambient air quality and other sources affecting local ambient condition such as road traffic next to the monitoring station.

4.2.27 No action or limit level exceedance was recorded in April reporting month.

4.2.28 No action or limit level exceedance was recorded in May reporting month.

Contract no. HY/2010/08- Central-Wanchai Bypass Tunnel (Slip Road 8 Section)

4.2.29 The proposed division of air monitoring stations are summarized in ***Table 4.10*** below.

Table 4.10 Air Monitoring Stations for Contract no. HY/2010/08

Station	Description
CMA3a	CWB PRE Site Office

4.2.30 No action or limit level exceedance was recorded in this reporting quarter.

4.3. Water Monitoring Results

Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

4.3.1 Water quality monitoring for Contract no. HK/2009/01 was commenced on 23 July 2010. The proposed division of water monitoring stations is summarized in ***Table 4.11*** below.

Table 4.11 Water Monitoring Stations for Contract no. HK/2009/01

Station Ref.	Location	Easting	Northing
Cooling Water Intake			
C1	HKCEC Extension	835885.6	816223.0

4.3.2 No action or limit level was recorded in this reporting quarter.

Contract no. HK/2009/02 - Wan Chai Development Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East

4.3.3 Water quality monitoring for Contract no. HK/2009/02 was commenced on 8 July 2010. The proposed division of water monitoring stations is summarized in ***Table 4.12*** below.

Table 4.12 Water Monitoring Stations for Contract no. HK/2009/02

Station Ref.	Location	Easting	Northing
Cooling Water Intake			
C1	HKCEC Extension	835885.6	816223.0
Cooling Water Intake			
RW21-P789	Great Eagle Centre/ Sun Hung Kai Centre/WSD Wanchai salt water intake / China Resources Building	836268.0	816020.0

4.3.4 No action or limit level was recorded in this reporting quarter.

Contract no. HK/2012/08 - Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West

4.3.5 Water monitoring for Contract no. HK/2012/08 was commenced on 5 March 2013. The proposed division of water monitoring stations are summarized in ***Table 4.13*** below.

Table 4.13 Water Monitoring Stations for Contract no. HK/2012/08

Station Ref.	Location	Easting	Northing
WSD Salt Water Intake			
WSD19	Sheung Wan	833415.0	816771.0
Cooling Water Intake			
P1	HKCEC Phase I	835774.7	816179.4

Station Ref.	Location	Easting	Northing
P3	The Academy of performing Arts	835824.6	816212.0
P4	Shui on Centre	835865.6	816220.0
P5	Government Buildings (Wanchai Tower / Revenue Tower / Immigration Tower)	835895.2	816215.2

4.3.6 One limit level of suspended solid exceedance was recorded at WSD19 on 13 March 2017 in March reporting month.

4.3.7 After checking with the Contractor, no marine construction activity was conducted on the monitoring date. Location of construction area was at downstream of monitoring station WSD19 during the monitoring period. In view of the above, the exceedance was considered not project related.

4.3.8 One action level of turbidity exceedance and one limit level of suspended solid exceedance were recorded at P1 on 15 March 2017 in March reporting month.

4.3.9 After checking with the Contractor, earth works was conducted at the concerned location at Expo Drive West during the monitoring period on 15 March 2017 and contaminated effluent was observed discharging from the construction site water treatment unit into Victoria Harbour within HKCEC2E area during monitoring sampling and affecting the water quality at the concerned monitoring station. It was further confirmed on-site that the water treatment unit maintained under Contract HK/2012/08 located at the concerned upstream location was ineffective in particle settling.

4.3.10 As such, it was considered that the turbidity and suspended solid exceedances were related to Project works. Immediate repeat in-situ measurement has confirmed the exceedance recorded at P1 on 15 March 2016. The Contractor of HK/2012/08 was immediately advised to take immediate action to rectify the defects observed. Rectification measures including addition of flocculant to enhance the particulates settling rate within the water treatment unit was implemented on 15 March 2017.

4.3.11 No further turbidity exceedance was recorded during additional monitoring conducted on 16 March 2017 and no further contaminated discharge from the outlet point was observed during monitoring. Also, no further suspended solid exceedance was recorded on the subsequent monitoring on 17 March 2017.

4.3.12 In view of the above events, the Contractor of HK/2012/08 was advised to enhance the regular checking and maintenance of the concerned water treatment and ensure the remedial actions are strictly implemented to ensure the quality of the discharge effluent. The Contractor was also suggested to review the upcoming construction works and review the current site drainage and effluent control and treatment scheme to ensure the construction site discharge complies with relevant license requirement and avoid any potential adverse impact to nearby waters.

4.3.13 No action or limit level exceedance was recorded in April reporting month.

4.3.14 There was one limit level of turbidity exceedance recorded at WSD19 on 28 April 2017 in May reporting month.

4.3.15 After checking with Contractor, no marine construction activity was conducted on the monitoring date. Location of the construction area was at downstream of monitoring station WSD19 during the monitoring period. In view of the above, the exceedance was considered not project related.

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

4.3.16 Due to the commencement of the maintenance dredging on 10 November 2010, water quality monitoring for Contract no. HY/2009/15 was commenced on 9 November 2010. The proposed division of water monitoring stations is summarized in ***Table 4.14*** and ***Table 4.15*** below.

Table 4.14 Water Monitoring Stations for Contract no. HY/2009/15

Station Ref.	Location	Easting	Northing
Cooling Water Intake			
C7	Windsor House	837193.7	816150.0

Remarks: - The cessation of seawater intake operation for C6 was confirmed on 17 May 2011, the water monitoring at C6 was then terminated since 17 May 2011.

Table 4.15 Enhance Dissolved Oxygen Monitoring Stations for Contract no. HY/2009/15

Station Ref.	Location
C6	Excelsior Hotel
Ex-WPCWA SW	South-western of the ex-Wan Chai Public Cargo Working Area
Ex-WPCWA-SE	South-eastern of the ex-Wan Chai Public Cargo Working Area

Remarks:

1. Enhanced DO monitoring at Windsor House Cooling (Station Ref: C7) was temporarily suspended since 22 October 2014 with respect to the formation of temporary reclamation zone TS3 and to be resumed upon removal of the respective temporary reclamation zone.
2. Enhanced DO monitoring at Monitoring station at Ex-WPCWA SE was temporarily suspended from 31 August 2015 with respect to seawall reinstatement works and formation of active works area. The Enhance DO monitoring at Ex-WPCWA SE was resumed on 11 May 2016 due to completed section of seawall reinstatement works are Ex-PCWA.

4.3.17 No action or limit level exceedance was recorded in March reporting month.

4.3.18 No action or limit level exceedance was recorded in April reporting month.

4.3.19 There was one limit level of turbidity exceedance recorded at C7 on 17 May 2017 in May reporting month.

4.3.20 After checking with Contractor, no marine activity was conducted at Causeway Bay Typhoon Shelter on the monitoring date. In view of no marine construction activity, the exceedance was considered not related to project works.

4.3.21 There was one limit level of suspended solid exceedance recorded at C7 on 17 May 2017 in May reporting month.

4.3.22 After checking with Contractor, no marine activity was conducted at Causeway Bay Typhoon Shelter on the monitoring date. In view of no marine construction activity, the exceedance was considered not related to project works.

Contract no. HY/2010/08- Central-Wanchai Bypass Tunnel (Slip Road 8 Section)

4.3.23 The proposed division of water quality monitoring stations are summarized in ***Table 4.16*** and ***Table 4.17*** below:

Table 4.16 Water quality monitoring Stations for Contract no. HY/2010/08

Station Ref.	Location	Easting	Northing
Cooling Water Intake			
C7	Windsor House	837193.7	816150.0

Table 4.17 Enhance Dissolved Oxygen Monitoring Stations for Contract no. HY/2010/08

Station Ref.	Location
C6	Excelsior Hotel

Remarks:

Enhanced DO monitoring at Windsor House Cooling (Station Ref: C7) was temporarily suspended since 22 October 2014 with respect to the formation of temporary reclamation zone TS3 and to be resumed upon removal of the respective temporary reclamation zone.

4.3.24 No action or limit level exceedance was recorded in March reporting month.

4.3.25 No action or limit level exceedance was recorded in April reporting month.

4.3.26 There was one limit level of turbidity exceedance recorded at C7 on 17 May 2017 in May reporting month.

4.3.27 After checking with Contractor, despite removal of TS3 temporary reclamation at SW area was conducted on the monitoring date, Contractor mitigation measures including the use of impermeable barrier and silt curtain was in place and the installed silt screen was in place. No particular observation regarding water quality impact found in the vicinity of the monitoring station during the monitoring period. In view of the above, it was considered that the exceedance was not related to project works.

4.3.28 There was one limit level of suspended solid exceedance recorded at C7 on 17 May 2017 in May reporting month.

4.3.29 After checking with Contractor, despite removal of TS3 temporary reclamation at SW area was conducted on the monitoring date, Contractor mitigation measures including the use of impermeable barrier and silt curtain was in place and the installed silt screen was in place. No particular observation regarding water quality impact found in the vicinity of the monitoring

station during the monitoring period. In view of the above, it was considered that the exceedance was not related to project works.

4.4 Waste Monitoring Results

Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC

4.4.1 No Inert C&D waste and non-inert C&D waste was disposed of for the site works in this reporting period. Details of the waste flow table are summarized in ***Table 4.18.***

Table 4.18 Details of Waste Disposal for Contract no. HK/2009/01

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m^3	NIL	62116.405	TKO137, TM38
Inert C&D materials recycled, m^3	NIL	5856.5	N/A
Non-inert C&D materials disposed, m^3	NIL	1673.69	SENT Landfill
Non-inert C&D materials recycled, kg	NIL	203993	N/A
Chemical waste disposed, kg	NIL	10250	N/A
Marine Sediment (Type 1 – Open Sea Disposal) , m^3	NIL (Bulk Volume)	97428.2 (Bulk Volume)	South of Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m^3	NIL (Bulk Volume)	52250 (Bulk Volume)	East of Cha Chau
Dredged Sediment Requiring Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers	NIL (Bulk Volume)	6773 (Bulk Volume)	East of Cha Chau

4.4.2 There were no Marine Sediment (Type 1 – Open Sea Disposal) and no Marine Sediment (Type 1- Open Sea Disposal (Dedicate Sites) & Type 2- Confined Marine Disposal) disposed of in this reporting quarter.

Contract no. HK/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East

4.4.3 No Inert and non-inert C&D waste were disposed of for the site works in this reporting period. Details of the waste flow table are summarized in ***Table 4.19.***

Table 4.19 Details of Waste Disposal for Contract no. HK/2009/02

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m^3	NIL	276075.1	TKO137/ TM 38
Inert C&D materials recycled, m^3	NIL	18161	N/A
Non-inert C&D materials disposed, m^3	NIL	1515.103	SENT Landfill
Non-inert C&D materials recycled, m^3	N/A	N/A	N/A
Chemical waste disposed, kg	NIL	13860	SENT Landfill
Marine Sediment (Type 1 – Open Sea Disposal), m^3	NIL	240222 (Bulk volume)	South of Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal), m^3 *	NIL	146445 (Bulk volume)	East of Sha Chau

4.4.4 There was no Marine Sediment (Type 1 – Open Sea Disposal) and no Marine Sediment (Type 1- Open Sea Disposal (Dedicate Sites) & Type 2- Confined Marine Disposal) disposed of in this reporting quarter.

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

4.4.5 There was no Inert C&D waste disposed in this reporting period and no non-inert C&D waste was disposed in this reporting period. Details of the waste flow table are summarized in ***Table 4.20.***

Table 4.20 Details of Waste Disposal for Contract no. HY/2009/15

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds	Remarks
Inert C&D materials disposed, m^3	NIL	141579.2	Tuen Mun Area 38	NIL
	NIL	65216	TKO137 FB	NIL
Inert C&D materials recycled, m^3	NIL	8127.21	HY/2010/08	NIL
	NIL	304	Ex-PCWA	NIL
	NIL	111.9	TS4	NIL
Non-inert C&D materials disposed, m^3	NIL	252.2	SENT Landfill	NIL
Non-inert C&D materials recycled, kg	NIL	299361.5	N/A	NIL
Chemical waste	NIL	8,200	N/A	NIL

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds	Remarks
disposed, kg				
Marine Sediment (Type 1 – Open Sea Disposal) , m^3	NIL	156909 (Bulk Volume)	South of Cheung Chau	Dredging from TCBR1E / TCBR1W / TCBR2/ TCBR3 / TCBR4 / Maintenance dredging
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m^3	NIL	327746 (Bulk Volume)	East of Sha Chau	Dredging from TCBR1E / TCBR1W / TCBR2/ TCBR3 / TCBR4 / Maintenance dredging
Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers)	NIL	12640 (Bulk Volume)	East of Sha Chau	Dredging from TCBR1W / Maintenance dredging
Marine Sediment (Type 2 – Confined Marine Disposal), m3	NIL (Bulk Volume)	9350 (Bulk Volume)	East of Sha Chau	Dredging from Eastern Breakwater of CBTS
Marine Sediment (Type 1 – Open Sea Disposal) , m3	NIL (Bulk Volume)	600 (Bulk Volume)	East Sha Chau / South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement
Marine Sediment (Type 2– Confined Marine Disposal) , m3	NIL (Bulk Volume)	14,780 (Bulk Volume)	South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement
Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynehetic Containers) , m3	NIL (Bulk Volume)	2,760 (Bulk Volume)	South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement

4.4.6 There were no marine sediments Type1- Open Sea Disposal and no Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal in this reporting quarter.

Contract no. HY/2009/19 – Central- WanChai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

4.4.7 No Inert and non-inert C&D waste were disposed of in this reporting quarter. Details of the waste flow table are summarized in ***Table 4.21***.

Table 4.21 Details of Waste Disposal for Contract no. HY/2009/19

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m^3	NIL	355921.04	TM38
Inert C&D materials recycled, m^3	NIL	59367	N/A
Non-inert C&D materials	NIL	1068.6	N/A

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
disposed, m^3			
Non-inert C&D materials recycled, kg	NIL	333.14	N/A
Chemical waste disposed, L	NIL	2.12	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m^3	NIL	162	South Cheung Chau
Marine Sediment (Type 2 – Confined Marine Disposal) , m^3	NIL	681	East Sha Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m3	NIL	4976.00	N/A

4.4.8 There were no marine sediments Type1- Open Sea Disposal and no Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal in this reporting quarter.

Contract no. HK/2012/08 –Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West

4.4.9 No Inert and non-inert C&D waste were disposed of in this reporting quarter. Details of the waste flow table are summarized in ***Table 4.22***.

Table 4.22 Details of Waste Disposal for Contract no. HK/2012/08

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m^3	NIL	4131	TM38
Inert C&D materials recycled, m^3	NIL	273	TKO 137
Non-inert C&D materials disposed, m^3 *	NIL	315	N/A
Non-inert C&D materials recycled, kg	NIL	NIL	N/A
Chemical waste disposed, L	NIL	NIL	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m^3 *	NIL (Bulk volume)	31759 (Bulk volume)	South of Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m^3 *	NIL (Bulk volume)	108542 (Bulk volume)	South of The Brothers (from 27 Aug 2013 onwards)

*Remarks: The details of waste disposal is recorded in calendar month period.

4.4.10 No Marine Sediment (Type 1 – Open Sea Disposal) disposed in this reporting quarter. No marine sediment Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal generated disposed in this reporting quarter.

Contract no. HY/2010/08 –Central - Wan Chai Bypass (CWB) –Tunnel (Slip Road 8)

4.4.11 Inert C&D waste was disposed in this reporting month, while no non-inert C&D waste disposed in this reporting period. Details of the waste flow table are summarized in ***Table 4.23***

Table 4.23 Details of Waste Disposal for Contract no. HY/2010/08

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m^3	17557.4 NIL	44406.6 19739.4	TM38 TKO137
Inert C&D materials recycled, m^3	NIL	NIL	N/A
Non-inert C&D materials disposed, m^3	NIL	NIL	N/A
Non-inert C&D materials recycled, kg	NIL	NIL	N/A
Chemical waste disposed, L	NIL	NIL	N/A
Marine Sediment (Type 1 – Open Sea Disposal)	NIL	62559.4	South Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal)	NIL	28309.2	Brothers Island
Marine Sediment (Type 3 – Special Treatment)	NIL	7780	Brothers Island

4.4.12 There was no Marine Sediment (Type 1 – Open Sea Disposal), Marine Sediment (Type 3 – Special Treatment) and marine sediment Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting quarter.

5. COMPLIANCE AUDIT

5.0.1. The Event Action Plan for construction noise, air quality and water quality are presented in ***Appendix 5.1***.

5.1. Noise Monitoring

5.1.1 No action or limit level exceedance was recorded in March reporting month.

5.1.2 Three limit level exceedances were recorded at M6 – HK Baptist Church Henrietta Secondary School on 03, 10 and 26 April 2017 in April reporting month. The exceedances were concluded as non-Project related.

5.1.3 One limit level exceedance was recorded at M5b – City Garden on 18 April 2017 in April reporting month. The exceedance was concluded as Project related.

5.1.4 Two limit level exceedances were recorded at M1a – Footbridge for Ex-Harbour Road Sports Centre on 16 and 25 May 2017 in May reporting month. The exceedances were concluded as non-Project related.

5.1.5 Noise monitoring results measured in this reporting period are reviewed and summarized. Details of graphical presentation can be referred in ***Appendix 4.1.***

5.2. Air Monitoring

5.2.1 One 24hr TSP limit level exceedance was recorded at CMA5b – Pedestrian Plaza on 2 March 2017 in March reporting month. The exceedance was concluded to be non-Project related.

5.2.2 Two 1hr TSP action level and one 1hr limit level exceedances were recorded at CMA5b – Pedestrian Plaza on 3 March 2017 in March reporting month. The exceedances were concluded to be non-Project related.

5.2.3 One 1hr TSP limit level exceedance was recorded at CMA4a –Society for the Prevention of Cruelty to Animals on 3 March 2017 in March reporting month. The exceedance was concluded to be non-Project related.

5.2.4 One 1hr TSP limit level exceedance was recorded at CMA1b – Oil Street Site Office on 27 March 2017 in March reporting month. The exceedance concluded to be non-Project related.

5.2.5 No action or limit level exceedance was recorded in April reporting month.

5.2.6 No action or limit level exceedance was recorded in May reporting month.

5.3. Water Quality Monitoring

5.3.1 There were 1 action level of turbidity exceedances and 2 limit level of suspended solid exceedances recorded in March reporting month. Investigation found that the 1 action level of

turbidity and 1 limit level of suspended solid exceedances recorded at monitoring station P1 on 15 March 2017 in March reporting month were concluded as related to Project works. Investigation found that 1 limit level of suspended solid exceedance at monitoring station WSD19 recorded in March reporting month was not related to Project works

5.3.2 No action or limit level exceedance was recorded in April reporting month.

5.3.3 There were two limit level of turbidity exceedances and one limit level of suspended solid exceedance were recorded in May reporting month. Investigation found that the turbidity and suspended solid exceedances were not related to Project works.

5.3.4 There was no action and limit level exceedance recorded for enhanced dissolved oxygen monitoring in this reporting quarter.

5.4. Site Audit

5.5.1. There was no non-compliance from the site audits in the reporting period. During environmental site inspections conducted during the reporting period, minor deficiencies were noted.

5.5. Review of the Reasons for and the Implications of Non-compliance

5.5.1 There were one action level of turbidity exceedance and one limit level of suspended solid exceedance were recorded at P1 on 15 March 2017. Earth works was conducted at the concerned location at Expo Drive West during the monitoring period on 15 March 2017 and contaminated effluent was observed discharging from the construction site water treatment unit into Victoria Harbour within HKCEC2E area during monitoring sampling and affecting the water quality at the concerned monitoring station. It was further confirmed on-site that the water treatment unit maintained under Contract HK/2012/08 located at the concerned upstream location was ineffective in particle settling. As such, it was considered that the turbidity and suspended solid exceedances were related to Project works.

5.5.2 One project related limit level exceedance was recorded at M5b – City Garden on 18 April 2017 in the reporting month. The exceedance was concluded as related to the breaking works at marine pier under Contract HY/2009/19.

5.6. Summary of action taken in the event of and follow-up on non-compliance

5.6.1 Immediate repeat in-situ measurement has confirmed the exceedance recorded at P1 on 15 March 2016. The Contractor of HK/2012/08 was immediately advised to take immediate action to rectify the defects observed. Rectification measures including addition of flocculant to enhance the particulates settling rate within the water treatment unit was implemented on 15 March 2017. No further turbidity exceedance was recorded during additional monitoring conducted on 16 March 2017 and no further contaminated discharge from the outlet point was observed during monitoring. Also, no further suspended solid exceedance was recorded on the subsequent monitoring on 17 March 2017.

5.6.2 Starter bar fixing works and breaking works at marine pier under Contract HY/2009/19 was conducted during the measurement on 18 April 2017, it was observed that breaking operation was the major noise contribution during measurement. It is concluded that the exceedance was Project related. The contractor was requested to submit a proposal for remediation measures following the Event and Action Plan. Actions from the remediation plan including i) Closing the opening of the temporary noise barrier ii) provide physical wrapping of breaker to dampen noise emission and iii) conduct breaking works intermittently were implemented by the Contractor and no further exceedance was recorded upon implementation of the remedial actions.

6. COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION

6.0.1. No environmental complaint was received in this reporting quarter.

6.0.2. The details of cumulative complaint log and summary of complaints are presented in ***Appendix 6.1***.

6.0.3. Cumulative statistic on complaints and successful prosecutions are summarized in ***Table 6.1*** and ***Table 6.2*** respectively.

Table 6.1 Cumulative Statistics on Complaints

Reporting Period	No. of Complaints
Commencement works (Mar 2010) to last reporting quarter	47
March 2017 – May 2017	0
Project-to-Date	**47**

Table 6.2 Cumulative Statistics on Successful Prosecutions

Environmental Parameters	Cumulative No. Brought Forward	No. of Successful Prosecutions this quarter (Offence Date)	Cumulative No. Project-to-Date
Air	-	0	0
Noise	-	0	0
Water	-	0	0
Waste	-	0	0
Total	**-**	**0**	**0**

7. CUMULATIVE CONSTRUCTION IMPACT DUE TO THE CONCURRENT PROJECTS

7.0.1. According to Condition 3.4 of the EP-356/2009, this section addresses the relevant cumulative construction impact due to the concurrent activities of the current projects including the Central Reclamation Phase III, Central-Wanchai Bypass and Island Eastern Corridor Link projects.

7.0.2. According to the Final EM&A Report of Central Reclamation Phase III (CRIII) for Contract HK 12/02, the major construction activities were completed by end of January 2014 and no construction activities were undertaken thereafter and the water quality monitoring was completed in October 2011 and no Project-related exceedance was recorded for air and noise monitoring. It can be concluded that cumulative construction impact due to the concurrent activities of the current projects with the Central Reclamation Phase III (CRIII) was insignificant.

7.0.3. According to the construction programme of Central-Wanchai Bypass at Wanchai West at the Central Reclamation Phase III area include road and drain works, backfilling works and reinstatement of Culvert and Cooling mains were performed in May 2017 reporting month. As no project related exceedance were recorded during the reporting period, cumulative construction impact due to the concurrent activities of the current projects with the Central Reclamation Phase III (CRIII) was considered as insignificant.

7.0.4. According to the construction programme of Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects, the major construction activities under Wan Chai Development Phase II were, road and drains construction, tunnel construction, backfilling works, road and drains works at Wan Chai West and Wan Chai East. The major construction activities under Central-Wan Chai Bypass and Island Eastern Corridor Link Projects were drainage works and ventilation building construction at Central; backfilling and temporary reclamation removal works at Causeway Bay, road works and side wall construction at Victoria Park; bridge construction, piling works and tunnel works at North Point area in the reporting month. In addition, other non-Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects was observed undertaken at Wan Chai North and North Point area.

7.0.5. No significant air impact from construction activities was anticipated in the reporting month. Besides, no project related exceedance was recorded during the air and noise environmental monitoring events in the reporting month. Thus, it is evaluated that the cumulative construction impact from the concurrent projects including Central Reclamation Phase III (CRIII), Wan Chai Development Phase II (WDII), Central-WanChai Bypass (CWB), Island Eastern Corridor Link projects (IECL) was insignificant.

8. CONCLUSION

8.0.1. The EM&A programme was carried out in accordance with the EM&A Manual requirements, minor alterations to the programme proposed were made in response to changing circumstances.

8.0.2. There were one action level of turbidity exceedance and one limit level of suspended solid exceedance were recorded at P1 on 15 March 2017 and were concluded as related to Project works. Rectification measures including addition of flocculant to enhance the particulates settling rate within the water treatment unit was implemented on 15 March 2017. No further turbidity exceedance was recorded during additional monitoring conducted on 16 March 2017 and no further contaminated discharge from the outlet point was observed during monitoring. Also, no further suspended solid exceedance was recorded on the subsequent monitoring on 17 March 2017.

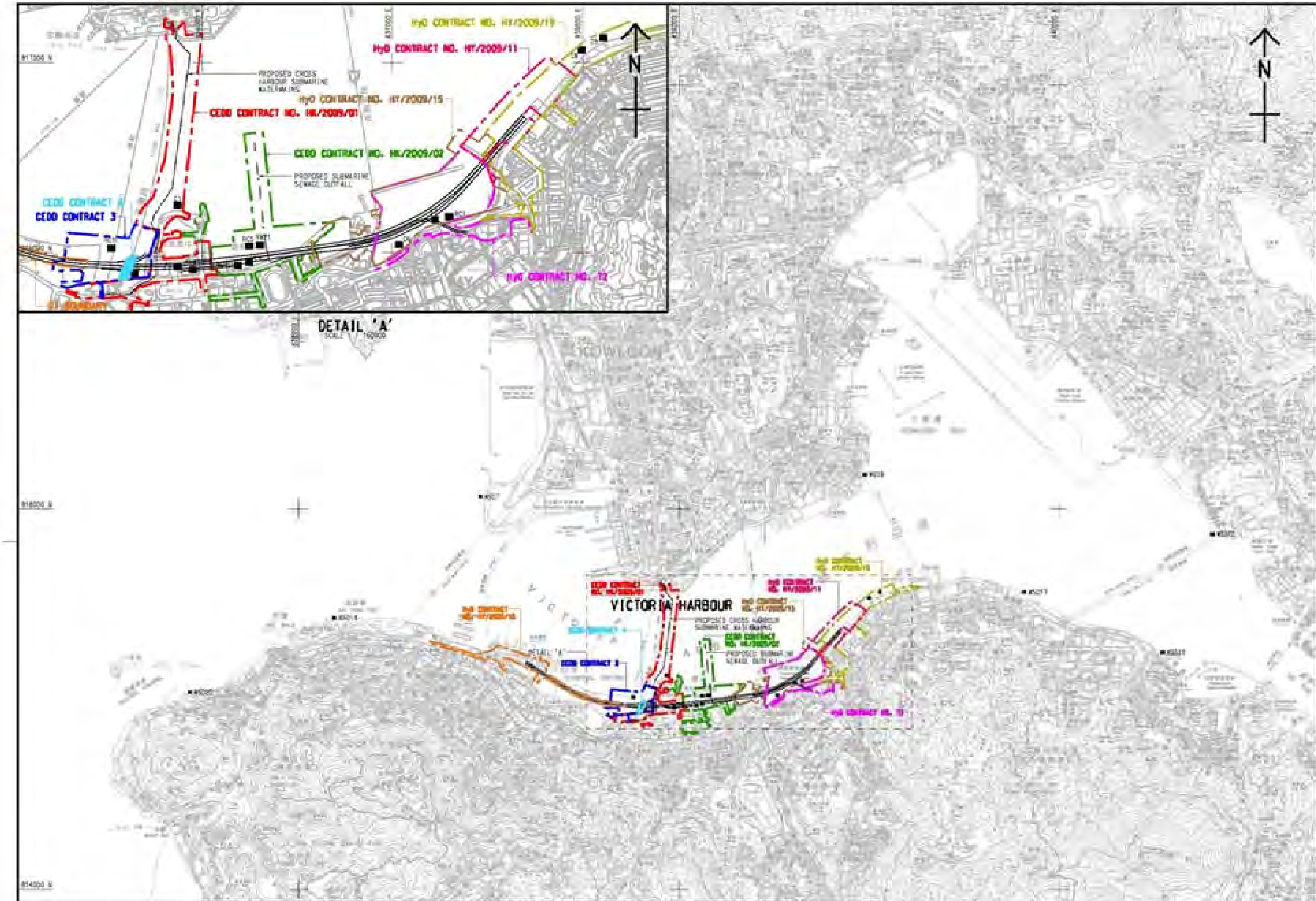
8.0.3. One project related limit level exceedance was recorded at M5b – City Garden on 18 April 2017 in the reporting month. Actions from the remediation plan including i) Closing the opening of the temporary noise barrier ii) provide physical wrapping of breaker to dampen noise emission and iii) conduct breaking works intermittently were implemented by the Contractor and no further exceedance was recorded upon implementation of the remedial actions.

8.0.4. No prosecution was received in this reporting quarter.

8.0.5. The construction programmes of individual contracts are provided in ***Appendix 8.1***.

Figure 2.1

Project Layout



LEGEND:

■ WATER QUALITY MONITORING STATIONS

COOLING WATER INTAKES

C1	HONG KONG CONVENTION AND EXHIBITION CENTRE EXTENSION
C2	TELECOM HOUSE/HK ACADEMY FOR PERFORMING ARTS / SHUI ON CENTRE
C3	HONG KONG CONVENTION AND EXHIBITION CENTRE PHASE I
C4	WAN CHAI TOWER AND GREAT EAGLE CENTRE
C5	SUN HUNG KAI CENTRE
C6	PROPOSED EXHIBITION STATION / WORLD TRADE CENTRE
C7	WINDSOR HOUSE
C8	CITY GARDEN
C9	PROVIDENT CENTRE
RC1	PROPOSED HKAPA EXTENSION
RC5	SUN HUNG KAI CENTRE (REPROVISION)
RC7	WINDSOR HOUSE (TEMPORARY REPROVISION)

WSD SALT WATER INTAKE

WSD21	WAN CHAI
RW21	WAN CHAI (REPROVISION)
WSD7	KOWLOON SOUTH
WSD9	TAI WAN
WSD10	CHA KWO LING
WSD15	SAI WAN HO
WSD17	QUARRY BAY
WSD19	SHEUNG WAN
WSD20	KENNEDY TOWN

DESIGNATED PROJECTS (DP)

DP1 — CENTRAL-WAN CHAI BYPASS (CWB) INCLUDING ITS ROAD TUNNEL AND SLIP ROADS

DP2 — ROAD P2 AND OTHER ROADS (PRIMARY / DISTRICT DISTRIBUTOR ROADS)

DP3 — PERMANENT AND TEMPORARY RECLAMATION WORKS INCLUDING ASSOCIATED DREDGING WORKS IN WAN CHAI DEVELOPMENT PHASE II (WDII) AREA

~~DP4 — TEMPORARY TYPHOON SHELTER~~ (DP4 NOT TO BE IMPLEMENTED)

DP5 — WAN CHAI EAST SEWAGE OUTFALL

DP6 — DREDGING FOR THE CROSS-HARBOUR WATER MAINS

DP1 IS COVERED BY EP - 356/2009

DP5 IS COVERED BY EP - 376/2009

DP3, DP5 AND DP6 ARE COVERED BY EP - 356/2009

WORKS CONTRACT	DESIGNATED PROJECT INVOLVED	CONSTRUCTION COMMENCEMENT
CEDD CONTRACT NO. HK/2009/01	DP1, DP3, DP6	APRIL 2010
CEDD CONTRACT NO. HK/2009/02	DP1, DP3, DP5	APRIL 2010
CEDD CONTRACT 3	DP1, DP3	END 2011
CEDD CONTRACT 4	DP1, DP3	END 2011
CEDD CONTRACT 5	DP2	2015
HyD CONTRACT NO. HY/2009/11	DP3	18 MARCH 2010
HyD CONTRACT NO. HY/2009/15	DP1, DP3	SEPTEMBER 2010
HyD CONTRACT NO. HY/2009/18	DP1	OCTOBER 2010
HyD CONTRACT NO. HY/2009/19	DP1	NOVEMBER 2010
HyD CONTRACT 12	DP1, DP3	MID 2013

PATH: p:\projects\60041297\DRAWING\SKETCH\C5\SKETCH 001.dgn

土木工程拓展署
Civil Engineering and Development Department

WAN CHAI DEVELOPMENT PHASE II

WAN CHAI DEVELOPMENT PHASE II AND CENTRAL - WAN CHAI BYPASS - SAMPLING, FIELD MEASUREMENT AND TESTING WORKS (STAGE 1)

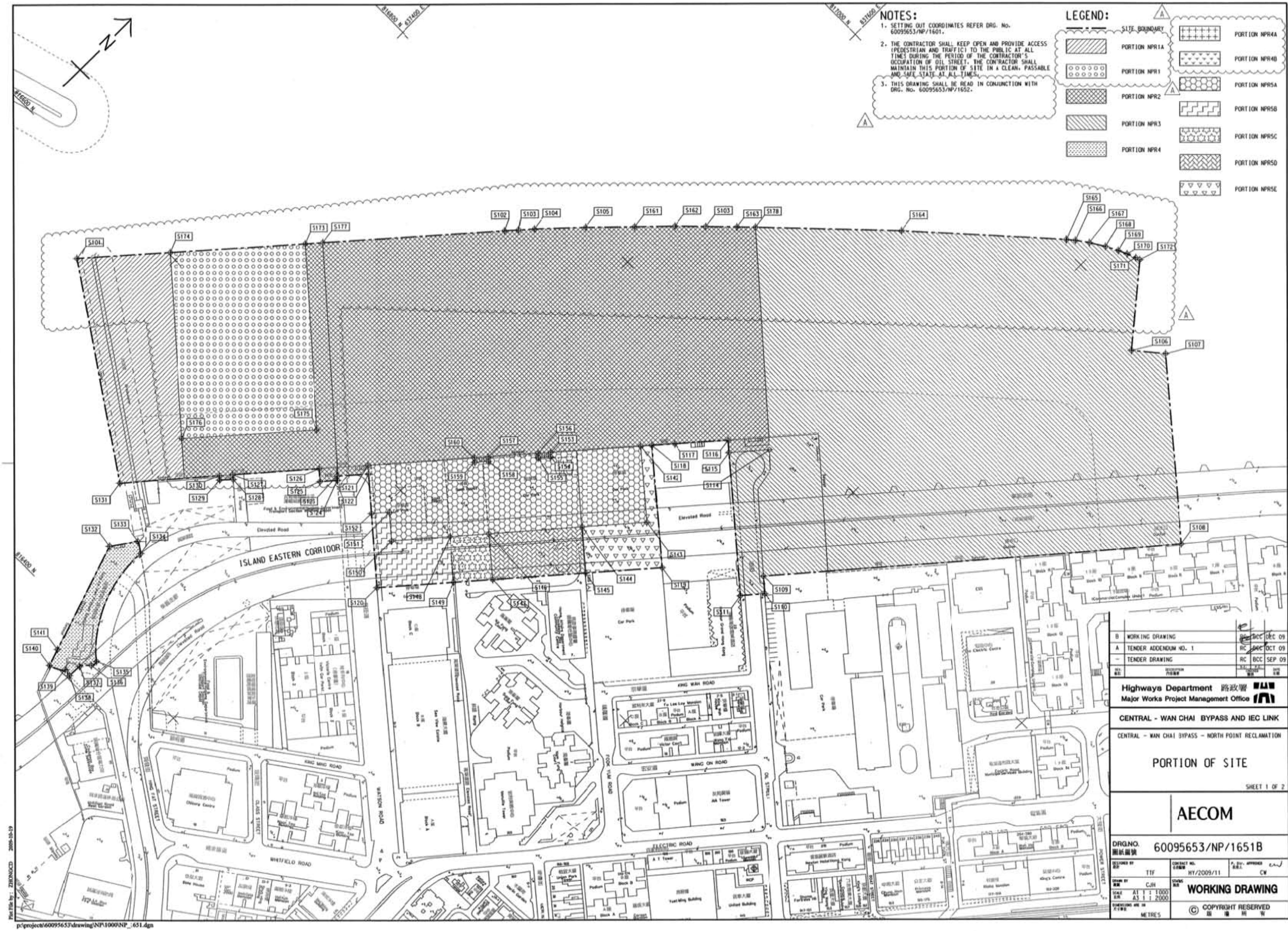
LOCATIONS OF WATER QUALITY MONITORING STATIONS

AECOM

DRAWING NO. 60041297/C5/SK001

SCALE A1 1:20000

DIMENSIONS IN METRES



NOTES:

1. SETTING OUT COORDINATES REFER DRG. No. 60095653/NP/1601.
2. THE CONTRACTOR SHALL KEEP OPEN AND PROVIDE ACCESS (PEDESTRIAN AND TRAFFIC) TO THE PUBLIC AT ALL TIMES DURING THE PERIOD OF THE CONTRACTOR'S OCCUPATION OF OIL STREET. THE CONTRACTOR SHALL MAINTAIN THIS PORTION OF SITE IN A CLEAN, PASSABLE AND SAFE STATE AT ALL TIMES.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG. No. 60095653/NP/1652.

LEGEND:

- SITE BOUNDARY
- PORTION NPR1A
- PORTION NPR1
- PORTION NPR2
- PORTION NPR3
- PORTION NPR4
- PORTION NPR4A
- PORTION NPR4B
- PORTION NPR5A
- PORTION NPR5B
- PORTION NPR5C
- PORTION NPR5D
- PORTION NPR5E

REV.	DESCRIPTION		CHECKED	DATE
B	WORKING DRAWING	RC	BCC	DEC 09
A	TENDER ADDENDUM NO. 1	RC	BCC	OCT 09
–	TENDER DRAWING	RC	BCC	SEP 09

Highways Department 路政署
Major Works Project Management Office

CENTRAL - WAN CHAI BYPASS AND IEC LINK

CENTRAL - WAN CHAI BYPASS - NORTH POINT RECLAMATION

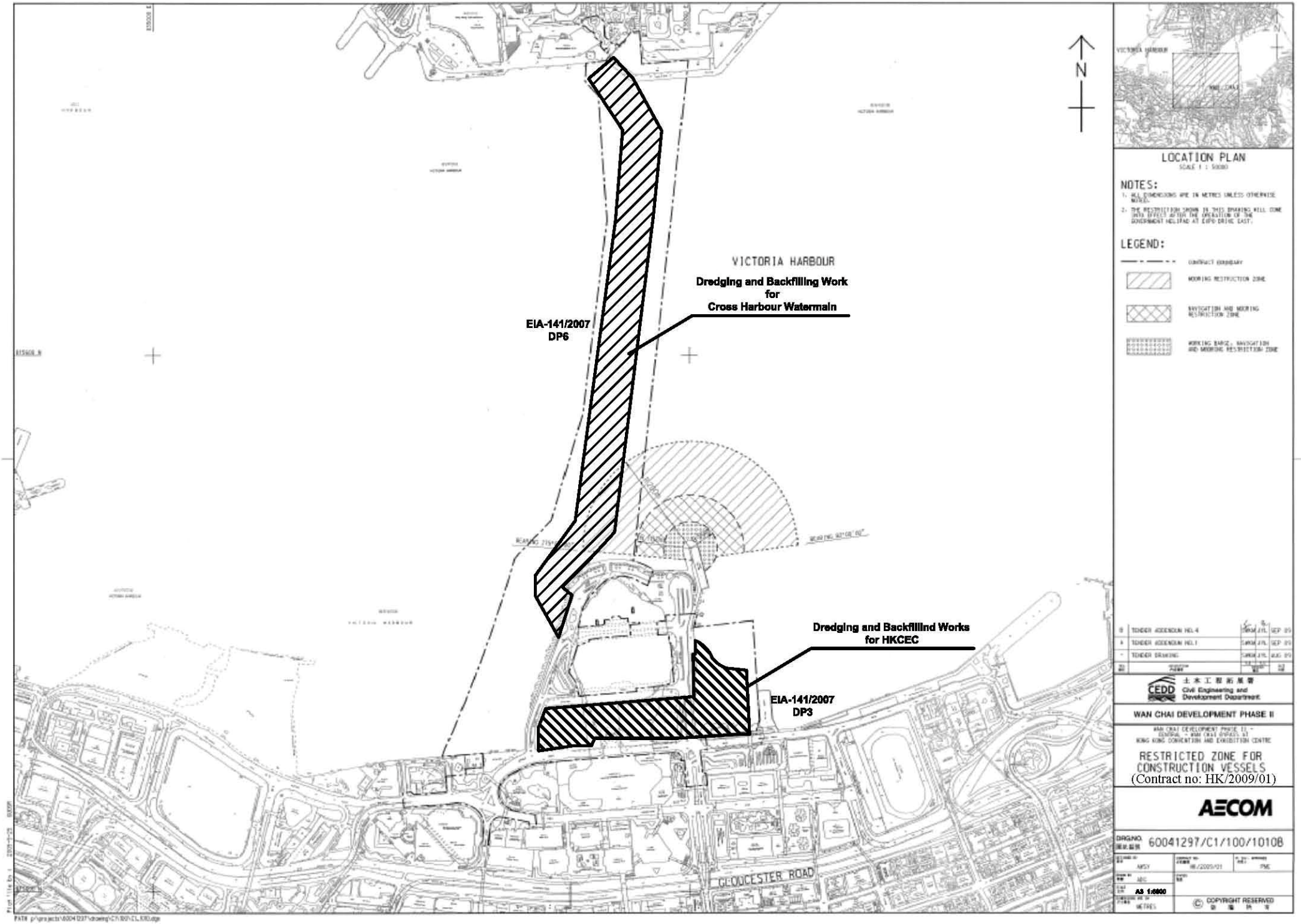
PORTION OF SITE

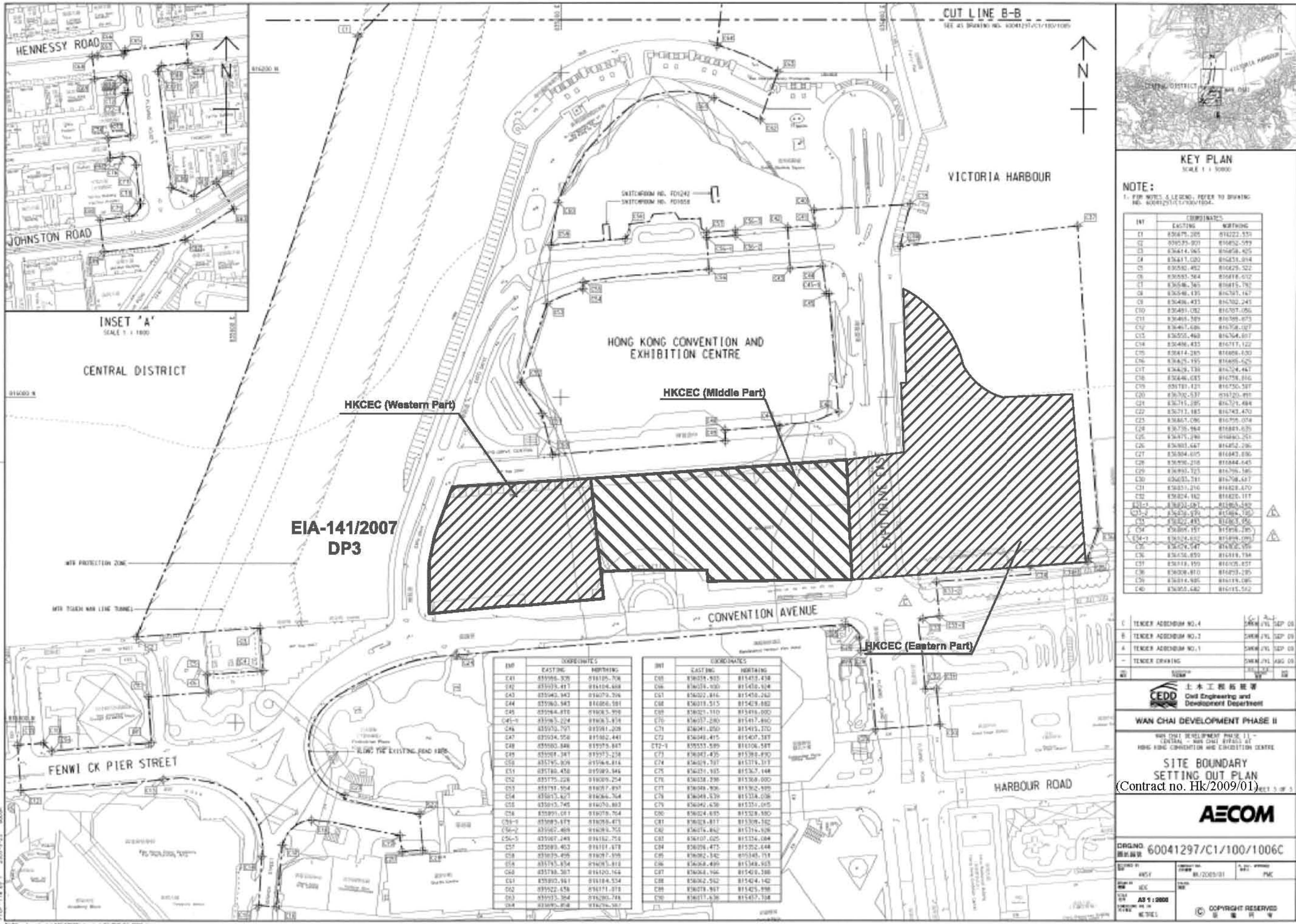
SHEET 1 OF 2

AECOM

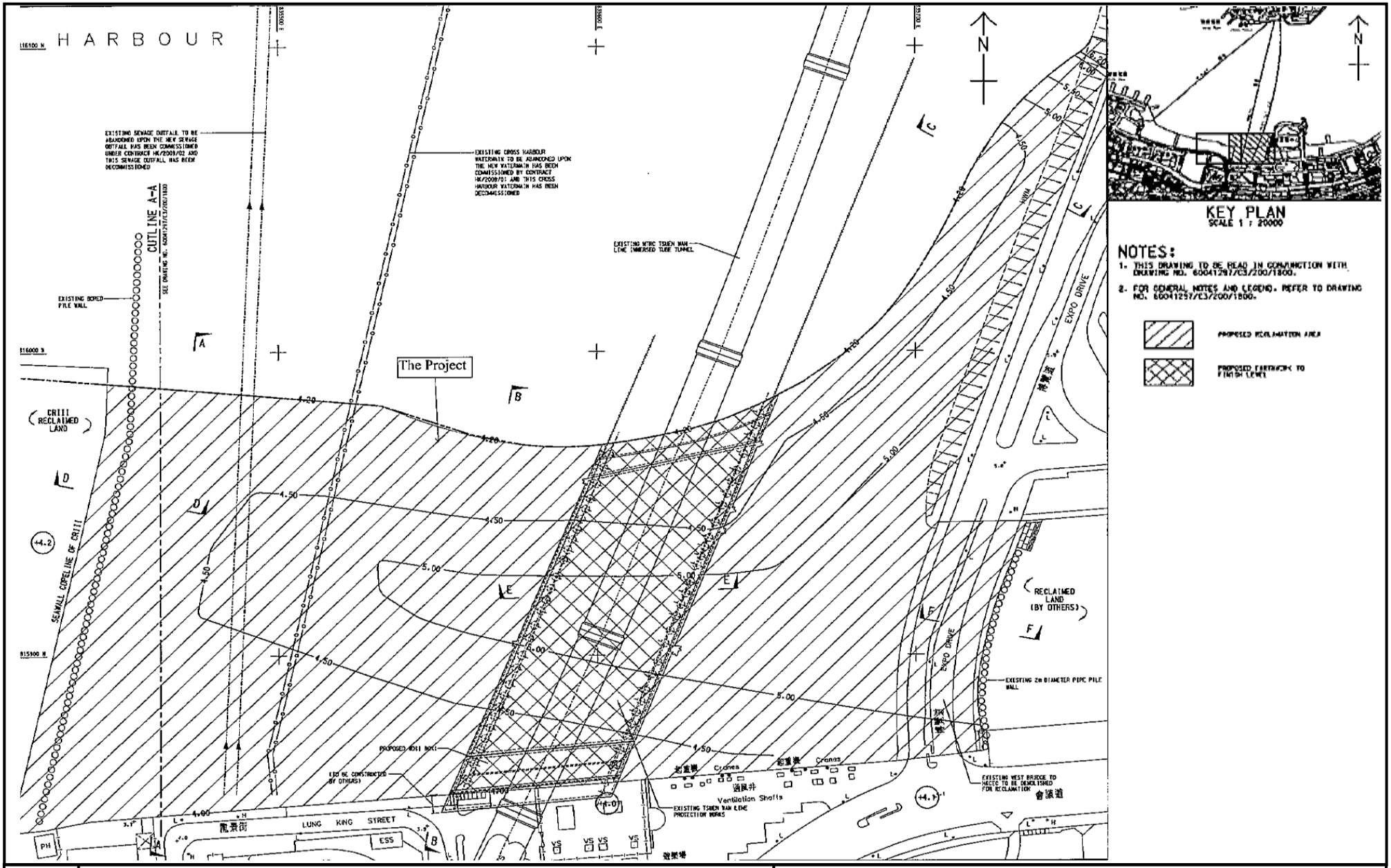
DRG.NO. 60095653/NP/1651B

DESIGNED BY: TTF	CONTRACT NO.: HY/2009/11	P. DIV. APPROVED: CW
DRAWN BY: CJH	STATUS: WORKING DRAWING	
SCALE: A1 1 : 1000, A3 1 : 2000		
DIMENSIONS ARE IN METRES		


VICTORIA HARBOUR
Dredging and Backfilling Work
for
Cross Harbour Watermain
EIA-141/2007
DP6
Dredging and Backfillind Works
for HKCEC
EIA-141/2007
DP3
GLOUCESTER ROAD
N
LOCATION PLAN
SCALE 1 : 50000
NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. THE RESTRICTION SHOWN IN THIS DRAWING WILL COME INTO EFFECT AFTER THE OPERATION OF THE GOVERNMENT HELIPAD AT EXPO DRIVE EAST.
LEGEND:
CONTRACT BOUNDARY
MOORING RESTRICTION ZONE
NAVIGATION AND MOORING RESTRICTION ZONE
WORKING BARGE, NAVIGATION AND MOORING RESTRICTION ZONE
TENDER ADDENDUM NO.4
TENDER ADDENDUM NO.1
TENDER DRAWING
CEDD
土木工程拓展署
Civil Engineering and Development Department
WAN CHAI DEVELOPMENT PHASE II
WAN CHAI DEVELOPMENT PHASE II - EXTERNAL WORKS AT HONG KONG CONVENTION AND EXHIBITION CENTRE
RESTRICTED ZONE FOR CONSTRUCTION VESSELS
(Contract no: HK/2009/01)
AECOM
DRG.NO. 60041297/C1/100/10108
AS 1:6000
METRES
© COPYRIGHT RESERVED



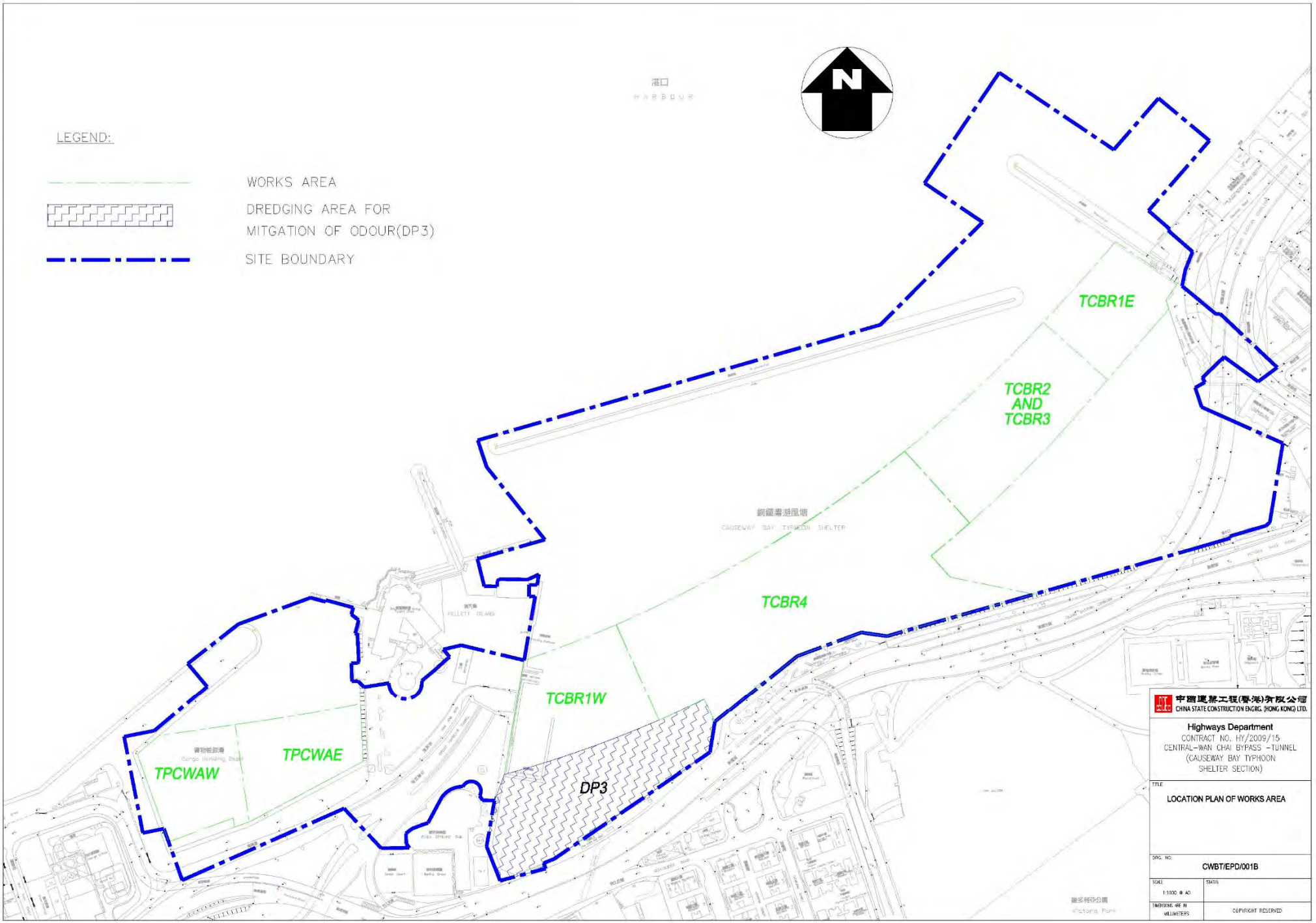
CUT LINE B-B
HENNESSY ROAD
JOHNSTON ROAD
INSET 'A'
SCALE 1 : 1000
CENTRAL DISTRICT
VICTORIA HARBOUR
HONG KONG CONVENTION AND
EXHIBITION CENTRE
HKCEC (Western Part)
HKCEC (Middle Part)
HKCEC (Eastern Part)
EIA-141/2007
DP3
MTR PROTECTION ZONE
CONVENTION AVENUE
FENWICK PIER STREET
HARBOUR ROAD
KEY PLAN
NOTE:
C TENDER ADDENDUM NO.4
B TENDER ADDENDUM NO.2
A TENDER ADDENDUM NO.1
- TENDER DRAWING
CEDD Civil Engineering and Development Department
WAN CHAI DEVELOPMENT PHASE II
SITE BOUNDARY
SETTING OUT PLAN
(Contract no. Hk/2009/01)
AECOM
DRG.NO. 60041297/C1/100/1006C
COPYRIGHT RESERVED



Project Title: Wan Chai Development Phase II – Central Wan Chai Bypass at Wan Chai West (Contract No. HK/2012/08) – Marine Works
工程項目名稱: 灣仔發展計劃第二期 - 中環灣仔繞道-灣仔西段(合約編號:HK/2012/08)-海事工程
Environmental Permit No. : FEP-08/356/2009
環境許可證編號 : FEP-08/356/2009

Figure 1b : General Layout of the Project
圖 1b : 工程項目佈局圖

(This figure was prepared based on Figure 1b of Application for Further Environmental Permit (Application No.: FEP 172/2016))
(本圖是根據申請新的環境許可證 (申請書編號 FEP-172/2016) 圖 1b 編製)


LEGEND:
WORKS AREA
DREDGING AREA FOR MITGATION OF ODOUR(DP3)
SITE BOUNDARY
N
TCBR1E
TCBR2 AND TCBR3
TCBR4
TCBR1W
DP3
TPCWAE
TPCWAW
中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGRG. (HONG KONG) LTD.
Highways Department
CONTRACT NO. HY/2009/15
CENTRAL-WAN CHAI BYPASS -TUNNEL (CAUSEWAY BAY TYPHOON SHELTER SECTION)
TITLE
LOCATION PLAN OF WORKS AREA
DRG. NO.
CWBT/EPD/001B
SCALE
1:1000 @ A0
STATUS
DIMENSIONS ARE IN MILLIMETERS
COPYRIGHT RESERVED

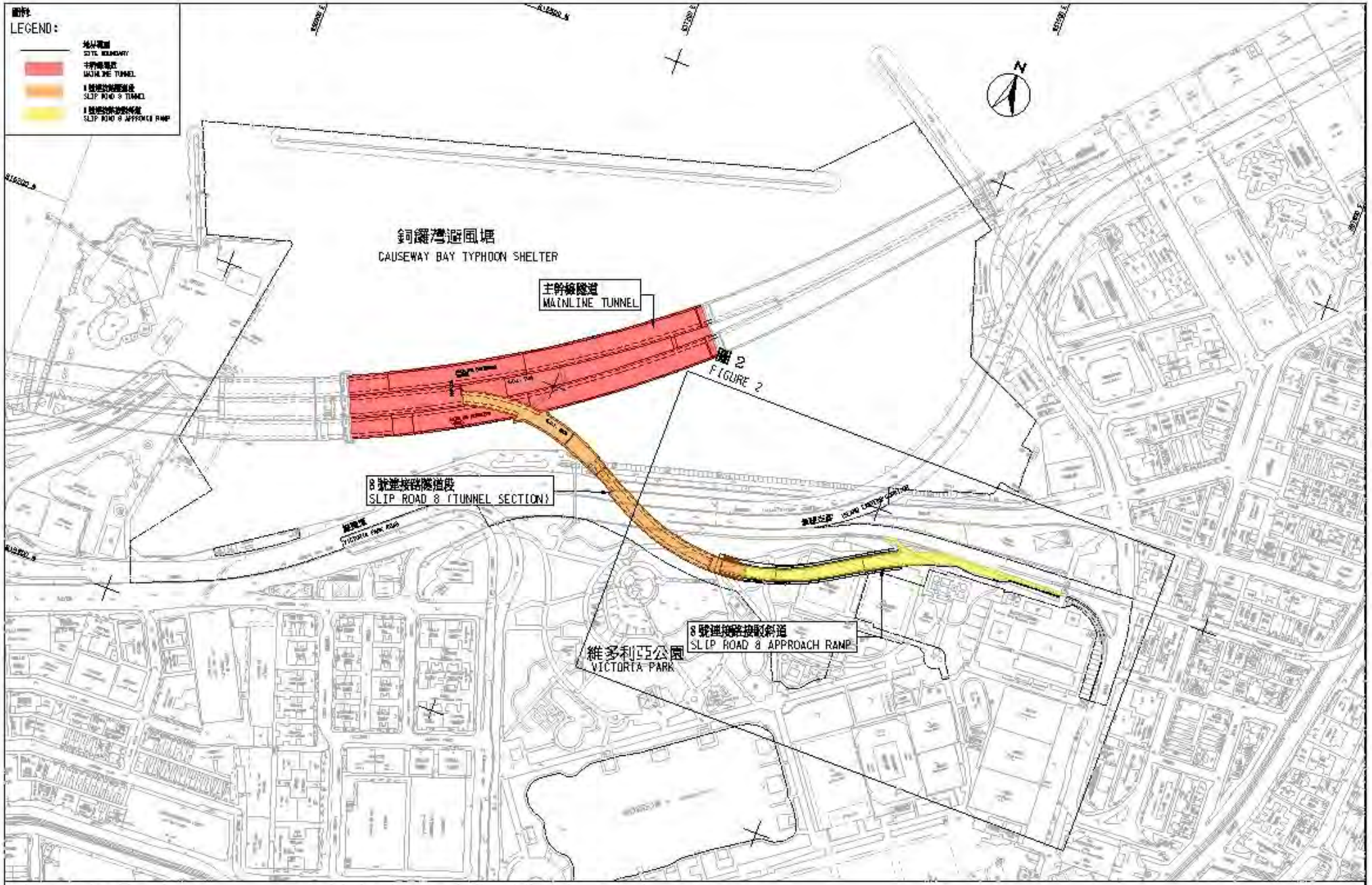


圖1- 合約編號 HY/2010/08中環灣仔繞道-8號連接路段隧道

SCALE 1 : 3000

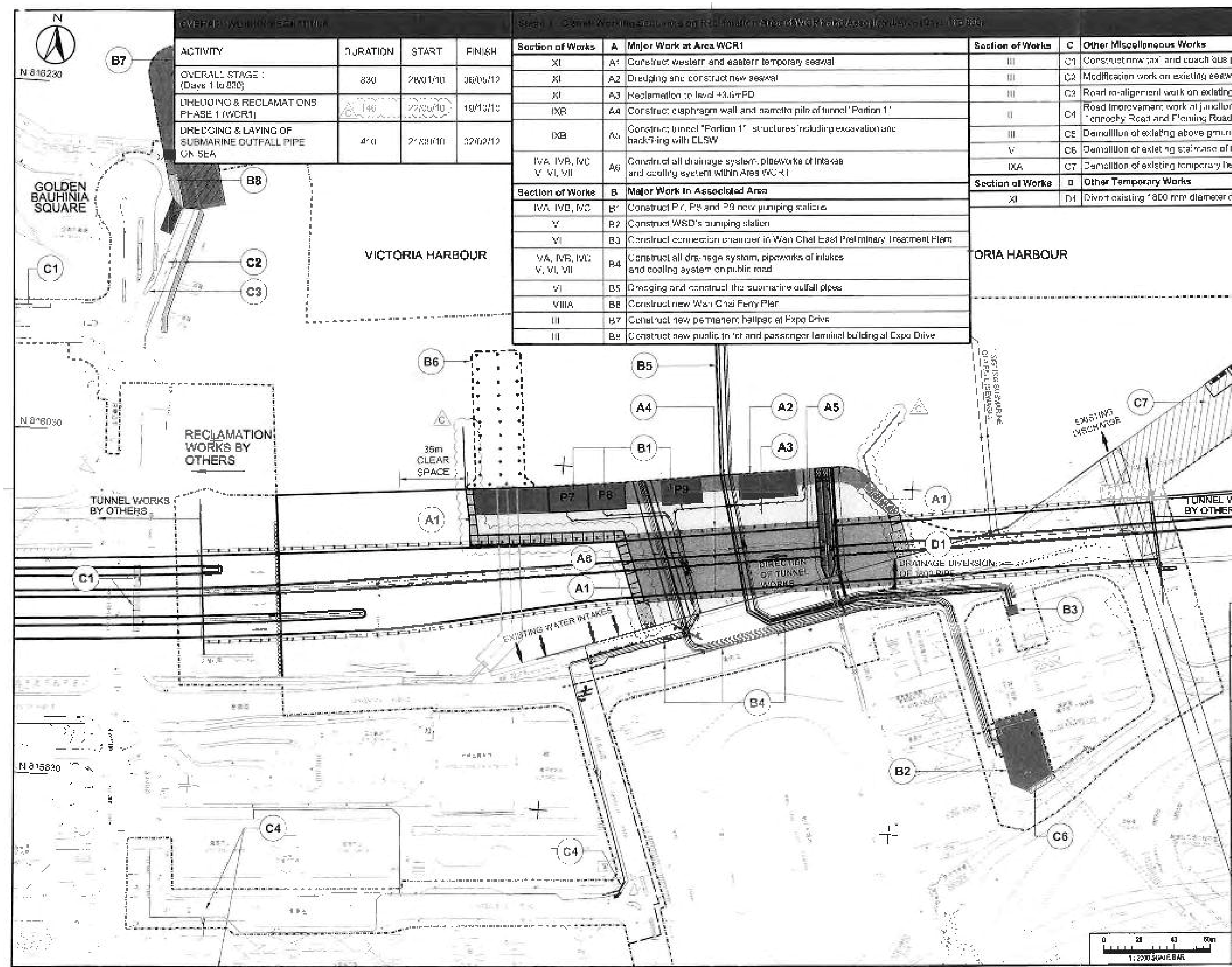
FIGURE 1 - CONTRACT NO. HY/2010/08 - CENTRAL - WAN CHAI BYPASS - TUNNEL (SLIP ROAD 8 SECTION)

T:\HY_2010_08\Misc\ARE\Docs\Figure for Website\T2 Figure 1.dgn 08-Apr-13

ACTIVITY	DURATION	START	FINISH
OVERALL STAGE : (Days 1 to 830)	830	26/01/10	30/05/12
DREDGING & RECLAMATIONS PHASE 1 (WCR1)	146	22/05/10	19/10/10
DREDGING & LAYING OF SUBMARINE OUTFALL PIPE ON SEA	[illegible]	[illegible]	02/02/12

Section of Works	A	Major Work at Area WCR1
XI	A1	Construct western and eastern temporary seawall
XI	A2	Dredging and construct new seawall
XI	A3	Reclamation to level +3.5mPD
IXB	A4	Construct diaphragm wall and barrette pile of tunnel "Portion 1"
IXB	A5	Construct tunnel "Portion 1" structures including excavation and backfilling with CLSW
IVA, IVB, IVC V, VI, VII	A6	Construct all drainage system, pipeworks of intakes and cooling system within Area WCR1
Section of Works	**B**	**Major Work in Associated Area**
IVA, IVB, IVC	B1	Construct P7, P8 and P9 new pumping stations
V	B2	Construct WSD's pumping station
VI	B3	Construct connection chamber in Wan Chai East Preliminary Treatment Plant
VA, IVB, IVC V, VI, VII	B4	Construct all drainage system, pipeworks of intakes and cooling system on public road
VI	B5	Dredging and construct the submarine outfall pipes
VIIIA	B6	Construct new Wan Chai Ferry Pier
III	B7	Construct new permanent helipad at Expo Drive
III	B8	Construct new public transport and passenger terminal building at Expo Drive

Section of Works	C	Other Miscellaneous Works
III	C1	Construct new taxi and coach/bus parking space at Expo Drive East
III	C2	Modification work on existing seawall and provide new EVA at Expo Drive
III	C3	Road re-alignment work on existing PTI at Expo Drive
II	C4	Road improvement work at junction of Harbour Road / Fenwick Road and Fleming Road / Gloucester Road
III	C5	Demolition of existing above ground structure at Expo Drive
V	C6	Demolition of existing staircase of footbridge at Wan Shing Street
IXA	C7	Demolition of existing temporary helipad at ex-PCWA
Section of Works	**D**	**Other Temporary Works**
XI	D1	Divert existing 1800 mm diameter drain pipe



REV	DATE	DESCRIPTION
C	[illegible]	[illegible] TEMPORARY SEAWALL LAYOUT REVISED
B	[illegible]	[illegible]
A	[illegible]	[illegible]

CLIENT

ENGINEER'S REPRESENTATIVE

CONTRACTOR

[illegible] JOINT VENTURE

PROJECT
CONTRACT NO. HK/2009/02
WAN CHAI DEVELOPMENT PHASE II
CENTRAL - WAN CHAI BYPASS AT WAN CHAI EAST

DRAWING TITLE
DETAILED WORKS SCHEDULE AND LOCATION PLAN - STAGE 1

	DESIGN	DRAWN	CHECKED
INITIAL	-	[illegible]	-
DATE	-	[illegible]	-

DRAWING NO. [illegible]K202902/SK0031 REV C

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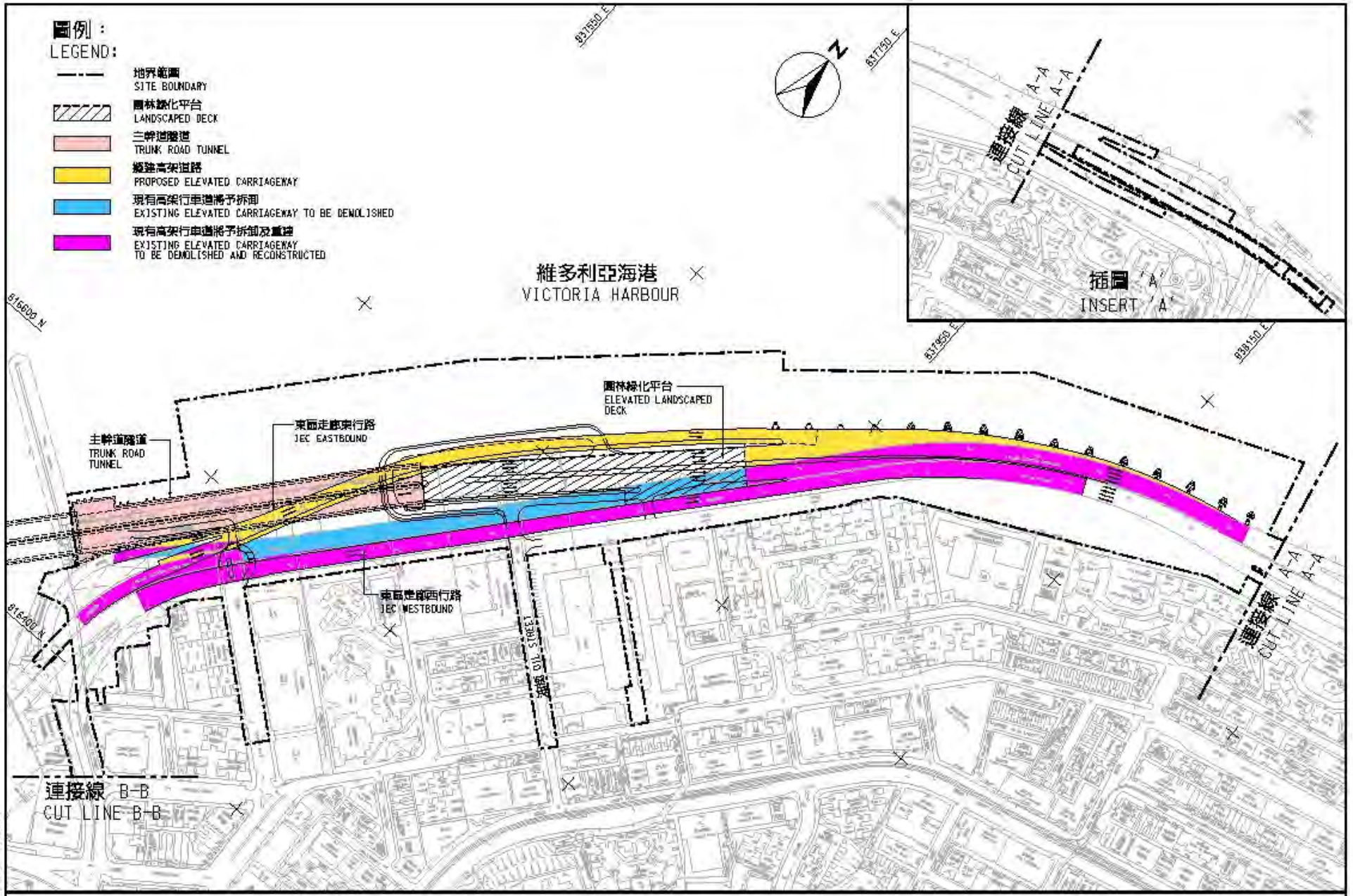

合約編號 HY/2009/19 - 中環灣仔繞道 - 北角段隧道及東區走廊連接路

CONTRACT NO. HY/2009/19 - CENTRAL-WAN CHAI BYPASS - TUNNEL (NORTH POINT SECTION) AND ISLAND EASTERN CORRIDOR LINK

SCALE 1 : 3000

Plotted by: ZUUL_NL 2011-1-12

P:\projects\60094653\Drawing\SKETCH\SK3241.dgn

Figure 2.2

Project Organization Chart

Project Organization Chart

Project Proponent

Civil Engineering & Development Department

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Senior Engineer
Tel: 9325 0853
Fax: 2577 5040

Project Proponent

Highways Department

Mr. Tony Cheung
Senior Engineer
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Fax: 2714 5289

Environmental Protection Department

Mr. Billy Ma
Environmental Protection Officer
Tel: 2835 2390
Fax: 2591 0558

Engineer's Representative for WDII

AECOM

Mr. Frankie Fan
Principal Resident Engineer
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Fax: 2587 1877

Engineer's Representative for CWB

AECOM

Mr. Peter Poon
Principal Resident Engineer
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Fax: 3912 3328

Independent Environmental Checker

Ramboll Environ Hong Kong Limited

Mr. David Yeung
Independent Environmental Checker
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Fax: 3565.2899

HK/2009/01 Contractor

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Site Agent
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HK/2009/02 Contractor

Chun Wo – CRGL JV

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Project Manager
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HK/2012/08 Contractor

China State –Build King Joint Venture

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HY/2009/15 Contractor

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Contractor's Representative
Tel: 3557 6405
Fax: 2865 5229

HY/2009/19 Contractor

Chun Wo- CRGL JV

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Site Agent
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Fax: 2570 8013

HY/2010/08 Contractor

China State Construction Engineering (HK) Ltd.

Mr. Francis Suen
Site Agent
Tel: 3557 6407
Fax: 2566 8061

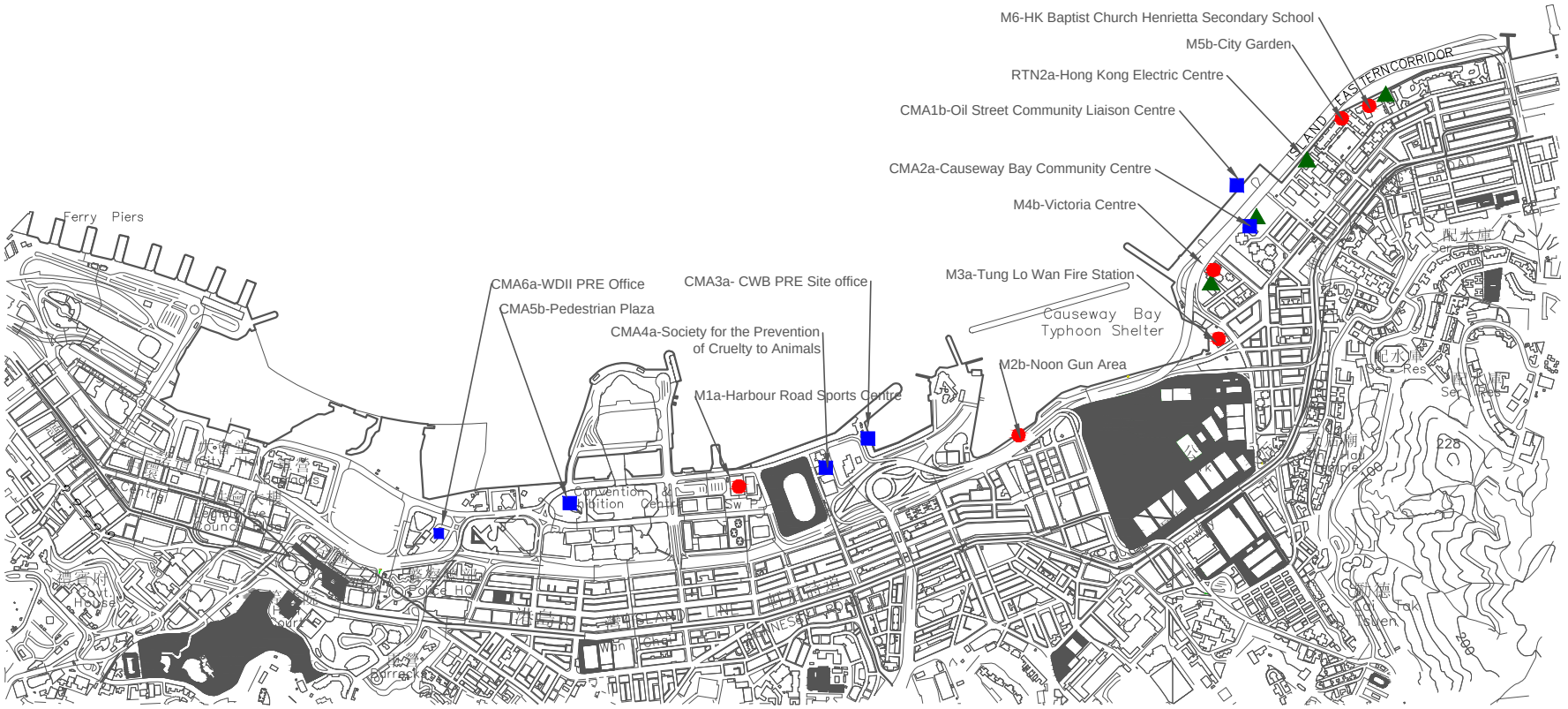
Environmental Team

Lam Geotechnics Limited

Mr. Raymond Dai
Environmental Team Leader
Tel: 2882 3939 Fax: 2882 3331

Figure 3.1

Locations of Monitoring Stations



LOCATIONS OF AIR QUALITY AND NOISE MONITORING STATIONS

Legend

Water Quality Monitoring Stations

RW21-P789 (Wanchai WSD intake/ Great Eagle Centre/ China Resources Centre/ Sun Hung Kai Centre)

C1 Hong Kong Convention and Exhibition Centre Extension

P1 Hong Kong Convention and Exhibition Centre Phase 1

P3 HK Academy For Performing Art

P4 Shui On Centre

P5 Government buildings (Wanchai Tower/ Revenue Tower/ Immigration Tower)

C6 Proposed Exhibition Station/ World Trade Centre

C7 Windsor House

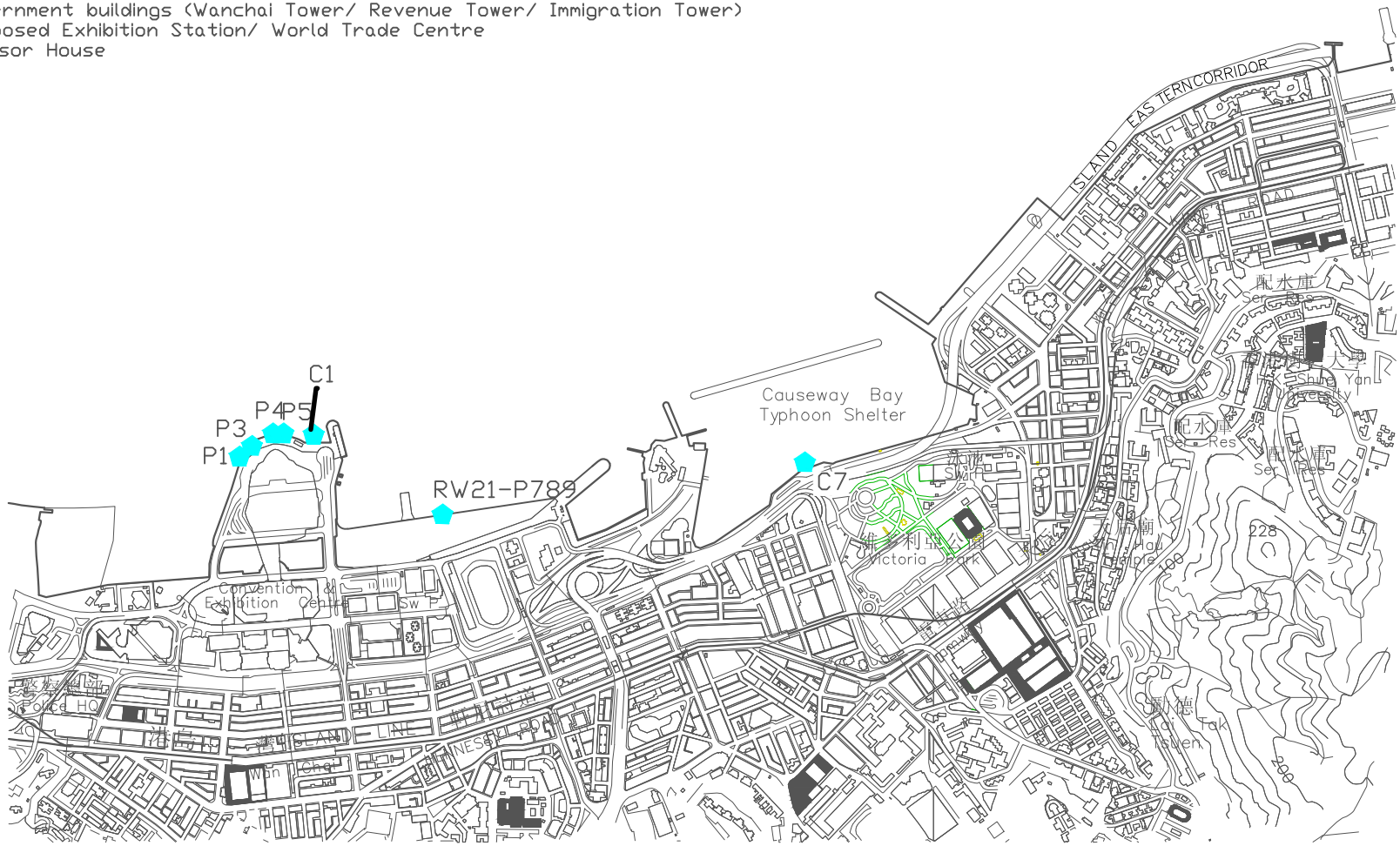


FIGURE	LOCATIONS OF WATER QUALITY MONITORING STATIONS

Legend

Enhance DO Monitoring Stations
Ex-PCWA SE Ex-Public Cargo Wanchai Area SouthEast Station
Ex-PCWA SW Ex-Public Cargo Wanchai Area Southwest Station
C6 Proposed Exhibition Station/ World Trade Centre
C7 Windsor House

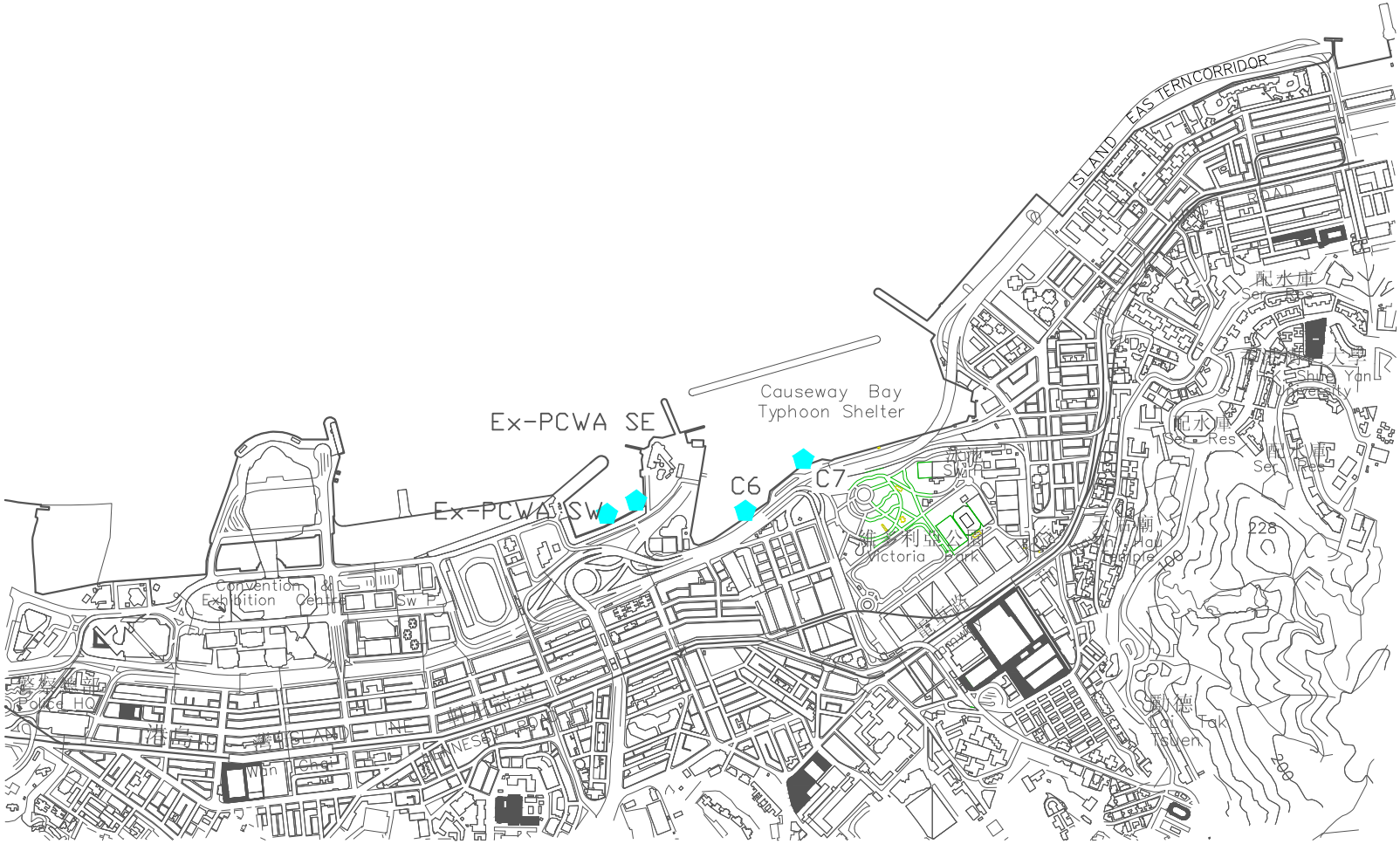


FIGURE	LOCATIONS OF ENHANCE DO MONITORING STATIONS

Legend

Water Quality Monitoring Stations

RW21-P789E (Wanchai WSD intake/ Great Eagle Centre/ China Resources Centre/ Sun Hung Kai Centre)

RW21-P789W (Wanchai WSD intake/ Great Eagle Centre/ China Resources Centre/ Sun Hung Kai Centre)

C1 Hong Kong Convention and Exhibition Centre Extension

P1 Hong Kong Convention and Exhibition Centre Phase 1

P3 HK Academy For Performing Art

P4 Shui On Centre

P5 Government buildings (Wanchai Tower/ Revenue Tower/ Immigration Tower)

C7 Windsor House

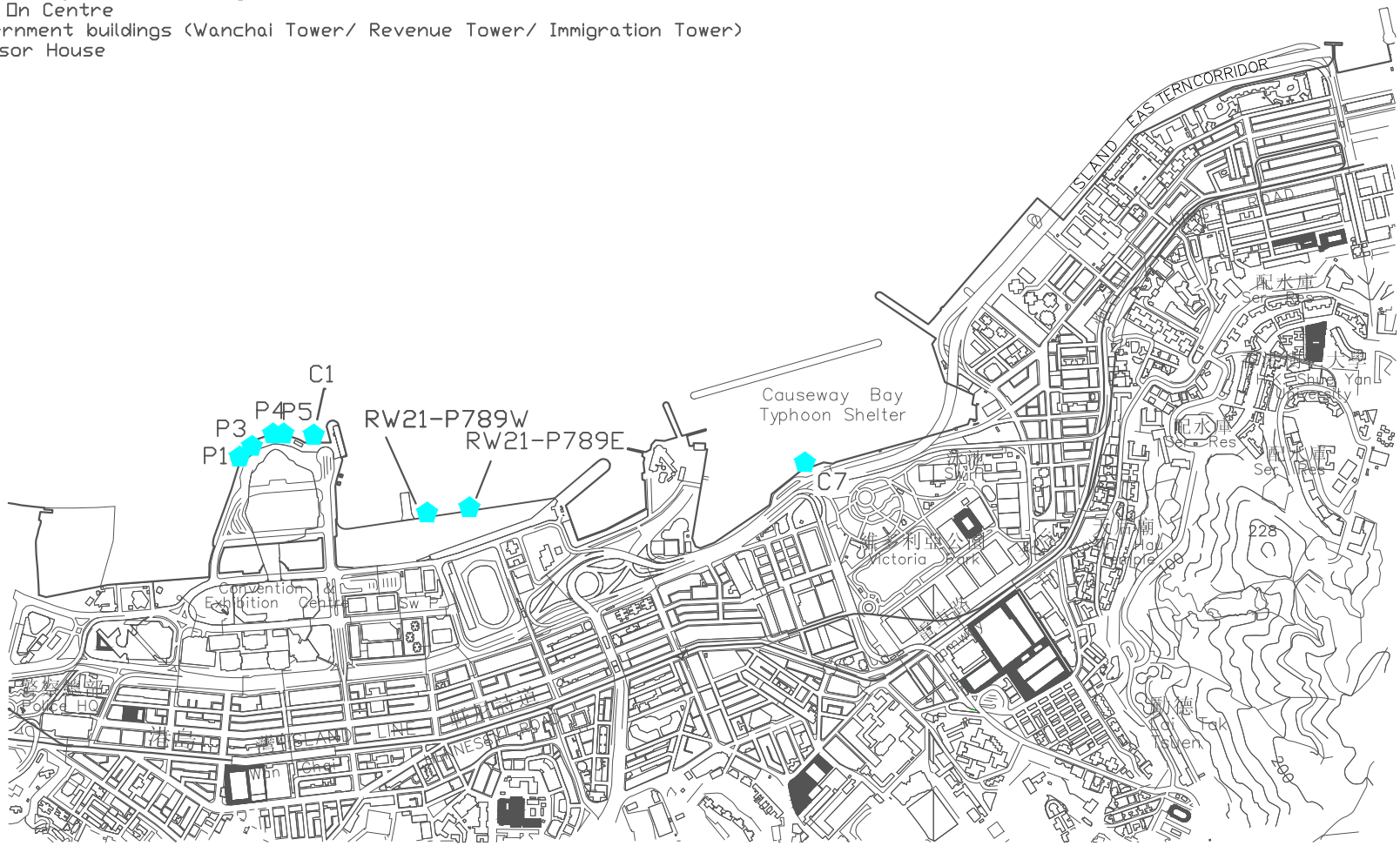


FIGURE	LOCATIONS OF WATER QUALITY MONITORING STATIONS

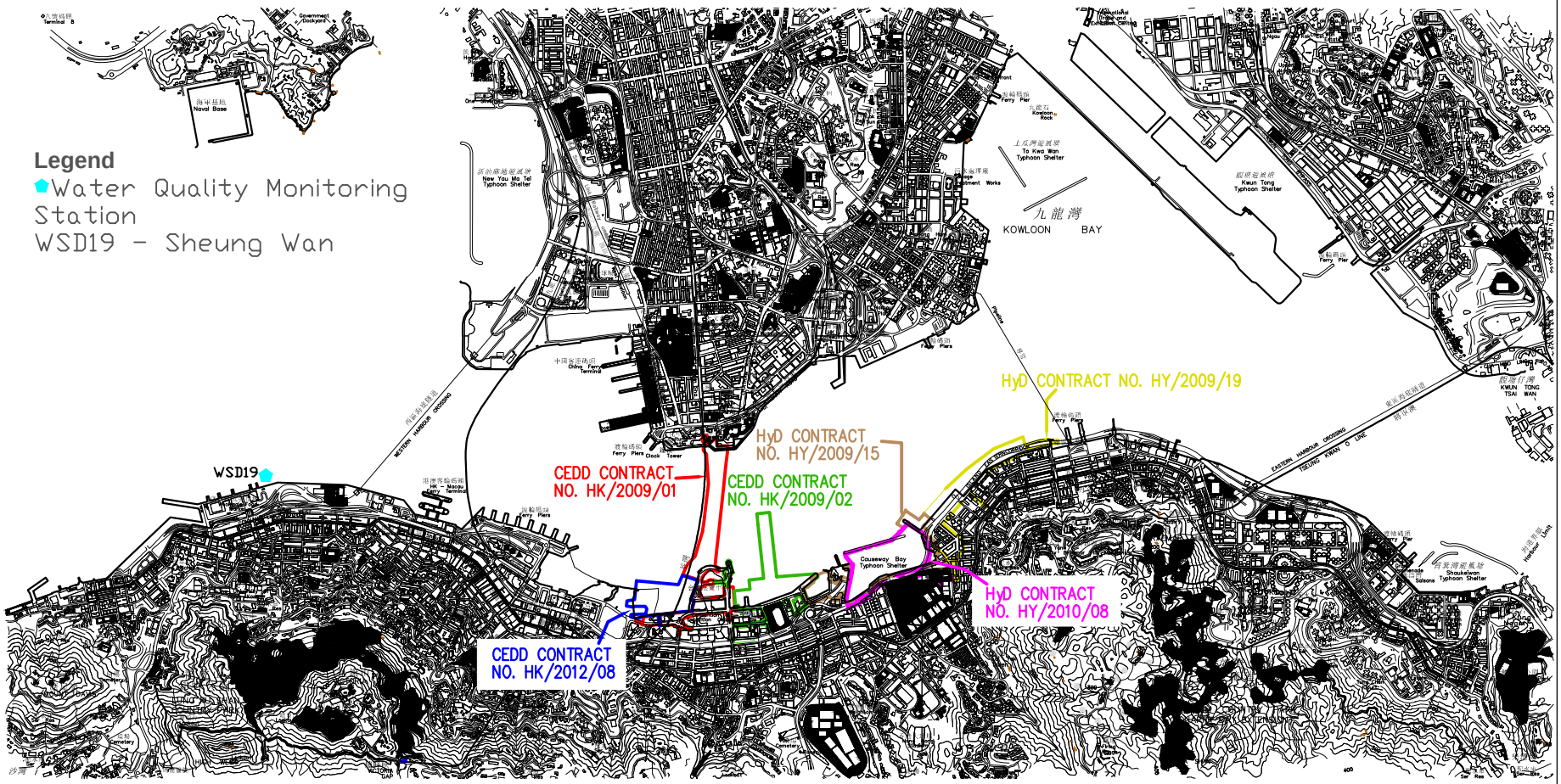


FIGURE	LOCATIONS OF WATER QUALITY MONITORING STATIONS

Appendix 2.1

Environmental Mitigation Implementation Schedule

Environmental Mitigation Implementation Schedule

Implementation Schedule for Air Quality Control

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
For the Whole Project								
S3.6.5	Four times a day watering of the work site with active operations.	Work site / during construction	Contractor		√			EIAO-TM
S3.8.1	Implementation of dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation. The following mitigation measures, good site practices and a comprehensive dust monitoring and audit programme are recommended to minimise cumulative dust impacts. • Strictly limit the truck speed on site to below 10 km per hour and water spraying to keep the haul roads in wet condition; • Watering during excavation and material handling; • Provision of vehicle wheel and body washing facilities at the exit points of the site, combined with cleaning of public roads where necessary; and • Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.	Work site / during construction	Contractor		√			

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S3.5.6	For the dredging activities carried out in the vicinity of Police Officers' Club, the dredging operation will be restricted to only 1 small close grab dredger to minimise the odour impact during the dredging activity. The dredging rate should be reduced as much as practicable for the area in close proximity to the Police Officers' Club. The sediments contain highly contaminated mud which may be disposed with the use of geosynthetic containers (details shall refer to Section 6), grab dredger has to be used for filling up the geosynthetic containers on barges. the dredging rate for the removal of the sediments at the south-west corner of the typhoon shelter shall be slowed down or restricted to specific non-popular hours in weekdays when it is necessary during construction.	Corner of CBTS/implementation of harbour-front enhancement	CEDD[1]		√			EIAO-TM
S3.8.8	Carry out dredging at the corner of CBTS to remove the sediment and clean the slime attached on the CBTS shoreline seawall	Corner of CBTS & CBTS shoreline seawall/implementation of harbour-front enhancement	CEDD[2]		√			EIAO-TM
Operation Phase								
For the Whole Project								

[1] CEDD will identify an implementation agent.

[2] CEDD will identify an implementation agent.

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S3.10.2	Monthly (from July to September) monitoring of odour impacts, for a period of 5 years, is proposed during the operational phase of the Project to ascertain the effectiveness of the Enhancement Package over time, and to monitor any on-going odour impacts at the ASRs.	Planned ASRs (CBTS Breakwater)/First 5-year period of operation phase	CEDD[1]			√		EIAO-TM
For DP1 – CWB (Within the Project Boundary)								
S3.6.53 – S3.6.54	The design parameters of the East and Central Ventilation Buildings as set in Tables 3.10 and 3.11	East and Central Ventilation Buildings / During operation of the Trunk Road	HyD			√		
S3.10.2	Air quality monitoring for the operation performance of the East Ventilation Building and associated East Vent Shaft will be conducted.	East Vent Shaft / During operation of the East Ventilation Building and associated East Vent Shaft	HyD			√		EIAO-TM

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Table A13.2 Implementation Schedule for Noise Control

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
For the Whole Project								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S4.9.4	Good Site Practice: • Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program. • Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program. • Mobile plant, if any, shall be sited as far away from NSRs as possible. • Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum. • Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs. • Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on-site construction activities.	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
For DP1 – CWB (Within the Project Boundary)								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S4.8.3 – S4.8.5	Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks: • Slip road 8 tunnel • Construction of diaphragm wall and substructures of the tunnel approach ramp • Excavation • Construction of slabs • Backfill • Demolition and construction of substructures for the IEC • Demolition works of existing piers and crossheads of the marine section of the existing IEC Use of PME grouping for the following tasks: • At-grade road construction • Substructure for IECL connection	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
For DP2 – WDII Major Roads (Road P2)								
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks: • Temporary road diversion • Resurfacing • At-grade roadwork	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
For DP3 – Reclamation Works								
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment for the following task: • Filling behind seawall • Seawall construction	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
For DP5 – Wan Chai East Sewage Outfall								
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment for the following tasks: • Submarine pipelines (marine section) Use of quiet powered mechanical equipment and movable noise barrier for the following tasks: • Installation of a new pipeline (land section)	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
For DP6 – Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui								
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment for the following tasks: • Submarine pipelines (marine section) •	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Operation Phase								
For DP1 – CWB (Within the Project Boundary)								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S4.8.14 – S4.8.18	• For Existing NSRs • about 235m length of noise semi-enclosure with transparent panel covering the westbound slip road from the IEC • about 230m length of noise semi-enclosure with transparent panel covering the main carriageways (eastbound and westbound) of the CWB and IEC • about 135m length of 5.5m high cantilevered noise barrier with 3m cantilever inclined at 45° with transparent panel on the eastbound slip road to the IEC • about 95m length of 5.5m high cantilevered noise barrier with 1m cantilever inclined at 45° with transparent panel on the eastbound slip road to the IEC • about 350m length of 3.5m high vertical noise barrier with transparent panel on the eastbound slip road to the IEC • low noise road surfacing for the trunk road (except tunnel section and beneath the landscaped deck at the eastern portal area) with speed limit of 70 km/hour	Near North Point / Before commencement of operation of road project	HyD	√	√	√		EIAO-TM
	For Future/Planned NSRs • about 265m length of noise semi-enclosure with transparent panel covering the westbound slip road from the IEC	In between the Electric Centre (next to City Garden) and CDA(1) site / Before occupation of Planned NSRs in CDA and CDA(1) sites.	HyD	√	√ #			

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	• The openable windows of the temple, if any, should be orientated so as to avoid direct line of sight to the existing Victoria Park Road as far as practicable.	Near Causeway Bay Fire Station / During detailed design of the re-provisioned Tin Hau Temple	Project Proponent for the re-provisioned Tin Hau Temple	√				

* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

Only the steel frame for this section of noise semi-enclosure would be erected in advance during the construction of the westbound slip road.

Table A13.3 Implementation Schedule for Water Quality Control

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
For DP3 – Reclamation Works, DP5 (Wan Chai East Sewage Outfall), DP6 (Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui), DP1 – CWB (within the Project Boundary)								
S5.8	A phased reclamation approach is planned for the WDII. Containment of fill within each of the reclamation phases by seawalls is proposed, with the seawall constructed first (above high water mark) with filling carried out behind the completed seawalls. Any gaps that may need to be provided for marine access will be shielded by silt curtains to control sediment plume dispersion away from the site. Filling for seawall construction should be carried out behind the silt curtain	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8	Dredging shall be carried out by closed grab dredger for the following works: • Seawall construction in all the reclamation areas; • Construction of the CWB Tunnel • Construction of the proposed WSD water mains; and • Construction of the proposed Wan Chai East sewage outfall pipelines.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8, Figure 5.3	Dredging for the Wan Chai East sewage outfall pipelines shall not be carried out concurrently with the following activities: • Dredging along the proposed cross-harbour water mains; • Dredging along the seawall in the Wan Chai Reclamation (WCR) zone (area between HKCEC Extension and PCWA).	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S5.8	The water body behind the temporary reclamations within the Causeway Bay typhoon shelter shall not be fully enclosed.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8	As a mitigation measure, to avoid the accumulation of water borne pollutants within the temporary embayment between CRIII and HKCEC1, an impermeable barrier, suspended from a floating boom on the water surface and extending down to the seabed, will be erected by the contractor before the HKCEC1 commences. The barrier will channel the stormwater discharge flows from Culvert L to the outside of the embayment. The contractor will maintain this barrier until the reclamation works in HKCEC2W are carried out and the new Culvert L extension is constructed.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8, Figure 5.3	The total dredging rates in each of the marine works zones shall not be more than the maximum production rates stated in the table below. These are the production rates without considering the effect of silt curtain.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO

Reclamation Area		Maximum Dredging Rate		Maximum Dredging Rate (m^3 per week)
		m^3 per day	m^3 per hour (for 16 hrs per day)	
Dredging along seawall or breakwater				
North Point Shoreline Zone (NPR)		6,000	375	42,000
Causeway Bay Shoreline Zone	TBW	1,500	94	10,500
	TCBR	6,000	375	42,000
PCWA Zone		5,000	313	35,000

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<table><tr><td colspan="2">Wan Chai Shoreline Zone (WCR)</td><td>6,000</td><td>375</td><td>42,000</td></tr><tr><td rowspan="2">HKCEC Shoreline Zone (HKCEC)</td><td>HKCEC Stage 1 & 3</td><td>1,500</td><td>94</td><td>10,500</td></tr><tr><td>HKCEC Stage 2</td><td>6,000</td><td>375</td><td>42,000</td></tr><tr><td colspan="2">Cross Harbour Water Mains</td><td>1,500</td><td>94</td><td>10,500</td></tr><tr><td colspan="2">Wan Chai East Submarine Sewage Pipeline</td><td>1,500</td><td>94</td><td>10,500</td></tr></table> Note: 1,500 m^3 per day shall be applied for construction of the western seawall of WCR1.							
S5.8, Figure 5.3	Dredging along the seawall at WCR1 shall be undertaken initially at 1,500m^3 per day for construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction at the western seawall (above high water mark) to protect the adjacent intakes as much as possible from further dredging activities.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8, Figure 5.3	For dredging within the Causeway Bay typhoon shelter, seawall shall be partially constructed to protect the nearby seawater intakes from further dredging activities. For example, at TCBR1W, the southern and eastern seawalls shall be constructed first (above high water mark) so that the seawater intakes at the inner water would be protected from the impacts from the remaining dredging activities along the northern boundary.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8, Figure 5.3	Silt curtains shall be deployed around the closed grab dredgers during seawall dredging and seawall trench filling in the areas of HKCEC, WCR, TCBR and NP.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8, Figure 5.3	Silt screens shall be applied to seawater intakes at interim construction stages as stated below: <table><tr><th>Interim Construction Stage</th><th>Location of Applications</th></tr><tr><td>**Scenario 2A** in early 2009 with concurrent dredging activities at HKCEC, WCR, TPCWA, TBW, NP and Water Mains Zone</td><td>**WSD saltwater intakes** at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South **Cooling water intakes** for Hong Kong Convention and Exhibition Centre Extension, Hong Kong Convention and Exhibition Centre Phase I, Telecom House / HK Academy for Performing Arts / Shun On Centre, Wan Chai Tower / Revenue Tower / Immigration Tower and Sun Hung Kai Centre</td></tr><tr><td>**Scenario 2B** in late 2009/2010 with concurrent dredging activities at Sewage Pipelines Zone and TCBR.</td><td>**WSD saltwater intakes** at Sheung Wan, Wan Chai **Cooling water intakes** for Queensway Government Offices, Excelsior Hotel, World Trade Centre and Windsor House.</td></tr><tr><td>**Scenario 2C** in 2011 with concurrent dredging activities at HKCEC and TCBR.</td><td>**WSD saltwater intakes** at Sheung Wan and Reprovisioned WSD Wan Chai saltwater intake. **Cooling water intakes** for MTR South, Excelsior Hotel & World Trade Centre and reprovisioned Windsor House.</td></tr></table>	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO

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S5.8	Other mitigation measures include: • mechanical grabs, if used, shall be designed and maintained to avoid spillage and sealed tightly while being lifted. For dredging of any contaminated mud, closed watertight grabs must be used; • all vessels shall be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; • all hopper barges and dredgers shall be fitted with tight fitting seals to their bottom openings to prevent leakage of material; • construction activities shall not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site or dumping grounds; • loading of barges and hoppers shall be controlled to prevent splashing of dredged material into the surrounding water. Barges or hoppers shall not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation; and	Work site / During the construction period	Contractor		√			ProPECC PN 1/94; WPCO (TM-DSS)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	• before commencement of the reclamation works, the holder of Environmental Permit has to submit plans showing the phased construction of the reclamation, design and operation of the silt curtain.							
S5.8	Silt screens are recommended to be deployed at the seawater intakes during the reclamation works period. Installation of silt screens at the seawater intake points may cause a potential for accumulation and trapping of pollutants, floating debris and refuse behind the silt screens and may lead to potential water quality deterioration at the seawater intake points. Major sources of pollutants and floating refuse include the runoff and storm water discharges from the nearby coastal areas. As a mitigation measure to avoid the pollutant and refuse entrapment problems and to ensure that the impact monitoring results are representative, regular maintenance of the silt screens and refuse collection shall be performed at the monitoring stations at regular intervals on a daily basis. The Contractor shall be responsible for keeping the water behind the silt screen free from floating rubbish and debris during the impact monitoring period.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S5.8	Dredging of contaminated mud is recommended as a mitigation measures for control of operational odour impact from the Causeway Bay typhoon shelter. In recognition of the potential impacts caused by dredging activities close to the seawater intakes, only 1 small close grab dredger shall be operated within the typhoon shelter (for the dredging to mitigate odour impact) at any time to minimize the potential impact. Double silt curtains shall be deployed to fully enclose the closed grab dredger during the dredging operation. In addition, an impermeable barrier, suspended from a floating boom on the water surface and extended down to the seabed, shall be erected to isolate the adjacent intakes as much as possible from dredging activities. For example, if dredging is to be carried out at the southwest corner of the typhoon shelter, physical barriers shall be erected to west of the cooling water intake for Excelsior Hotel so that the intake would be shielded from most of the SS generated from the dredging operation to the west of the intake. For area in close proximity of the cooling water intake point, the dredging rate shall be reduced as much as practicable. Site audit and water quality monitoring shall be carried out at the seawater intakes during the dredging operations. Daily monitoring of SS at the cooling water intake shall be carried out, and 24 hour monitoring of turbidity at the intakes shall be implemented during the dredging activities. If the monitoring results indicate that the dredging operation has caused significant changes in water quality conditions at the seawater intakes, appropriate actions shall be taken to stop the dredging and mitigation measures such as slowing down the dredging rate shall be implemented.	Causeway Bay typhoon shelter/Implementation of harbour-front enhancement.	CEDD[3]		√			WPCO

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
For the Whole Project								
S5.8	• Construction Runoff and Drainage • use of sediment traps, wheel washing facilities for vehicles leaving the site, and adequate maintenance of drainage systems to prevent flooding and overflow; • Permanent drainage channels shall incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities shall be based on the guidelines in Appendix A1 of ProPECC PN 1/94; • a sediment tank constructed from pre-formed individual cells of approximately 6 - 8 m3 capacity can be used for settling ground water prior to disposal; • oil interceptors shall be provided in the drainage system for the tunnels and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor shall have a bypass to prevent flushing during periods of heavy rain; • precautions and actions to be taken when a rainstorm is imminent or forecast, and during or after rainstorms. Particular attention shall be paid to the control of any silty surface runoff during storm events; • on-site drainage system shall be installed prior to the commencement of other construction activities. Sediment traps shall be installed in order to minimise the sediment loading of the effluent prior to discharge; • All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge shall be adequately designed for the controlled release of storm flows. All sediment control measures shall be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage shall be reinstated to its original condition when the construction work is finished or the temporary diversion is no longer	• Work site / During the constructi on period	Contractor		√			ProPECC PN 1/94; WPCO (TM-DSS)

[3] CEDD will identify an implementation agent.

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				Des	C	O	Dec	
	required. • All fuel tanks and store areas shall be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity.							
	• Minimum distances of 100 m shall be maintained between the storm water discharges and the existing or planned WSD flushing water intakes during construction phase.							
S5.8	*Sewage from Construction Work Force* Construction work force sewage discharges on site shall be connected to the existing trunk sewer or sewage treatment facilities. The construction sewage shall be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor shall also be responsible for waste disposal and maintenance practices.	Work site / During the construction period	Contractor		√			ProPECC PN 1/94; WPCO (TM-DSS)
S5.8	*Floating Debris and Refuse* Collection and removal of floating refuse shall be performed at regular intervals on a daily basis. The contractor shall be responsible for keeping the water within the site boundary and the neighbouring water free from rubbish.	Work site and adjacent water / During the construction period.	Contractor		√			WPCO

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S5.8	*Storm Water Discharges* Minimum distances of 100 m shall be maintained between the existing or planned stormwater discharges and the existing or planned WSD flushing water intakes.	Work site and adjacent water / During the design and construction period.	Contractor	√	√			WPCO
Operation Phase								
DP1 – CWB (within the Project Boundary)								
S5.8	For the operation of CWB, a surface water drainage system would be provided to collect road runoff. The following operation stage mitigation measures are recommended to ensure road runoff would comply with the TM under the WPCO: • The drainage from tunnel sections shall be directed through petrol interceptors to remove oil and grease before being discharged to the nearby foul water manholes. • Petrol interceptors shall be regularly cleaned and maintained in good working condition. • Oily contents of the petrol interceptors shall be properly handled and disposed of, in compliance with the requirements of the Waste Disposal Ordinance. • Sewage arising from ancillary facilities of CWB (for examples, car park,	CWB/During design and operational period	HyD/TD[3]	√		√		WPCO

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				Des	C	O	Dec	
	control room, ventilation and administration buildings and tunnel portals) shall be connected to public sewerage system. Sufficient capacity in public sewerage shall be made available to the proposed facilities. • Road drainage shall also be provided with adequately designed silt trap to minimize discharge of silty runoff. • The design of the operational stage mitigation measures for CWB shall take into account the guidelines published in ProPECC PN 5/93 "Drainage Plans subject to Comment by the EPD." All operational discharges from the CWB into drainage or sewerage systems are required to be licensed by EPD under the WPCO.							

* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

[3] if employ Management, Operation and Maintenance (MOM) Contract

Table A13.4 Implementation Schedule for Waste Management

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
For DP3 – Reclamation Works								
S6.7.2	***Marine Sediments*** The dredged marine sediments would be loaded onto barges, transported to and disposed of at the designated disposal sites at South of Cheung Chau, East of Ninepin, East of Tung Lung Chau, South of Tsing Yi or East of Sha Chau to be allocated by the MFC depending on their level of contamination or at other disposal sites after consultation with the MFC and EPD. In accordance with the ETWB TCW No. 34/2002, the contaminated material must be dredged and transported with great care. The mitigation measures recommended in Section 5 of the EIA Report shall be incorporated. The dredged contaminated sediment must be effectively isolated from the environment upon final disposal and shall be disposed of at the Type 2 confined marine disposal contaminated mud pit.	Work site / During the construction period	Contractor		√			ETWB TCW No. 34/2002
S6.7.3	Based on the biological screening results, the Category H (>10xLCEL) sediment which failed the biological testing would require Type 3 special disposal. The volume of Category H sediment from the Causeway Bay typhoon shelter which would require special disposal arrangements is estimated to be approximately 0.05 Mm^3. A feasible containment method is proposed whereby the dredged sediments are sealed in geosynthetic containers and, at the disposal site, the containers would be dropped into the designated contaminated mud pit where they would be covered by further mud disposal and later by the mud pit capping, thereby meeting the requirements for fully confined mud disposal.							

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				Des	C	O	Dec	
S6.7.5	It will be the responsibility of the Contractor to satisfy the appropriate authorities that the contamination levels of the marine sediment to be dredged have been analysed and recorded. According to the ETWB TCW No. 34/2002, this will involve the submission of a formal Sediment Quality Report to the DEP, at least 3 months prior to the dredging contract being tendered							
S6.7.6	During transportation and disposal of the dredged marine sediments requiring Type 1 and Type 2 disposal, the following measures shall be taken to minimise potential impacts on water quality: • Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material. Excess material shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved.							

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	• Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP. • Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation.							
S6.6.12	***Floating Refuse*** During the construction phase, the project proponent's contractor will be responsible for the collection of any refuse within their works area. Floating booms will be provided on the water surface to confine the refuse from the working barges as well as to avoid the accumulation of pollutants within temporary embayment as mentioned in Table 13.3.	Work site / During the construction period	Contractor		√			
For the Whole Project								

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.7	*Good Site Practices* Recommendations for good site practices during the construction activities include: • nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; • training of site personnel in proper waste management and chemical waste handling procedures; • provision of sufficient waste disposal points and regular collection for disposal; • appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; • regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; and • a recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites).	Work site / During the construction period	Contractor		√			Waste Disposal Ordinance (Cap.354)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.8	*Waste Reduction Measures* Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include: • segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; • to encourage collection of aluminium cans, PET bottles and paper, separate labelled bins shall be provided to segregate these wastes from other general refuse generated by the work force; • any unused chemicals or those with remaining functional capacity shall be recycled; • use of reusable non-timber formwork, such as in casting the tunnel box sections, to reduce the amount of C&D material. • prior to disposal of C&D waste, it is recommended that wood, steel and other metals shall be separated for re-use and / or recycling to minimise the quantity of waste to be disposed of to landfill; • proper storage and site practices to minimise the potential for damage or contamination of construction materials; and • plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	Work site / During planning and design stage, and construction stage	Contractor	√	√			

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.10	*General Refuse* General refuse shall be stored in enclosed bins or compaction units separate from C&D material. A licensed waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&D material. A collection area shall be provided where wastes can be stored and loaded prior to removal from site. An enclosed and covered area is recommended to reduce the occurrence of 'wind blow' light material.	Work site / During the construction period	Contractor		√			Public Health and Municipal Services Ordinance (Cap. 132)
S6.7.11	*Chemical Wastes* After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) shall be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals shall be collected by a licensed collector for disposal at the CWTF or other licensed facility in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Work site / During the construction period	Contractor		√			Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S6.7.12	*Construction and Demolition Material* C&D material shall be sorted on-site into inert C&D material (that is, public fill) and C&D waste. All the suitable inert C&D material shall be broken down to 250 mm in size for reuse as public fill in the WDII reclamation. C&D waste, such as wood, glass, plastic, steel and other metals shall be reused or recycled and, as a last resort, disposed of to landfill. A suitable area shall be designated to facilitate the sorting process and a temporary stockpiling area will be required for the separated materials.	Work site / During the construction period	Contractor		√			ETWB TCW No. 33/2002, 31/2004, 19/2005

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.13	In order to monitor the disposal of public fill and C&D waste at public filling facilities and landfills, respectively, and to control fly tipping, a trip-ticket system shall be included as one of the contractual requirements and implemented by the Environmental Team undertaking the environmental monitoring and audit work. An Independent Environment Checker shall be responsible for auditing the results of the system.	Work site / During the construction period	Contractor and Independent Environmental Checker		√			ETWB TCW No. 31/2004
S6.7.14	*Bentonite Slurry* The disposal of residual used bentonite slurry shall follow the good practice guidelines stated in ProPECC PN 1/94 "Construction Site Drainage" and listed as follows: • If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis. • If the used bentonite slurry is intended to be disposed of through the public drainage system, it shall be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the Technical Memorandum of Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters. • If the used bentonite slurry is intended to be disposed to public fill reception facilities, it will be mixed with dry soil on site before disposal.	Work site / During the construction period	Contractor		√			ProPECC PN 1/94

* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

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Table A13.5 Implementation Schedule for Land Contamination

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
For the Whole Project								
S.12.6	• The contaminated site shall be cleaned up before commencement of site clearance and construction work at the concerned area which may disturb the ground.	A King Marine / Before commencement of construction activities at A King Marine.	Project proponent for the re-provisioned Tin Hau Temple	√				*"Guidance Notes for Investigation and Remediation of Contaminated Sites of Petrol Filling Stations, Boatyards, and Car Repair/Dismantling Workshops"* published by EPD, HKSAR EPD ProPECC Note No. 3/94
S7.10	During soil remediation works, the Contractor for the excavation works shall take note of the following points for excavation: • Excavation profiles must be properly designed and executed; • In case the soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table by installing well points or similar means; • Quantities of soil to be excavated must be estimated; • It maybe necessary to split quantities of soil according to soil type, degree and nature of contamination. • Temporary storage of soil at intermediate depot or on-site	A King Marine / During soil remediation works	Contractor	√				Air Pollution Control Ordinance Noise Control Ordinance Waste Disposal Ordinance Waste Disposal (Chemical Waste) (General) Regulation

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	maybe required. The storage site shall include protection facilities for leaching into the ground. eg. Liner maybe required.							
	• Supply of suitable clean backfill materials is needed after excavation. • Care must be taken of existing buildings and utilities. • Precautions must be taken to control of ground settlement • Speed controls for vehicles shall be imposed on dusty site areas. • Vehicle wheel and body washing facilities at the site's exit points shall be established and used. The following environmental mitigation measures shall be strictly followed during the operation and/or maintenance of the CS/S facilities:							Water Pollution Control Ordinance

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	Air Quality Mitigation Measures • The loading, unloading, handling, transfer or storage of cement shall be carried out in an enclosed system. • The loading, unloading, handling, transfer or storage of other materials which may generate airborne dust emissions such as untreated soil and oversize materials sorted out from the screening plant and stabilized soil stockpiled in the designated handling area, shall be carried out in such a manner to prevent or minimise dust emissions. These materials shall be adequately wetted prior to and during the loading, unloading and handling operations. • All practicable measures, including speed controls for vehicles, shall be taken to prevent or minimize the dust emission caused by vehicle movement. • Tarpaulin or low permeable sheet shall be put on dusty vehicle loads transported between site locations.							
	Noise Mitigation Measures • The mixing facilities shall be sited as far as practicable to the nearby noise sensitive receivers. • Simultaneous operation of mixing facilities and other equipment shall be avoided. • Mixing process and other associated material handling activities shall be properly scheduled to minimise potential cumulative noise impact on the nearby noise sensitive receivers. • Construction Noise Permit shall be applied for the operation of powered mechanical equipment during restricted hours (if any).							

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	Water Quality Mitigation Measures • Stockpile of untreated soil shall be covered as far as practicable to prevent the contaminated material from leaching out. The leachate shall be discharged following the requirements of WPCO. *Waste Mitigation Measures* • Treated oversize materials will be used as filling material for backfilling within the site. Sorted materials of size smaller than 5 cm will be collected and transferred to the mixing plant for further decontamination treatment. • Stabilized soils shall be broken into suitable size for backfilling or reuse on site. • A high standard of housekeeping shall be maintained within the mixing plant area. • If necessary, there shall be clear and separated areas for stockpiling of untreated and treated materials.							

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Table A13.6 Implementation Schedule for Marine Ecology

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
For the Whole Project - Schedule 3 DP								
S.9.7.2	Alternative design of the Trunk Road constructed in tunnel shall be adopted to avoid permanent reclamation in CBTS and ex-PWCA Basin.	-	CEDD/HyD	√				EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
For DP3 – Reclamation Works								
S.9.7.3	Translocation of those potentially affected coral colonies to the nearby suitable habitats such as Junk Bay is recommended. A detailed translocation plan (including translocation methodology, monitoring of transplanted corals, etc.) should be drafted and approval by AFCD during the detailed design stage of the Project.	Ex-PCWA Basin and along seawall next to a public pier which is about 250 m away from the CBTS	CEDD/HyD	√				EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S.9.7.4	During dredging and filling operations, a number of mitigation measures to control water quality shall be adopted to confine sediment plume within reclamation area and protect marine fauna in proximity to the reclamation. The mitigation measures include the following: • Installation of silt curtains during dredging activities • Use of tightly-closed grab dredger • Reduction of dredging rate • Control of grab descending speed • Construction of leading edges of seawall in the early stages of the reclamation works	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
	• Adoption of multiple-phase construction schedule							

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S.9.7.6	To minimize potential disturbance impacts on the foraging ardeid population in the CBTS, particularly in the area near the A King Shipyard, appropriate mitigation measures shall be adopted particularly during the construction phase. The following measures are recommended: • Use of Quiet Mechanical Plant during the construction phase shall be adopted wherever possible. • Adoption of multiple-phase construction schedule. • General measures to reduce noise generated during the construction phase (see noise impact assessment) shall be effectively implemented.	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
S.9.7.7	Seawalls shall be constructed in advance around the reclamation areas within the area of the CBTS to screen adjacent feeding ground from construction phase activities, reduce noise disturbance to the associated seabirds and also to restrict access to this habitat adjacent to works areas by ship traffic.	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
S.9.7.8	Loss of artificial seawall habitats shall be reinstated by the construction of about 1 km vertical wave absorbing seawall along the coastlines of the new reclamation around the HKCEC and at North Point. The new seawalls are expected to provide large area of hard substrata for settlement and recruitment of intertidal fauna similar to those previously recorded from existing intertidal habitats.	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.

*Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

Table A13.7 Implementation Schedule for Landscape and Visual

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
For the Whole Project								
Table 10.5	CM1 Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM2 Existing trees to be retained on site shall be carefully protected during construction.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM3 Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM4 Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM5 Control of night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Table 10.5	CM6 Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		√			EIAO TM
For DP1 – CWB (Within the Project Boundary)								
Table 10.5	CM1 Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	Contractor		√			EIAO TM
Table 10.5	CM2 Existing trees to be retained on site shall be carefully protected during construction.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM3 Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM4 Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM5 Control of night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Table 10.5	CM6 Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		√			EIAO TM
For DP2 – WDII Major Roads (Road P2)								
Table 10.5	CM1 Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM2 Existing trees to be retained on site shall be carefully protected during construction.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM3 Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM4 Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	Contractor	√	√			EIAO TM
Table 10.5	CM5 Control of night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Table 10.5	CM6 Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		√			EIAO TM
For DP3 – Reclamation Works								
Table 10.5	CM5 Control of night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Table 10.5	CM6 Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		√			EIAO TM
For DP5 – Wan Chai East Sewage Outfall								
Refer to EIA-058/2001 Table 10.13	CM2 Minimisation of works areas.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM3 Erection of decorative hoardings.	Work site / During Construction Phase	Contractor		√			EIAO TM

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Refer to EIA-058/2001 Table 10.13	CM4 Control night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM5 Minimisation of disruption to public by effective programming of the works.	Work site / During Construction Phase	Contractor		√			EIAO TM
For DP6 – Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui								
Refer to EIA-058/2001 Table 10.13	CM2 Minimisation of works areas.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM3 Erection of decorative hoardings.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM4 Control night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM5 Minimisation of disruption to public by effective programming of the works.	Work site / During Construction Phase	Contractor		√			EIAO TM
Operation Phase								
For the Whole Project - Schedule 3 DP								
Table 10.6, Figure 10.5.1-10.5.5	OM1 Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM2 Shrub and Climbing Plants to soften proposed structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	√		ETWB TCW 2/2004

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Table 10.6, Figure 10.5.1-10.5.5	OM3 Buffer Tree and Shrub Planting to screen proposed roads and associated structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD/	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM4 Aesthetic design of proposed waterfront promenade.	Work site / During Design Stage and Operation Phases	CEDD[4]	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM5 Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM6 Aesthetic design of roadside amenity areas.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	√		ETWB TCW 2/2004
For DP1 – CWB (Within the Project Boundary)								
Table 10.6, Figure 10.5.1-10.5.5	OM1 Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM2 Shrub and Climbing Plants to soften proposed structures	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM3 Buffer Tree and Shrub Planting to screen proposed roads and associated structures.	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM5 Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM6 Aesthetic design of roadside amenity areas.	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
For DP2 – WDII Major Roads (Road P2)								

[4] CEDD will identify an implementation agent

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Table 10.6, Figure 10.5.1-10.5.5	OM1 Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	CEDD/HyD		√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM3 Buffer Tree and Shrub Planting to screen proposed roads and associated structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD		√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM5 Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	CEDD/HyD		√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM6 Aesthetic design of roadside amenity areas	Work site / During Design Stage and Operation Phases	CEDD/HyD		√	√		ETWB TCW 2/2004
For DP3 – Reclamation Works								
Table 10.6, Figure 10.5.1-10.5.5	OM4 Aesthetic design of proposed waterfront promenade.	Work site / During Design Stage and Operation Phases	CEDD[5]	√	√	√		ETWB TCW 2/2004

*Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

[5] CEDD will identify an implementation agent

Appendix 3.1

Action and Limit Level

Action and Limit Level

Action and Limit Level for Noise Monitoring

Time Period	Action Level	Limit Level
07:00 – 19:00 hours on normal weekdays	When one documented complaint is received.	75 dB(A)[Note 1]

Note 1:
- 70dB(A) and 65 dB(A) for schools during normal teaching periods and school examination periods, respectively.
- If works are to be carried out during the restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.

Action and Limit Level for Air Quality Monitoring

Monitoring Location	1-hour TSP Level in $\mu g/m^3$		24-hour TSP Level in $\mu g/m^3$	
	Action Level	Limit Level	Action Level	Limit Level
CMA1b	320.1	500	176.7	260
CMA2a	323.4	500	169.5	260
CMA3a	311.3	500	171.0	260
CMA4a	312.5	500	171.2	260
CMA5b	332.0	500	181.0	260
CMA6a	300.1	500	187.3	260

Action and Limit Level for Water Quality Monitoring

Parameters	Dry Season		Wet Season	
	Action	Limit	Action	Limit
WSD Salt Water Intake				
SS in mg L^{-1}	13.00	14.43	16.26	19.74
Turbidity in NTU	8.04	9.49	10.01	11.54
DO in mg/L	3.66	3.28	3.17	2.63
Cooling Water Intake				
SS in mg L^{-1}	15.00	22.13	18.42	27.54
Turbidity in NTU	9.10	10.25	11.35	12.71
DO in mg/L	3.36	2.73	3.02	2.44

Remarks:
- Action and Limit Level for the wet season are applied after the EPD approval of Updated EM&A Manual on 29 April 2011.

Action and Limit Level for Enhance DO Monitoring

Parameters	Depth	Dry Season		Wet Season	
		Action	Limit	Action	Limit
C6	Surface and Middle	3.13	2.00	2.60	2.00
	Bottom	4.14	3.33	2.91	2.34
C7	Surface and Middle	3.87	3.09	3.31	2.57
	Bottom	3.91	3.53	2.75	2.48
Ex-WPCWA SW	Surface and Middle	3.84	3.73	3.19	3.10
	Bottom	4.71	4.63	3.31	3.25
Ex-WPCWA SE	Surface and Middle	4.26	3.61	3.55	3.00
	Bottom	5.36	5.35	3.76	3.76

Action and Limit Levels for Odour Patrol

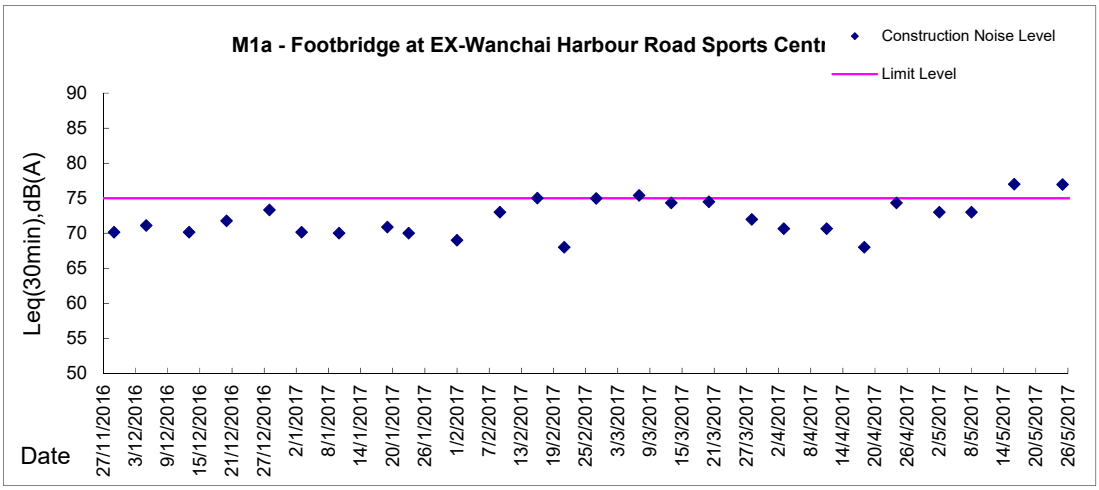
Parameters	Action	Limit
Odour Nuisance (from odour intensity analysis or odour patrol)	• When two documented complaint are received; or • Odour Intensity of 2 is measured from odour intensity analysis.	• Five or more consecutive genuine documented complaints within a week; or • Odour Intensity of 3 or above is measured from odour intensity analysis.

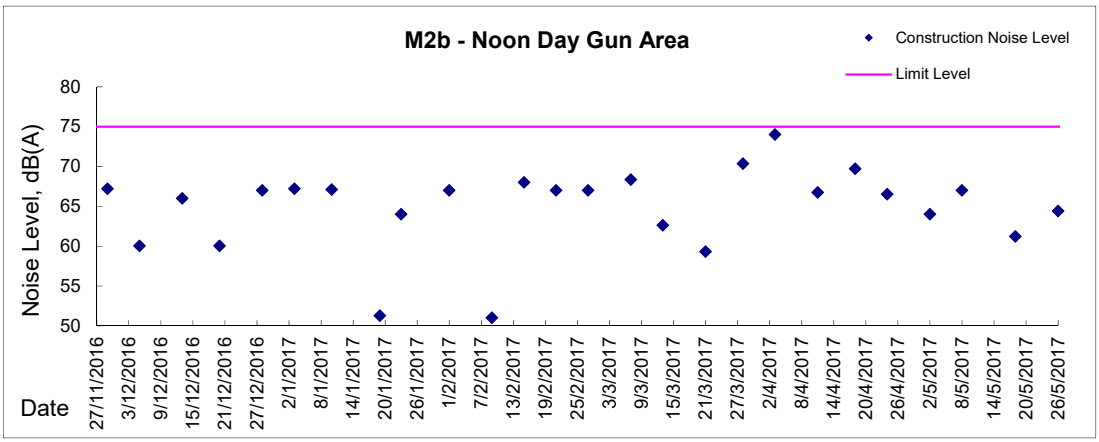
Appendix 4.1

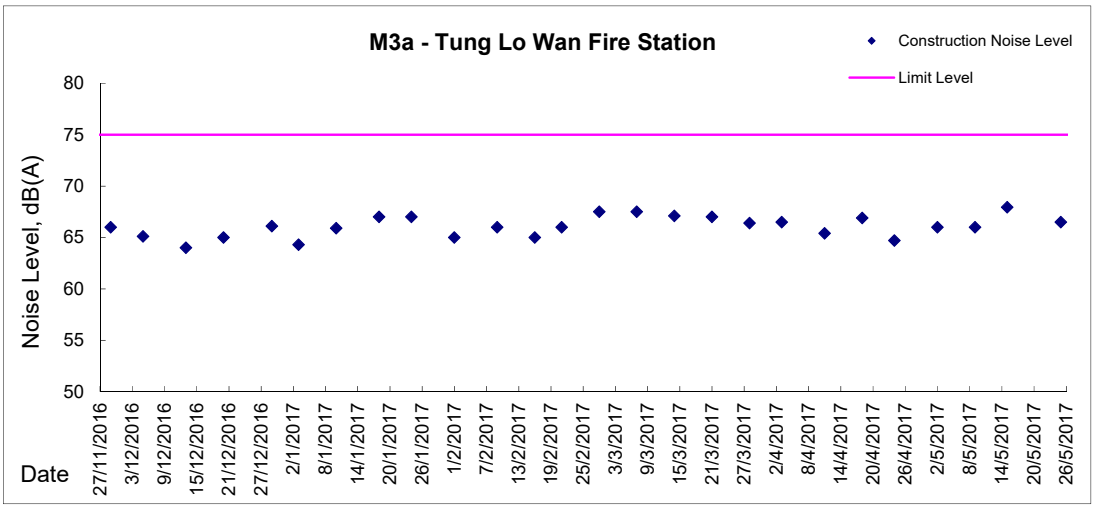
Noise Monitoring Graphical Presentations

Graphic Presentation of Noise Monitoring Result

Day Time (0700 - 1900hrs on normal weekdays)

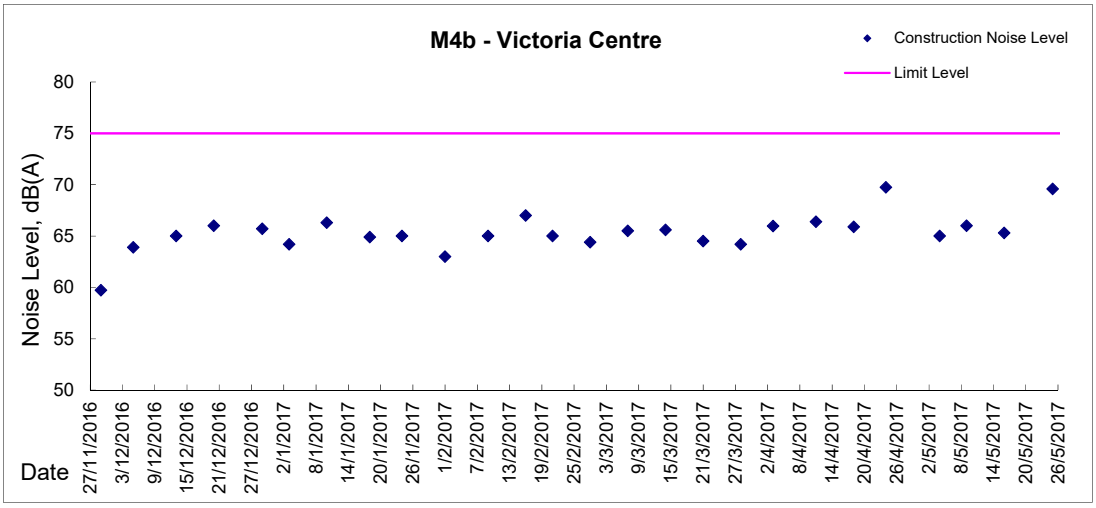


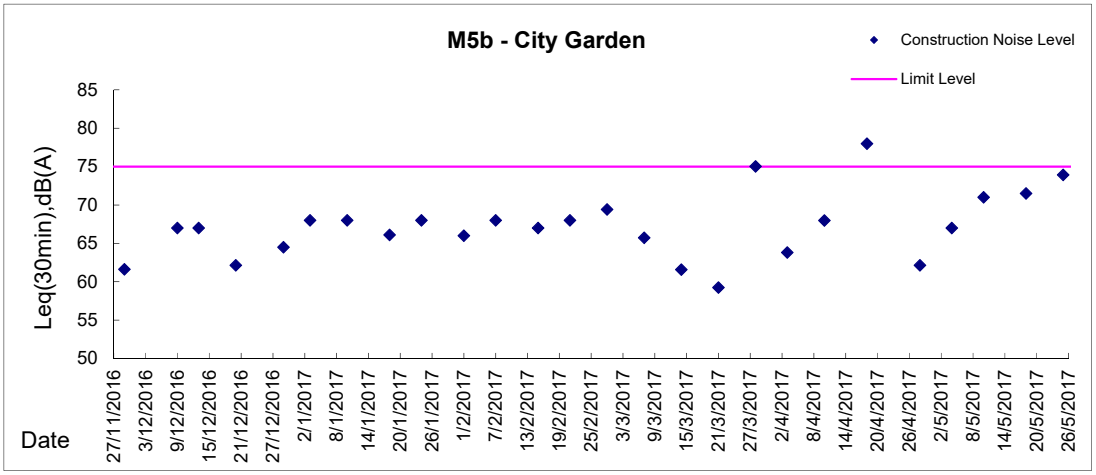


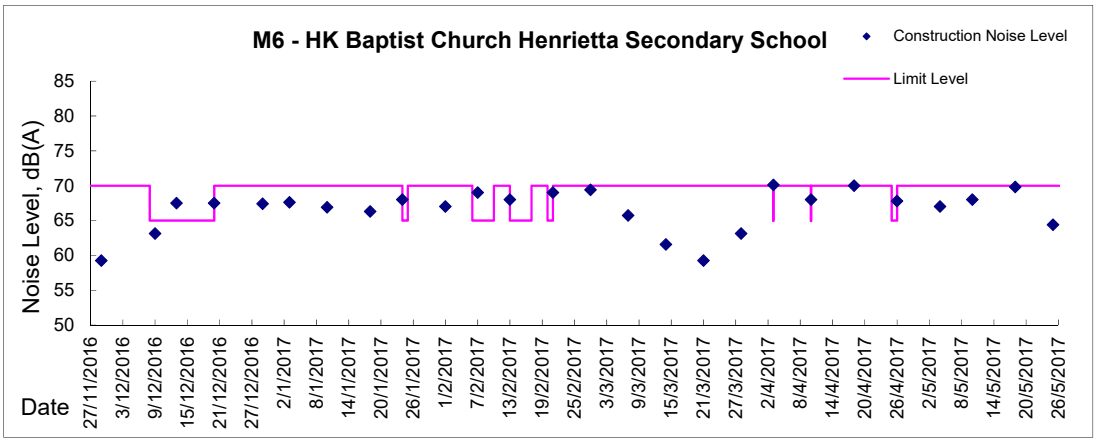


Graphic Presentation of Noise Monitoring Result

Day Time (0700 - 1900hrs on normal weekdays)

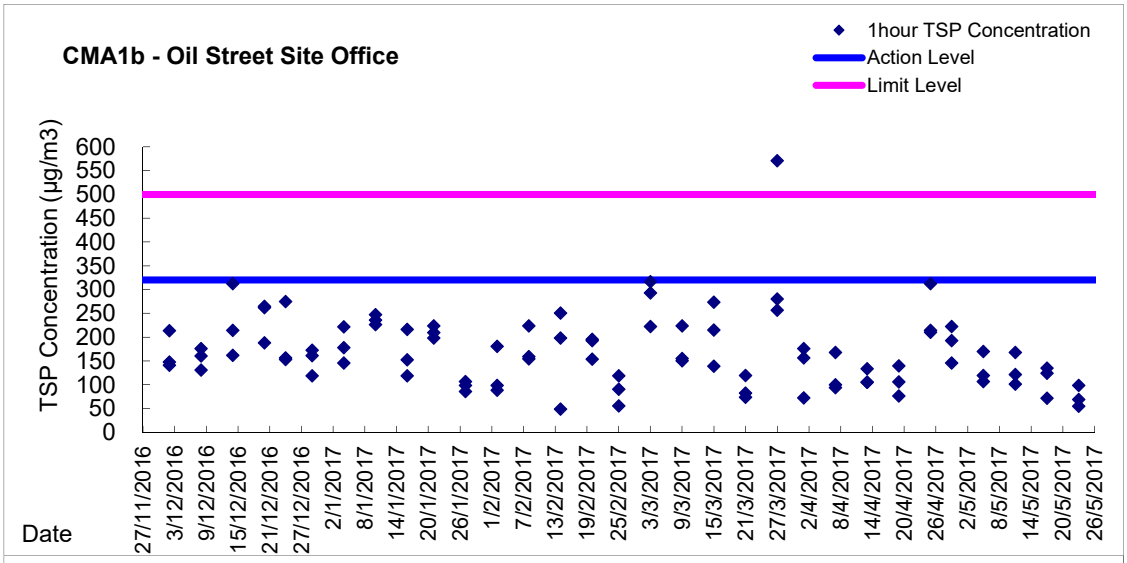


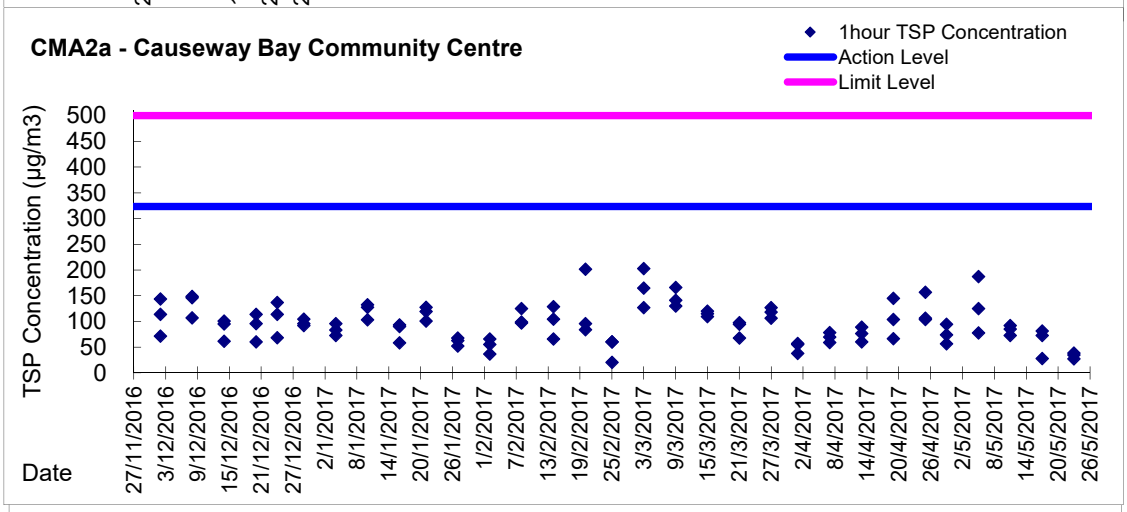


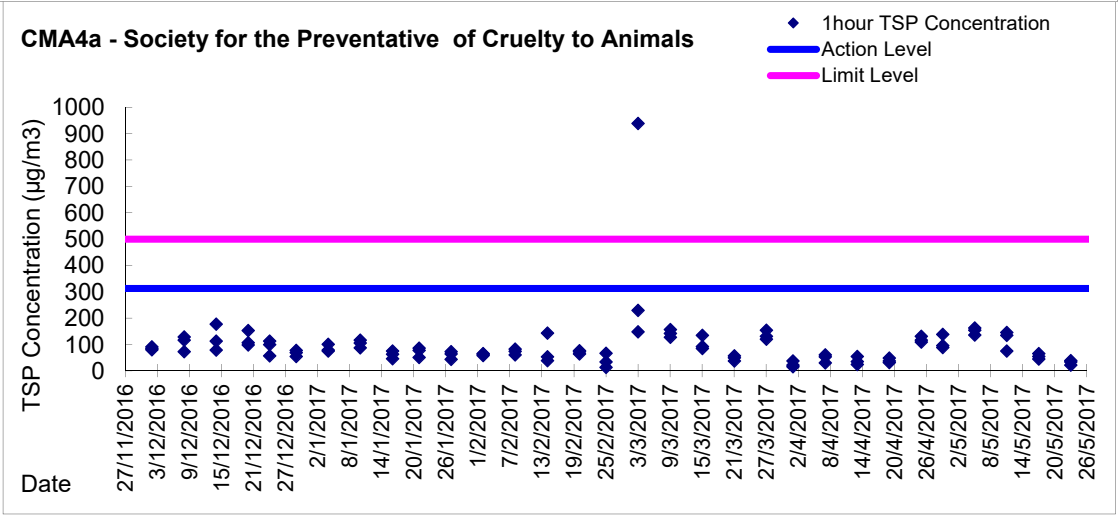


Appendix 4.2
Air Quality Monitoring Graphical Presentations

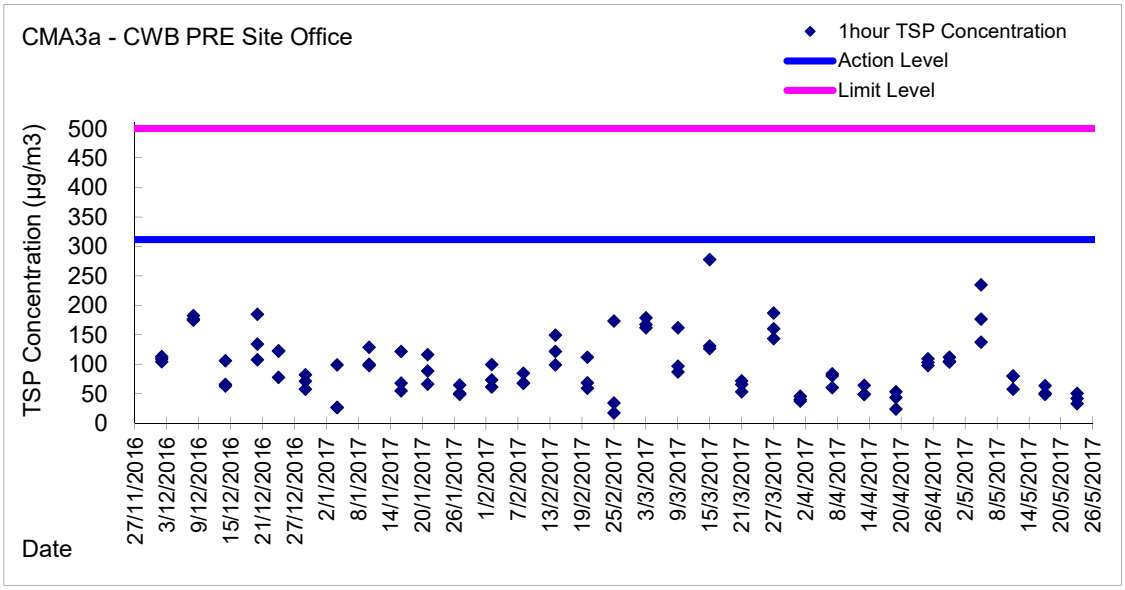
Graphic Presentation of 1 hour TSP Result

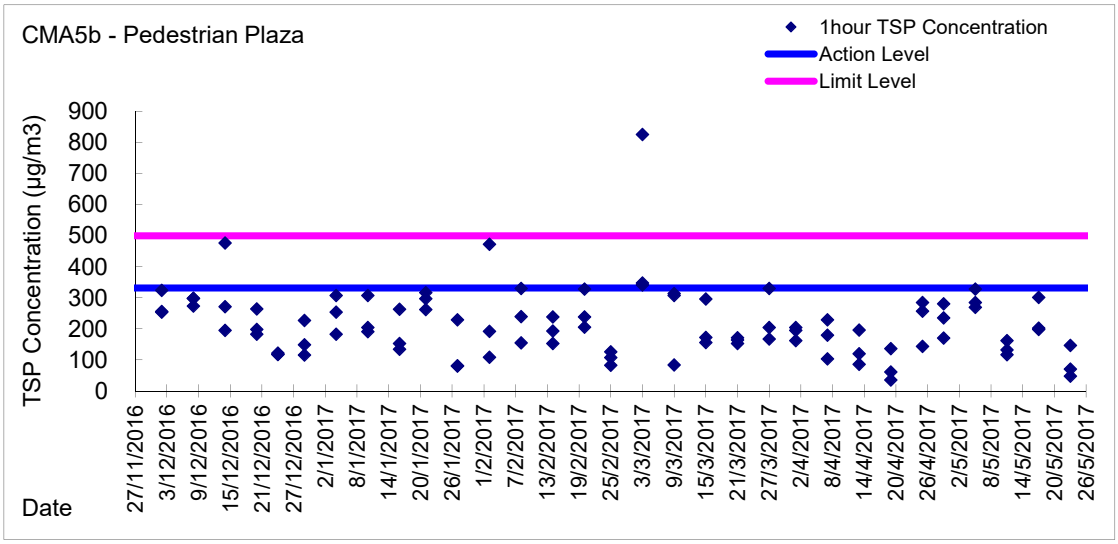


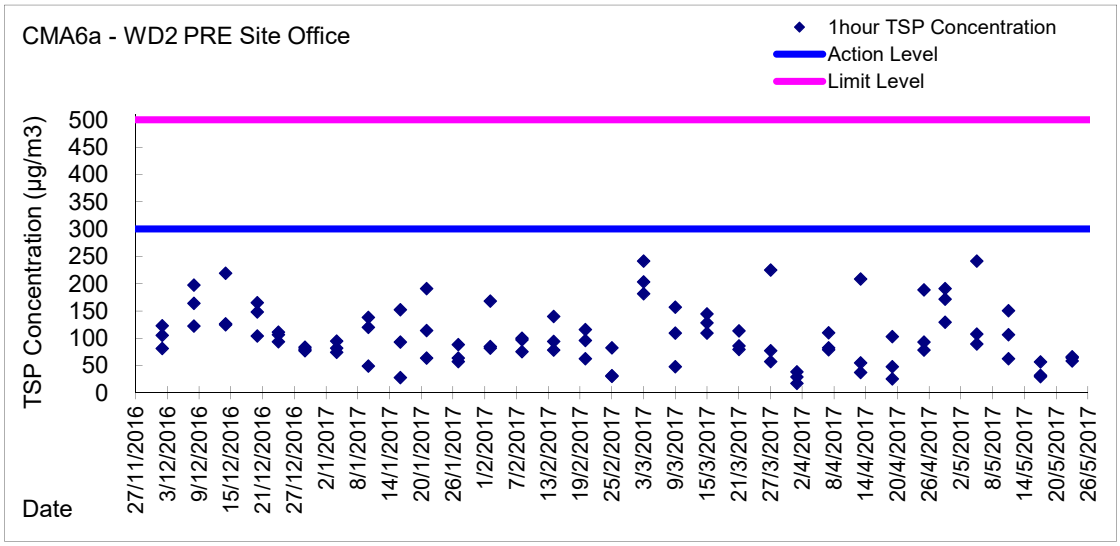




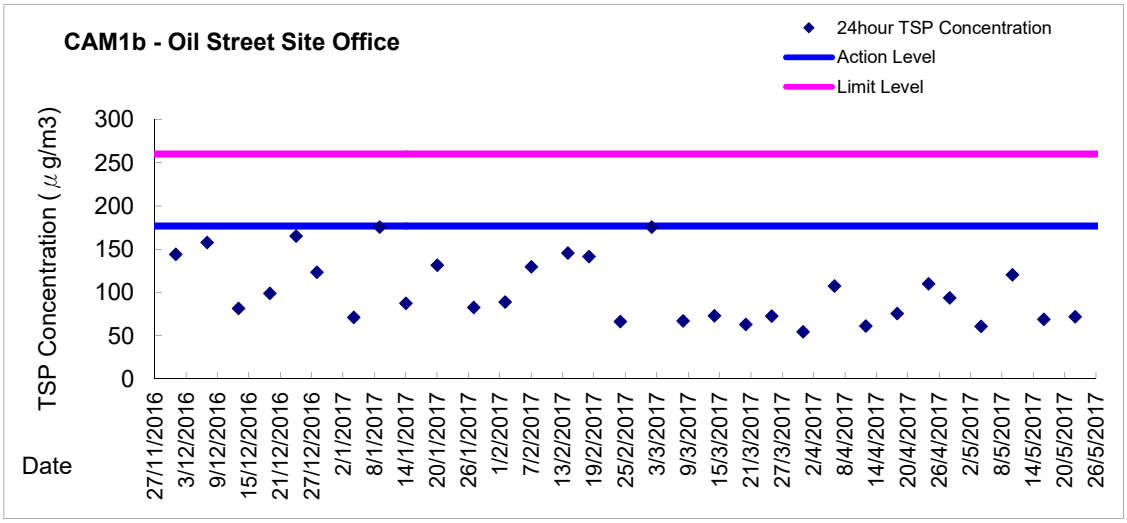
Graphic Presentation of 1 hour TSP Result

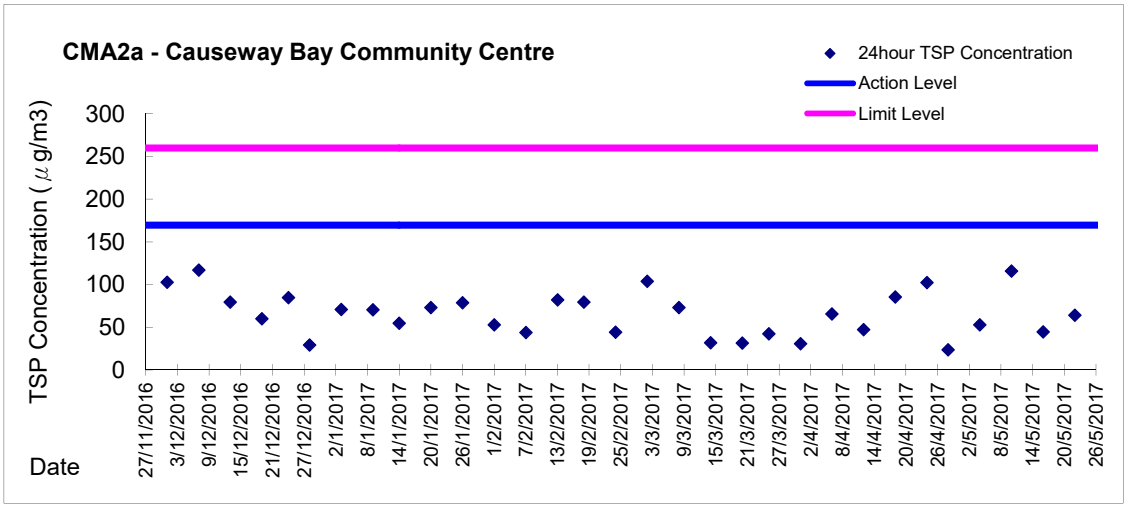


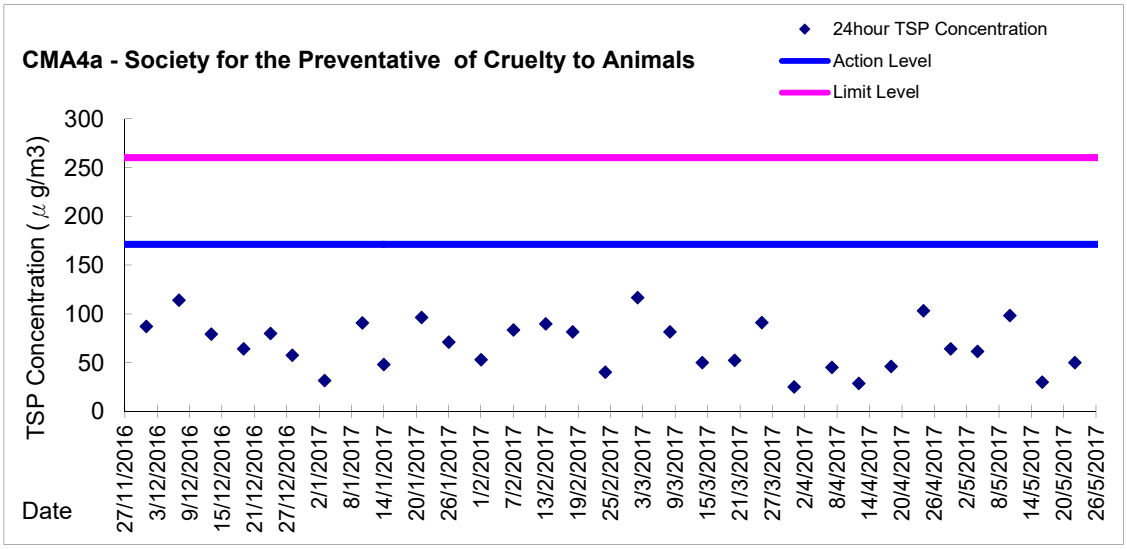




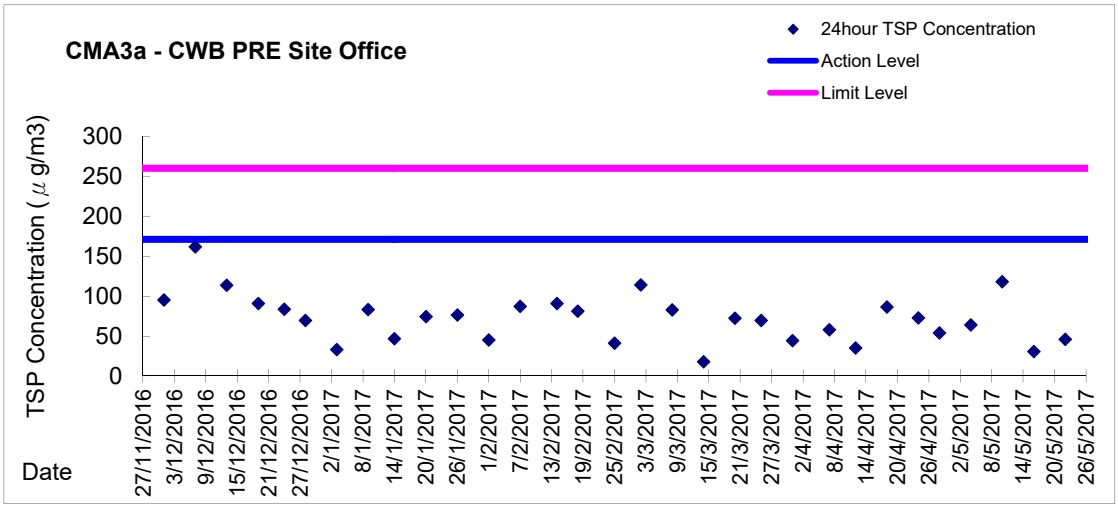
Graphic Presentation of 24 hour TSP Result

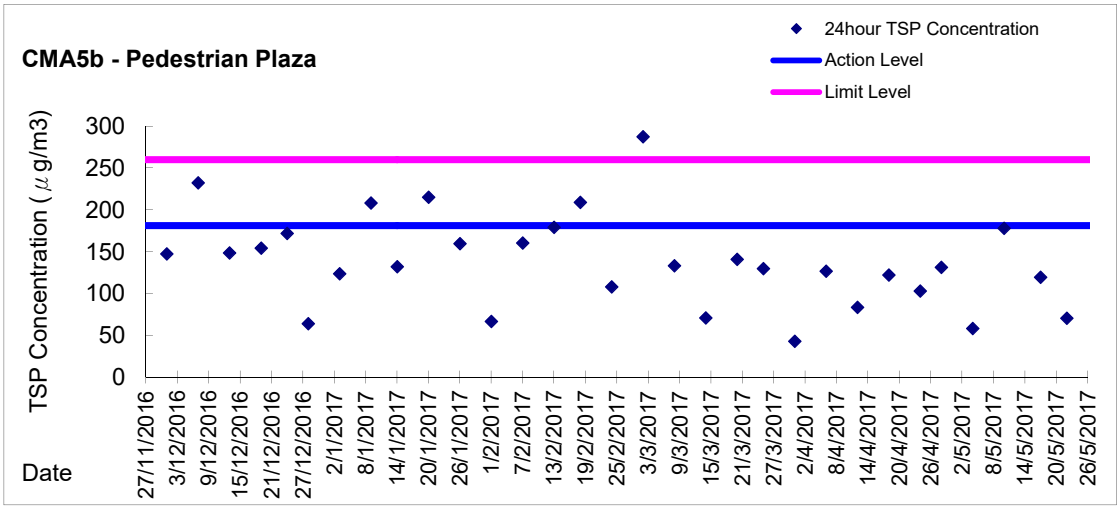


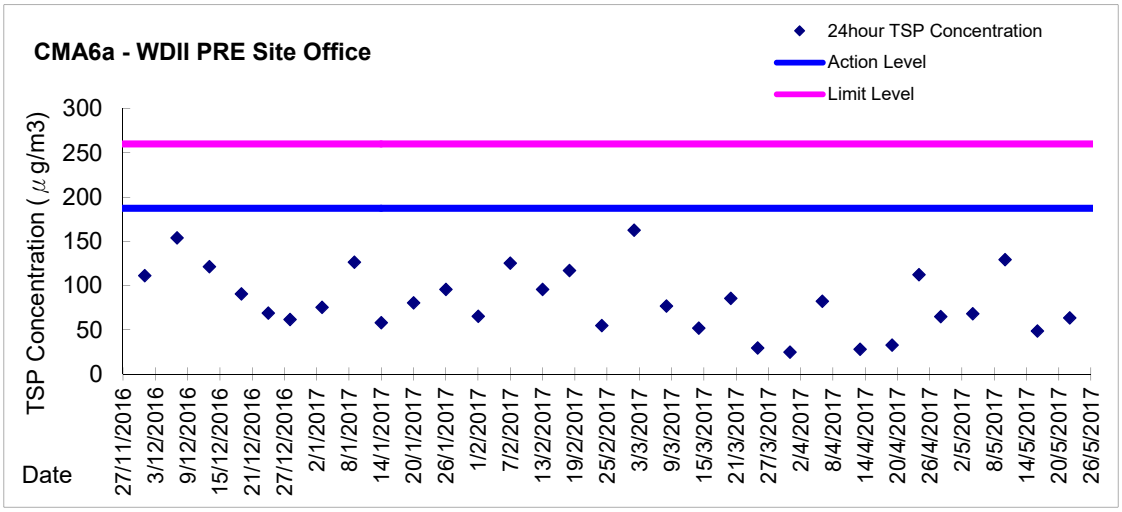




Graphic Presentation of 24 hour TSP Result



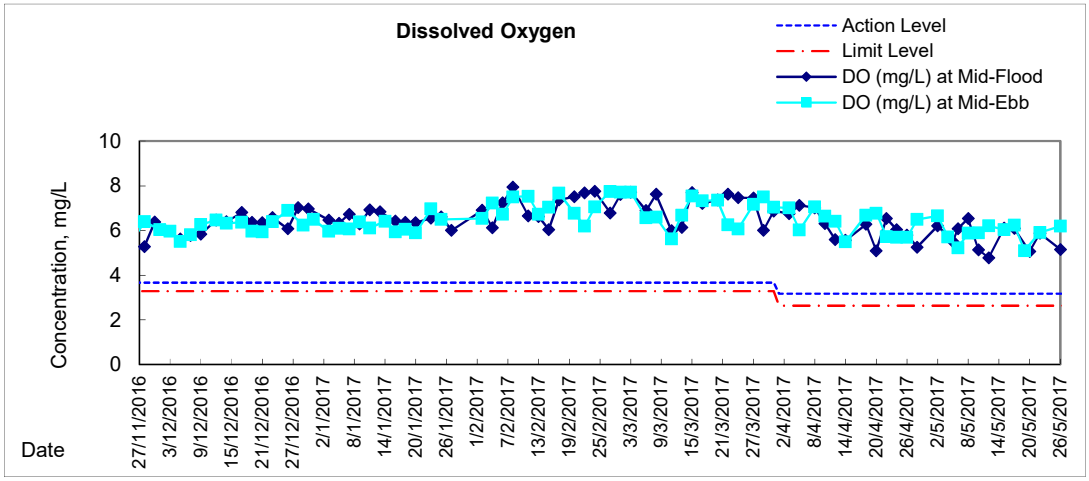


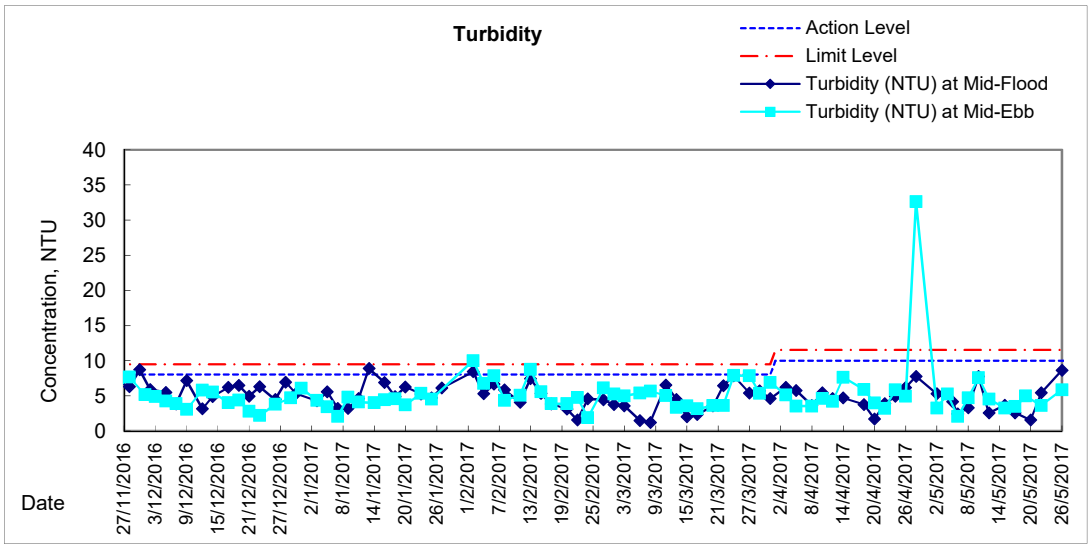


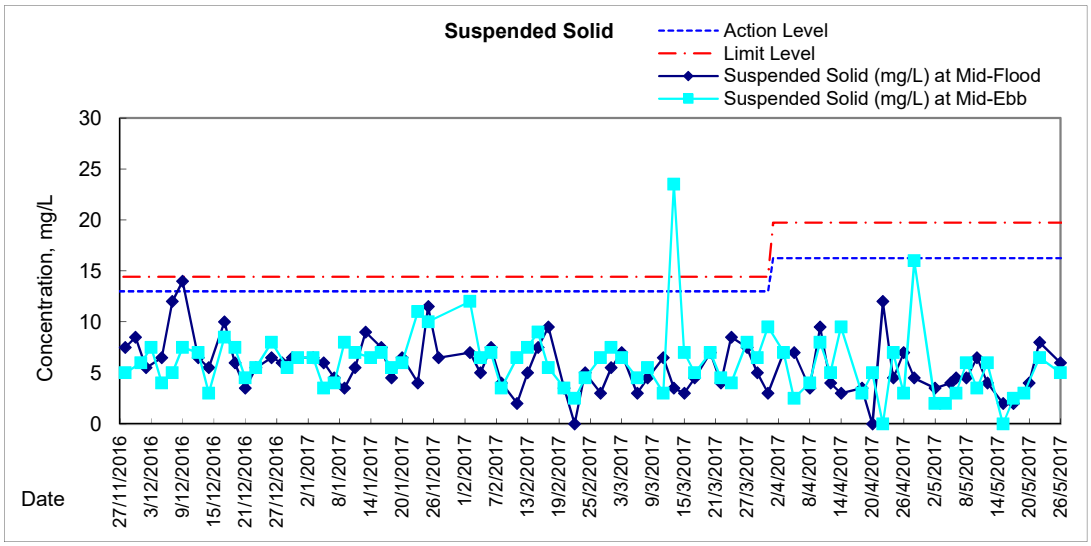
Appendix 4.3

Water Quality Monitoring Graphical Presentations

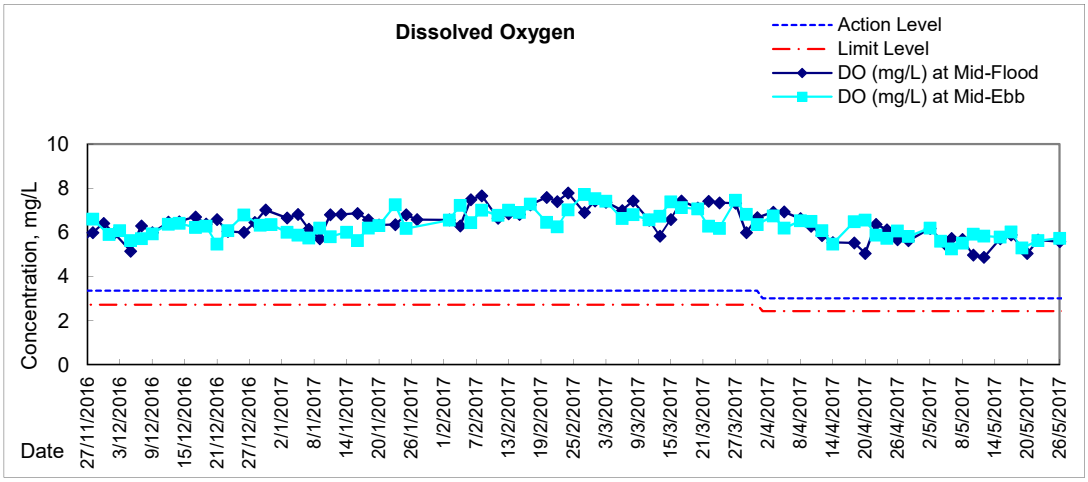
Graphic Presentation of Water Quality Result of WSD19 - Sheung Wan

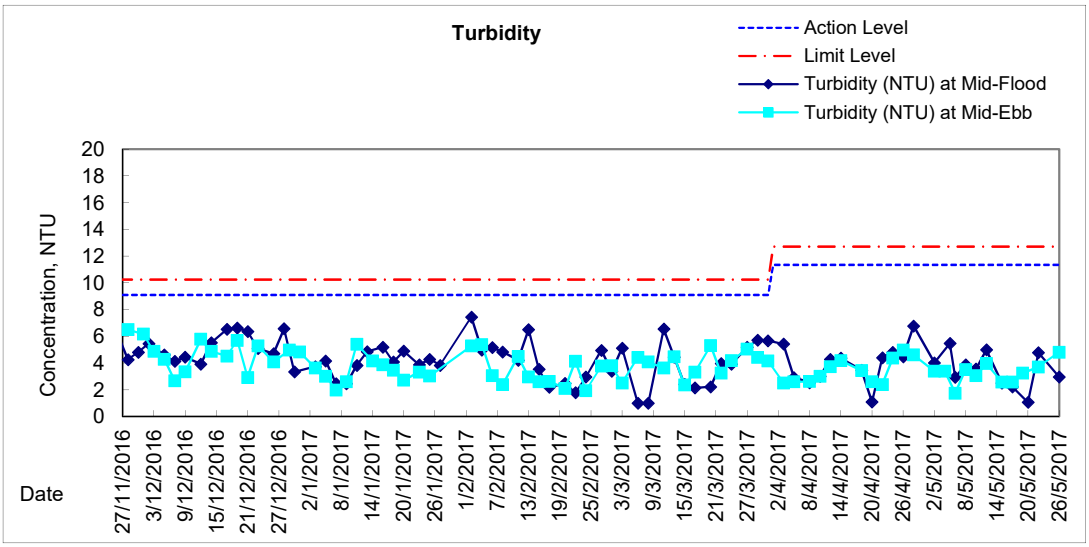


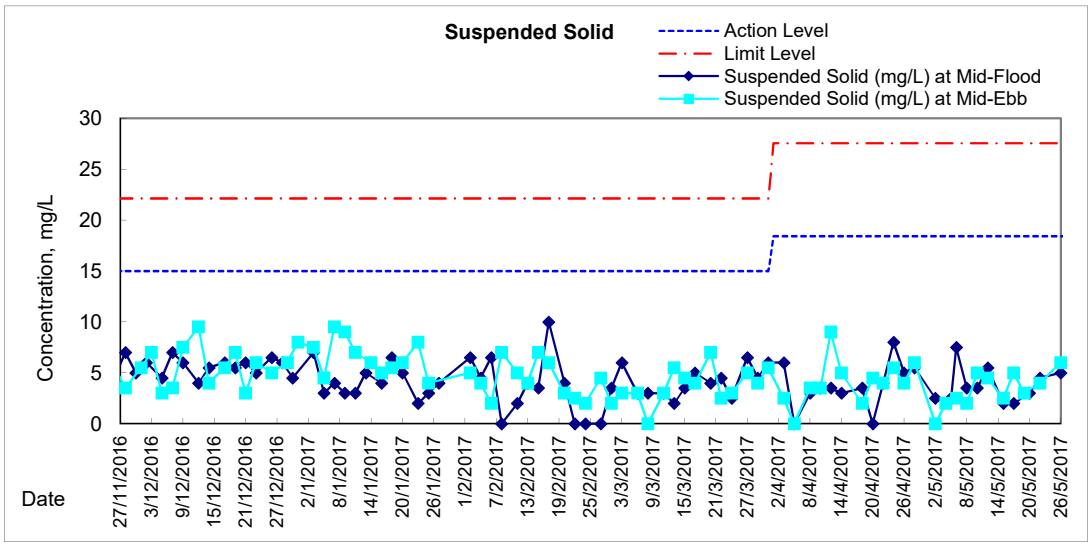




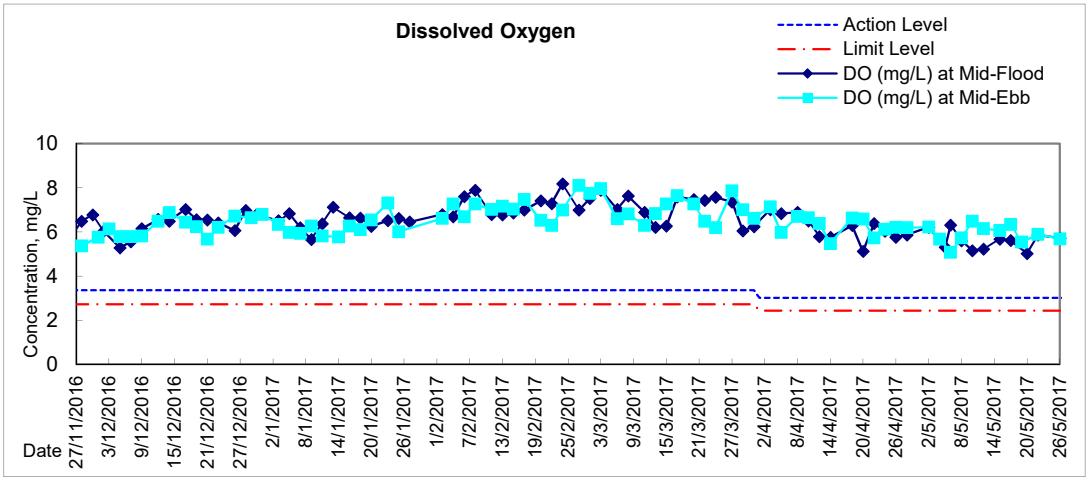
Graphic Presentation of Water Quality Result of C1 - HKCEC

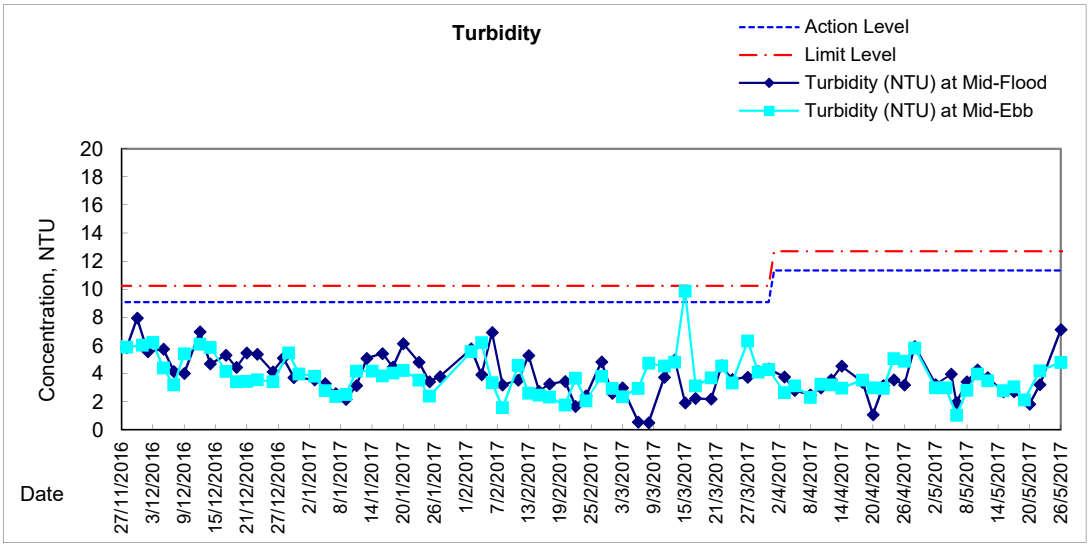


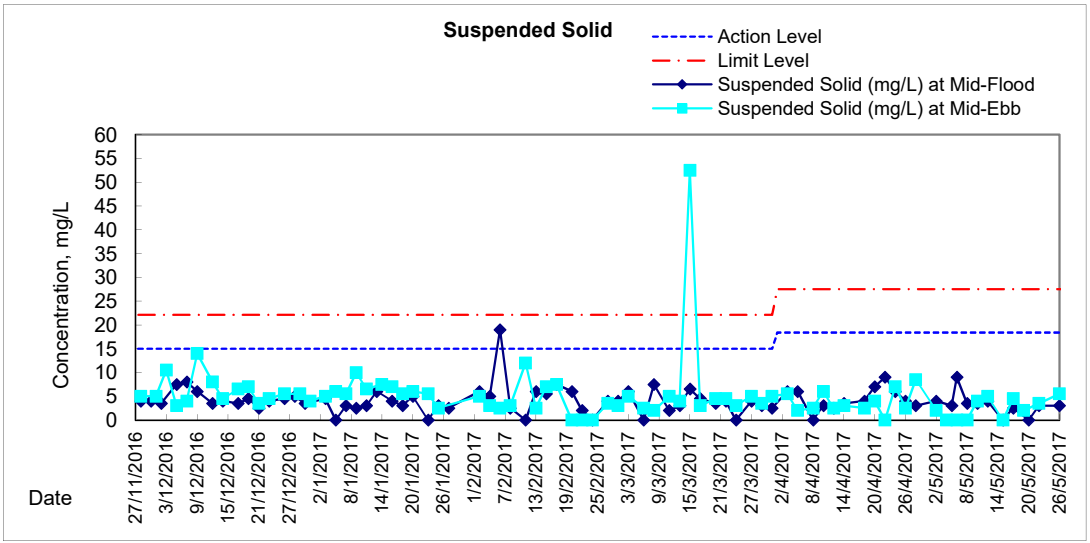




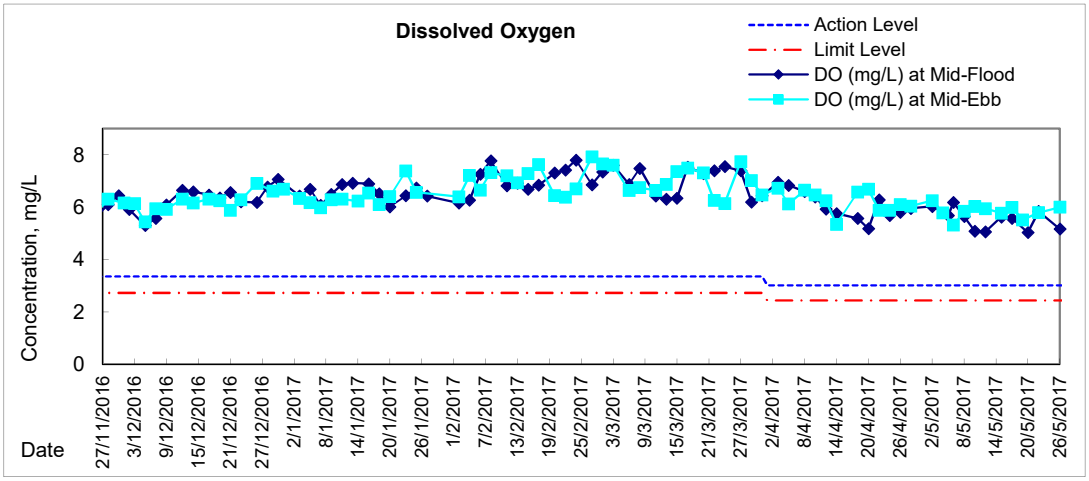
Graphic Presentation of Water Quality Result of P1 - HKCEC Phase I

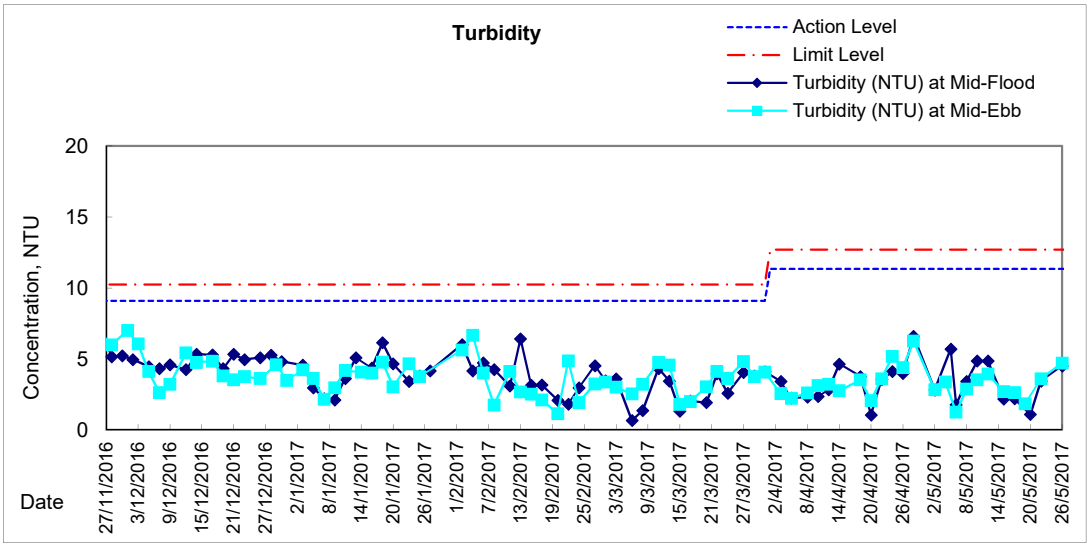


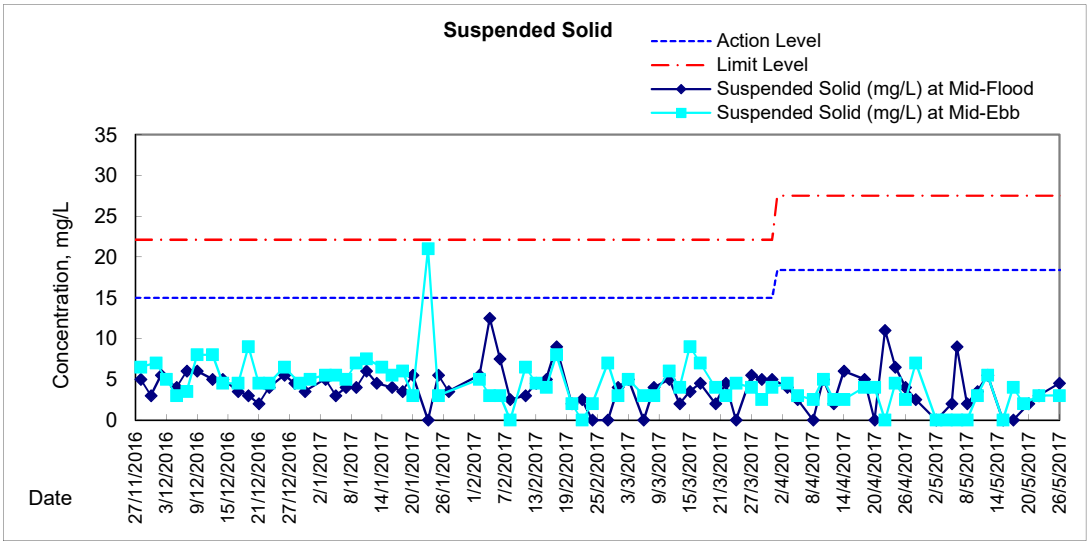




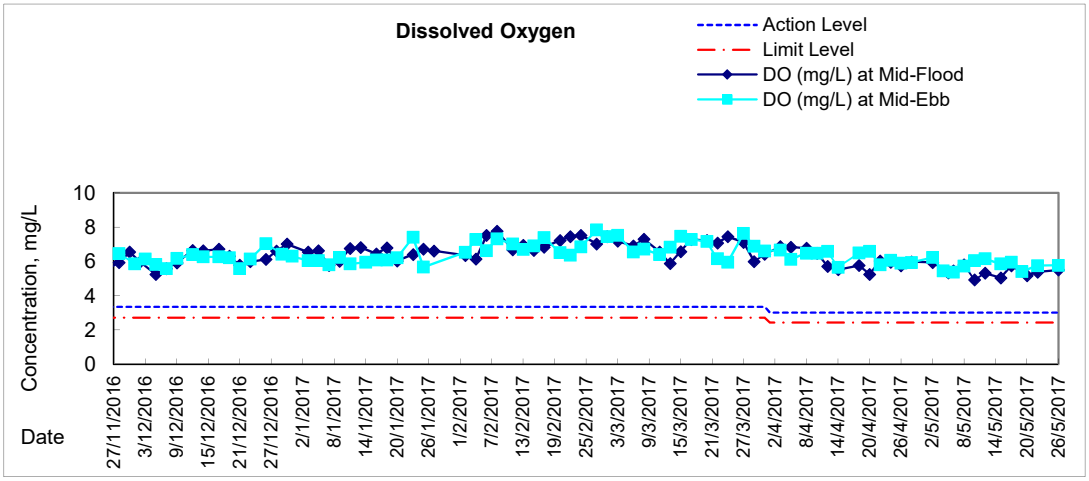
Graphic Presentation of Water Quality Result of P3 - APA

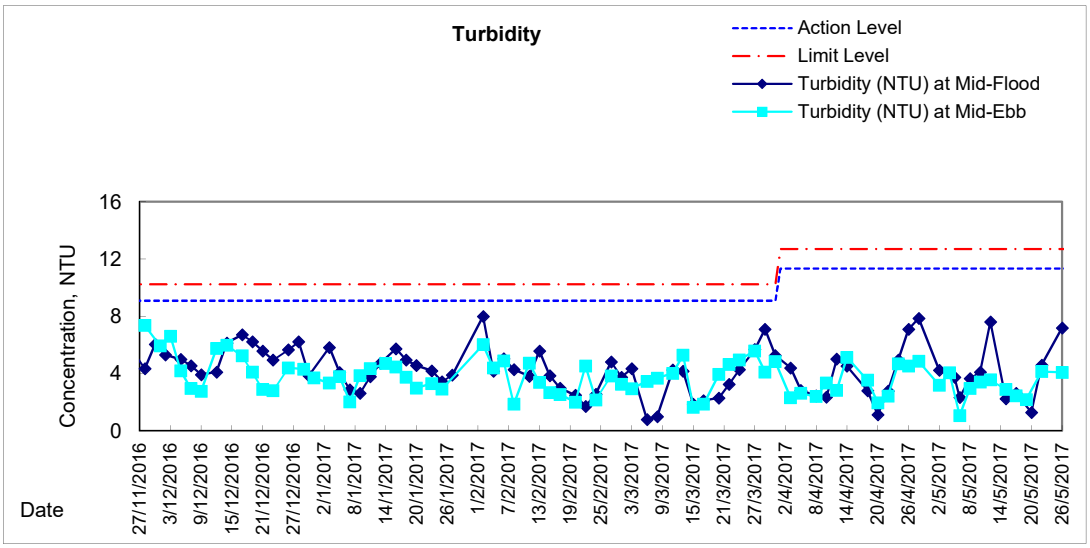


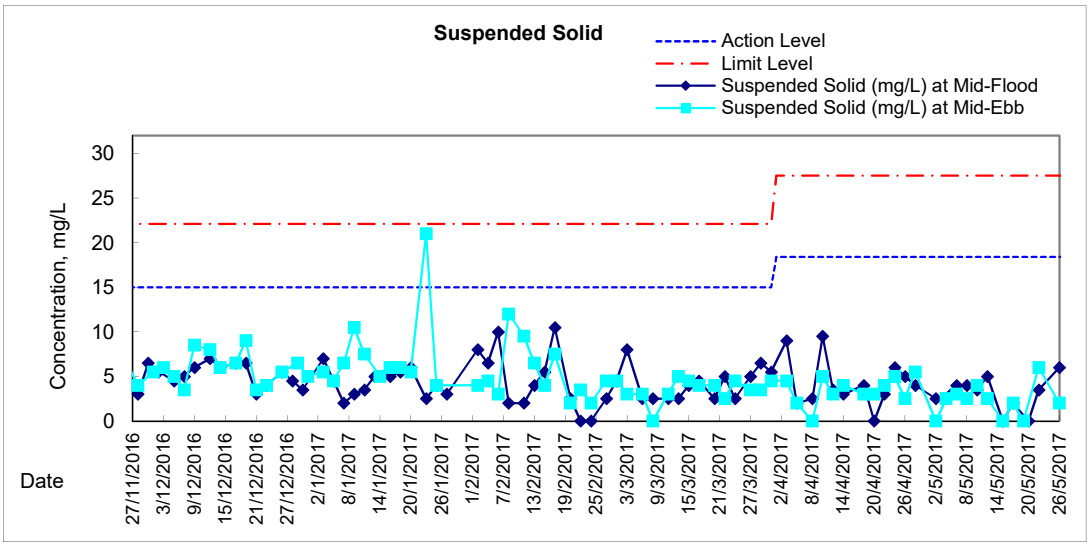




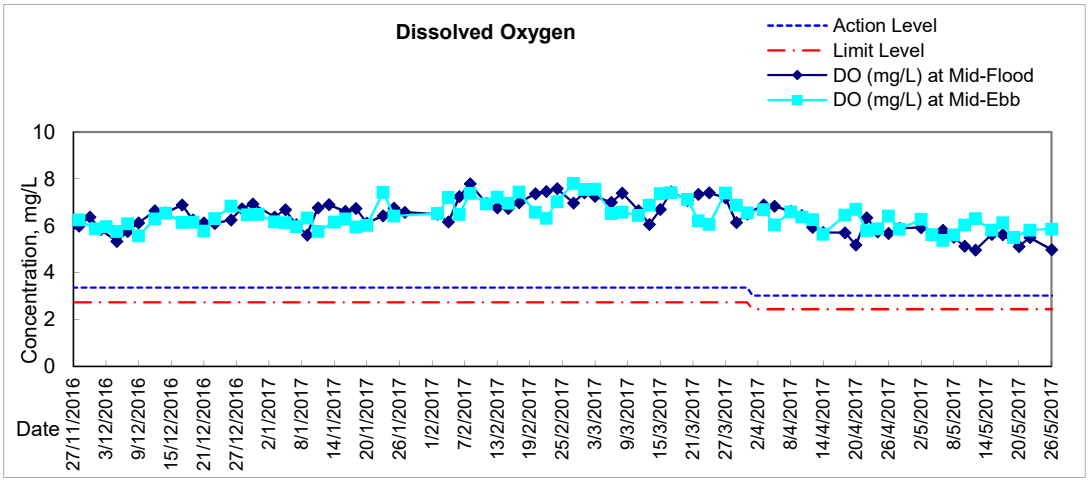
Graphic Presentation of Water Quality Result of P5 - WCT / RT / IT

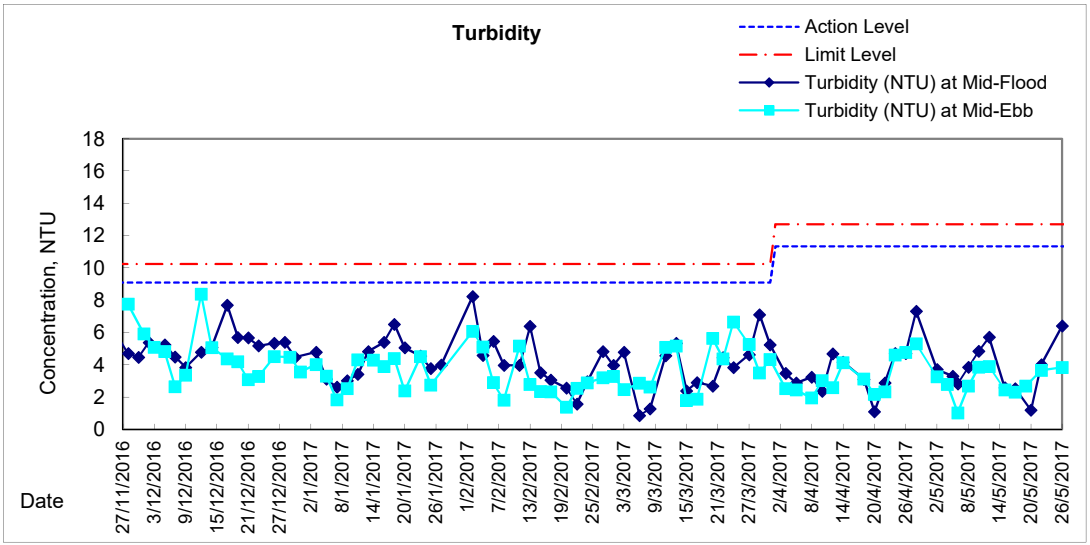


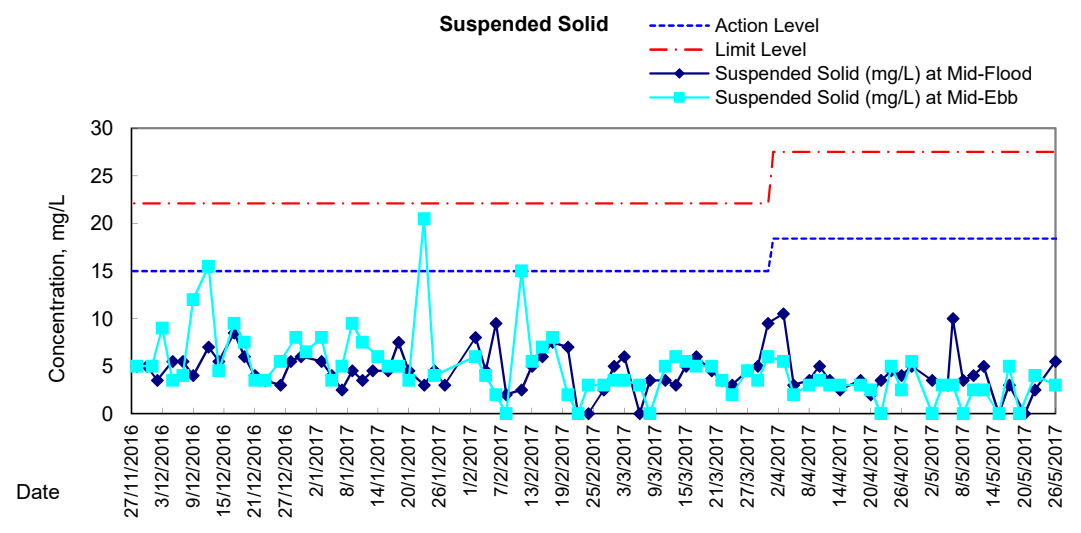




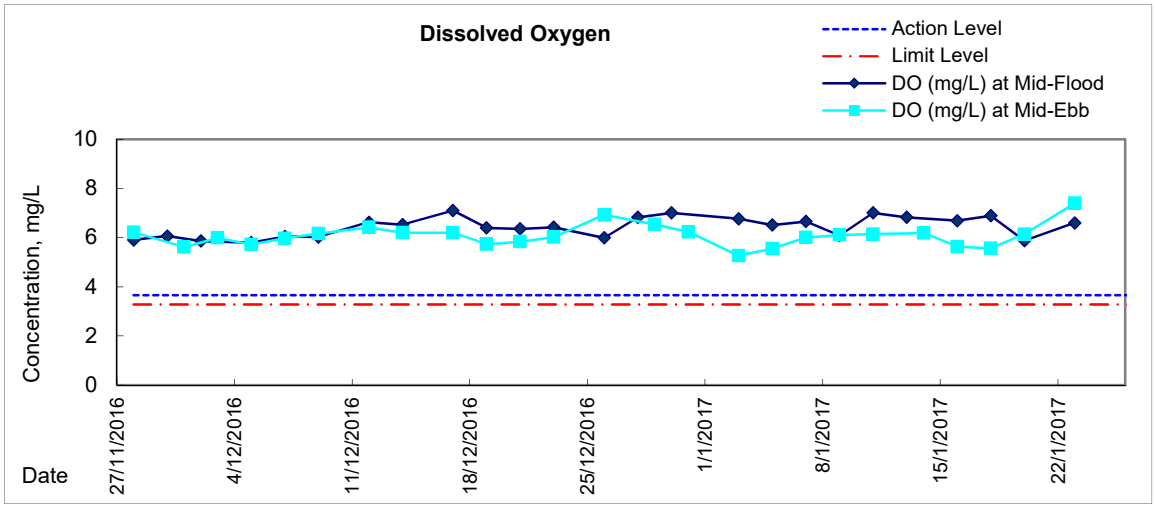
Graphic Presentation of Water Quality Result of P4 - SOC

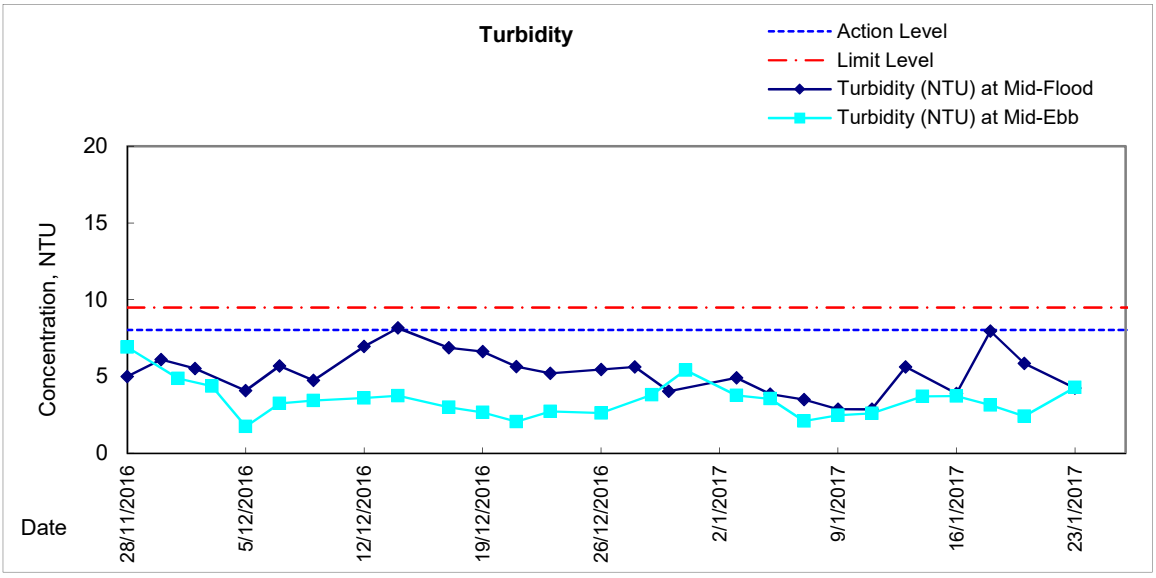


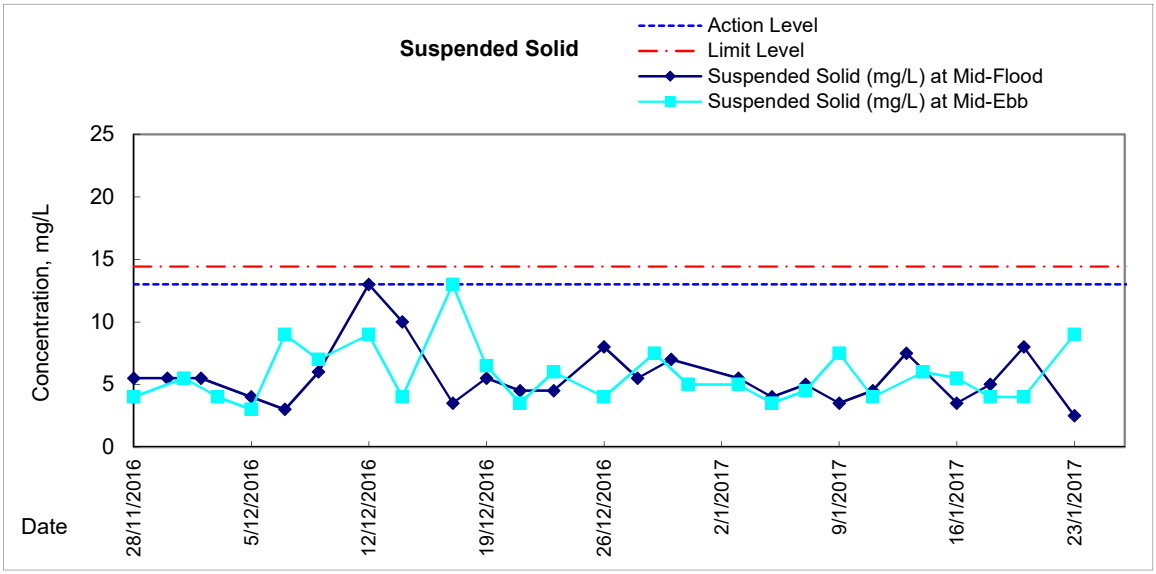




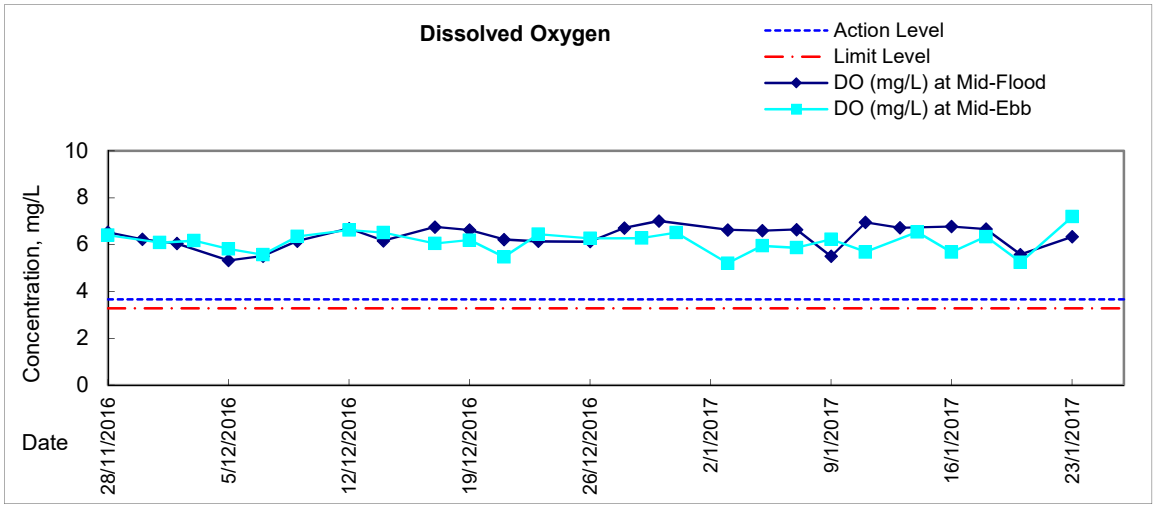
Graphic Presentation of Water Quality Result of RW21-P789W - GEC/CRC/SHK

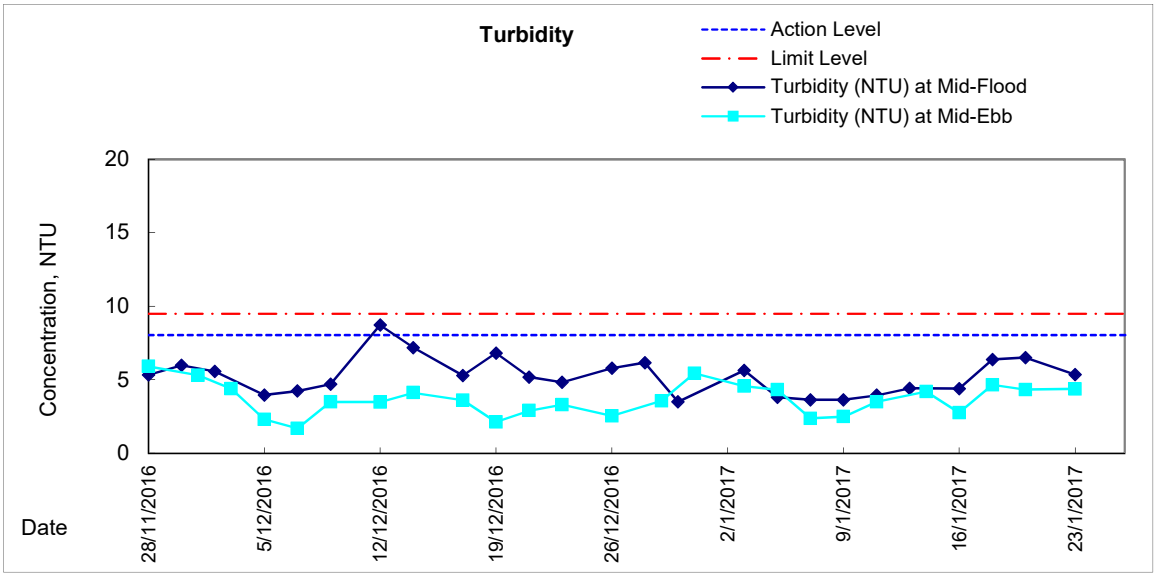


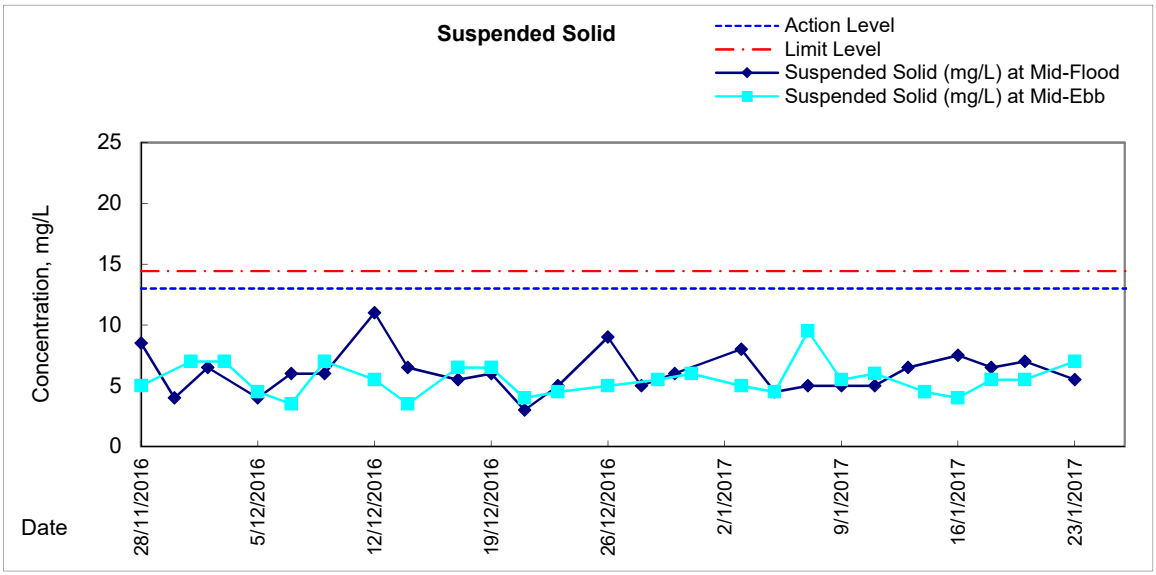




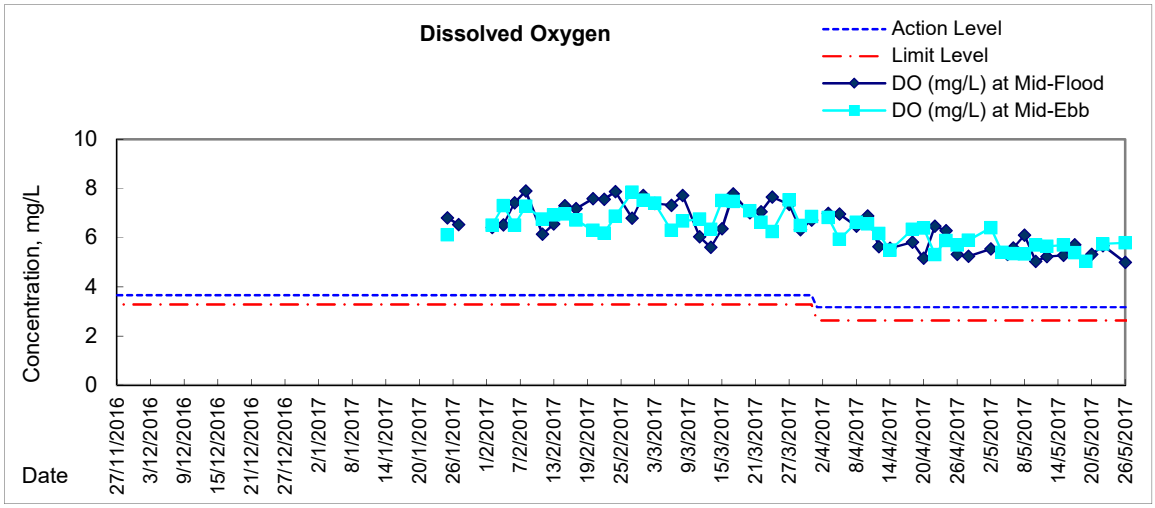
Graphic Presentation of Water Quality Result of RW21-P789E - GEC/CRC/SHK

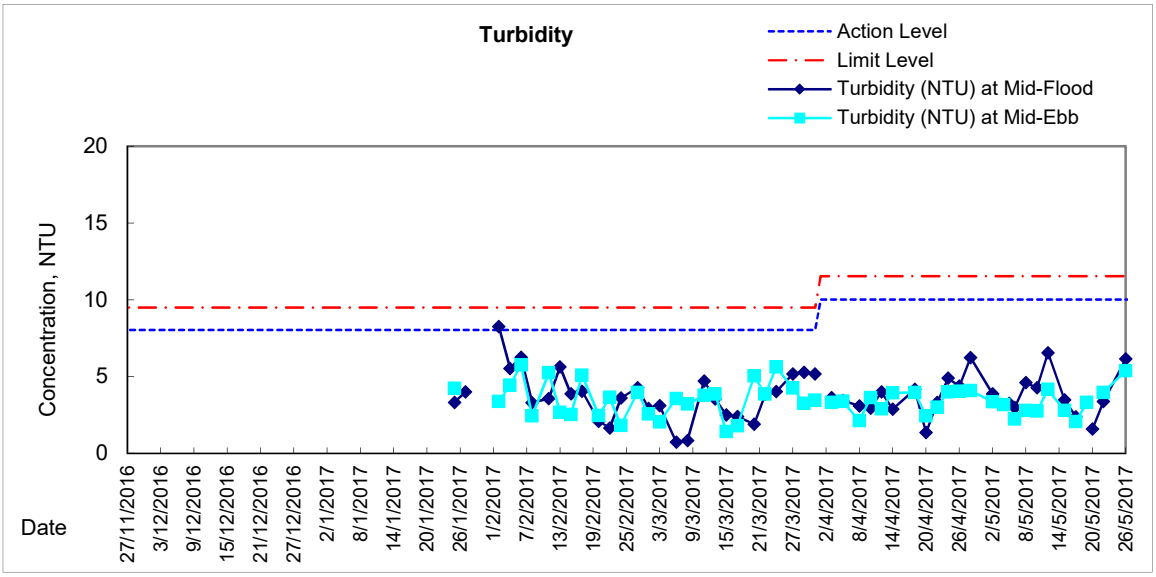


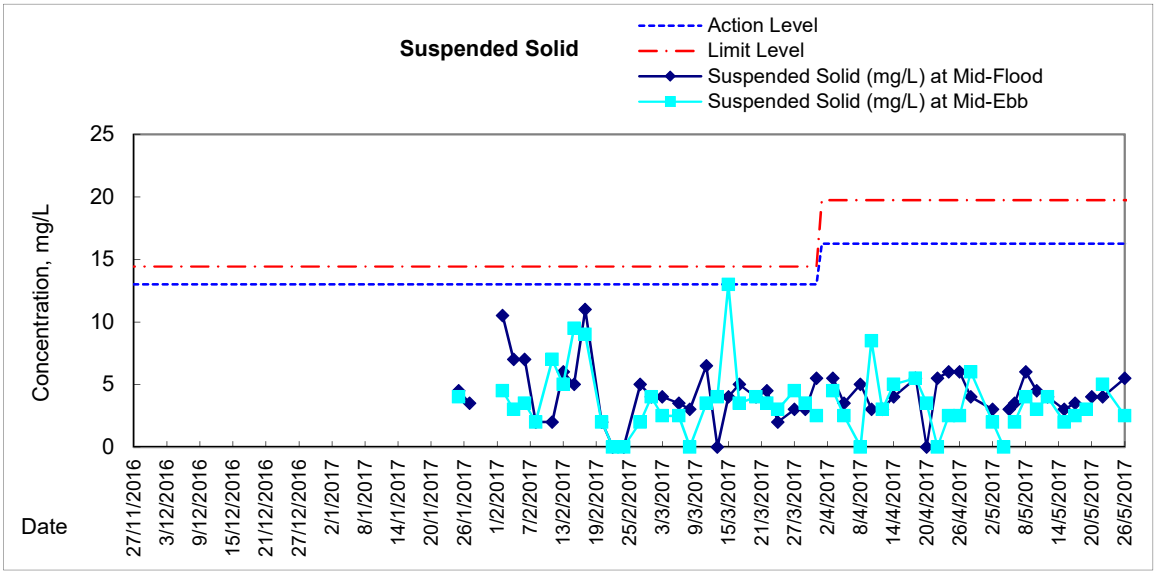




Graphic Presentation of Water Quality Result of RW21-P789 - GEC/CRC/SHK

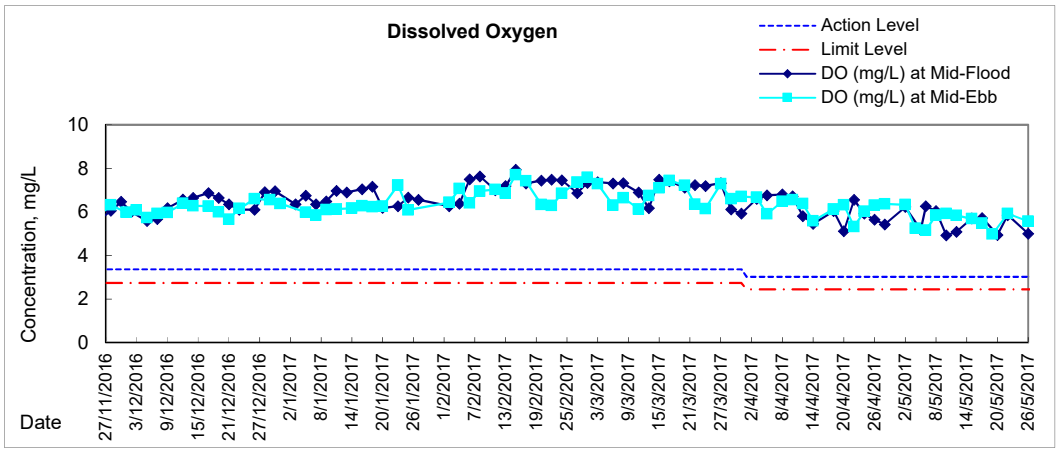


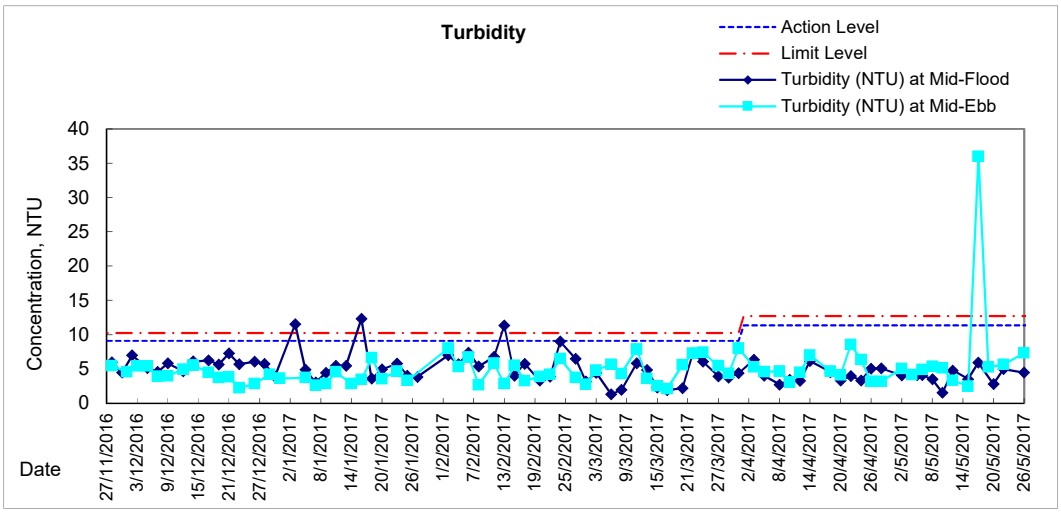


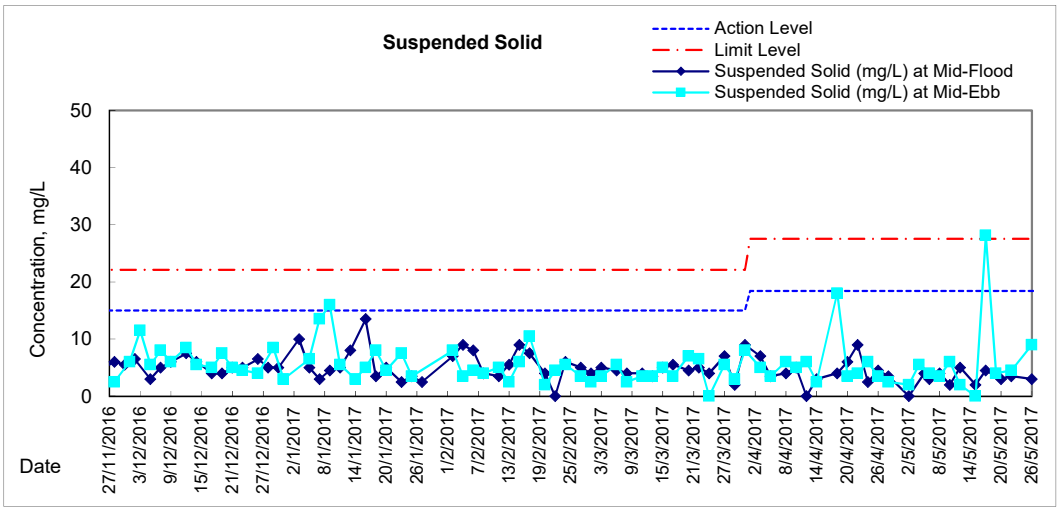


Remarks: With respect to the removal of silt screen system for Cooling Water Intakes P7, P8, P9 and WSD Water Intake RW21, the respective water quality monitoring at monitoring station RW21-P789 was adjusted to RW21-P789 East (RW21-P789E) and RW21-P789 West (RW21-P789W) from 28 November 2016 ebb tide. Due to the reinstatement of the captioned silt screen system, the respective water quality monitoring was reverted to previous monitoring station RW21-P789 from 25 January 2017 onwards.

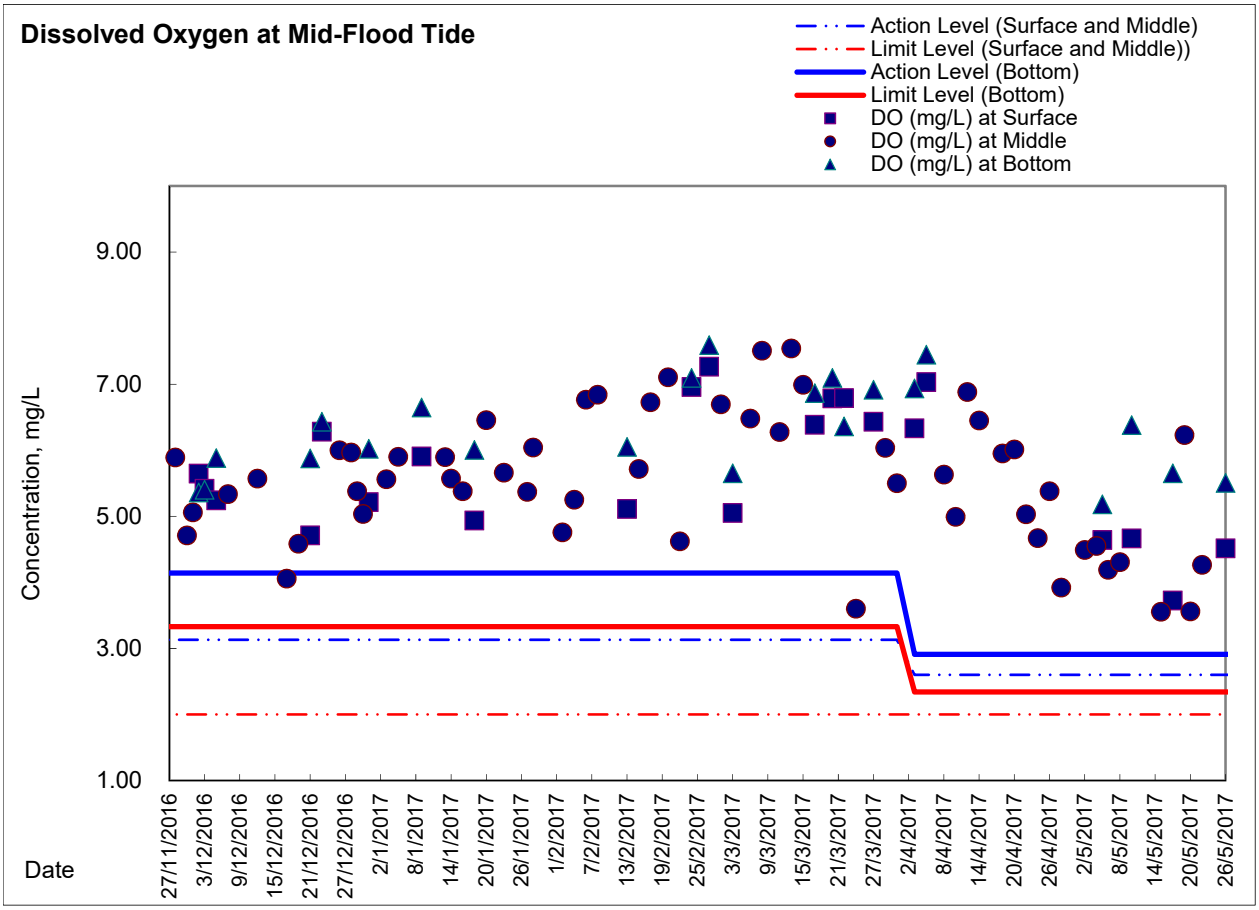
Graphic Presentation of Water Quality Result of C7 - Windsor House

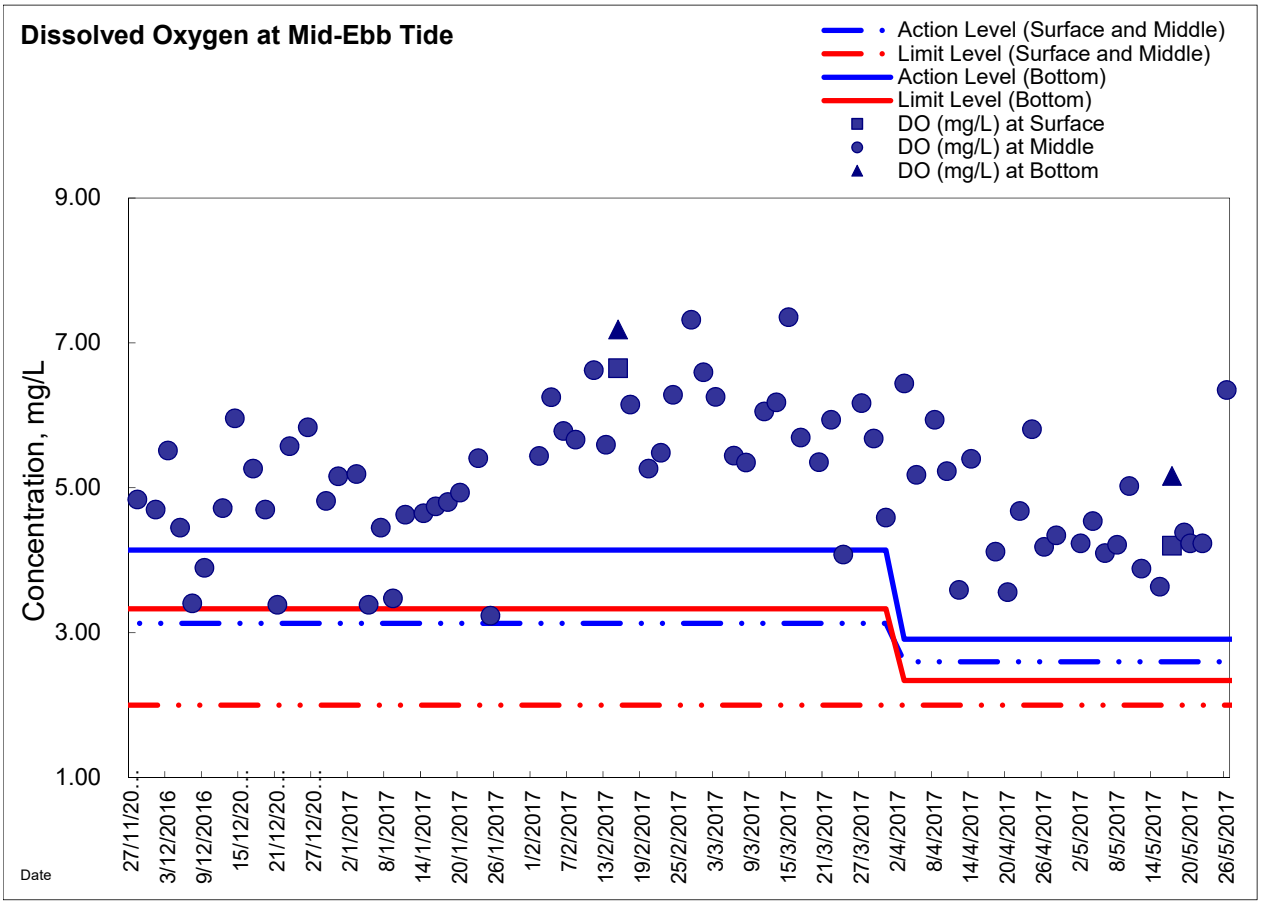




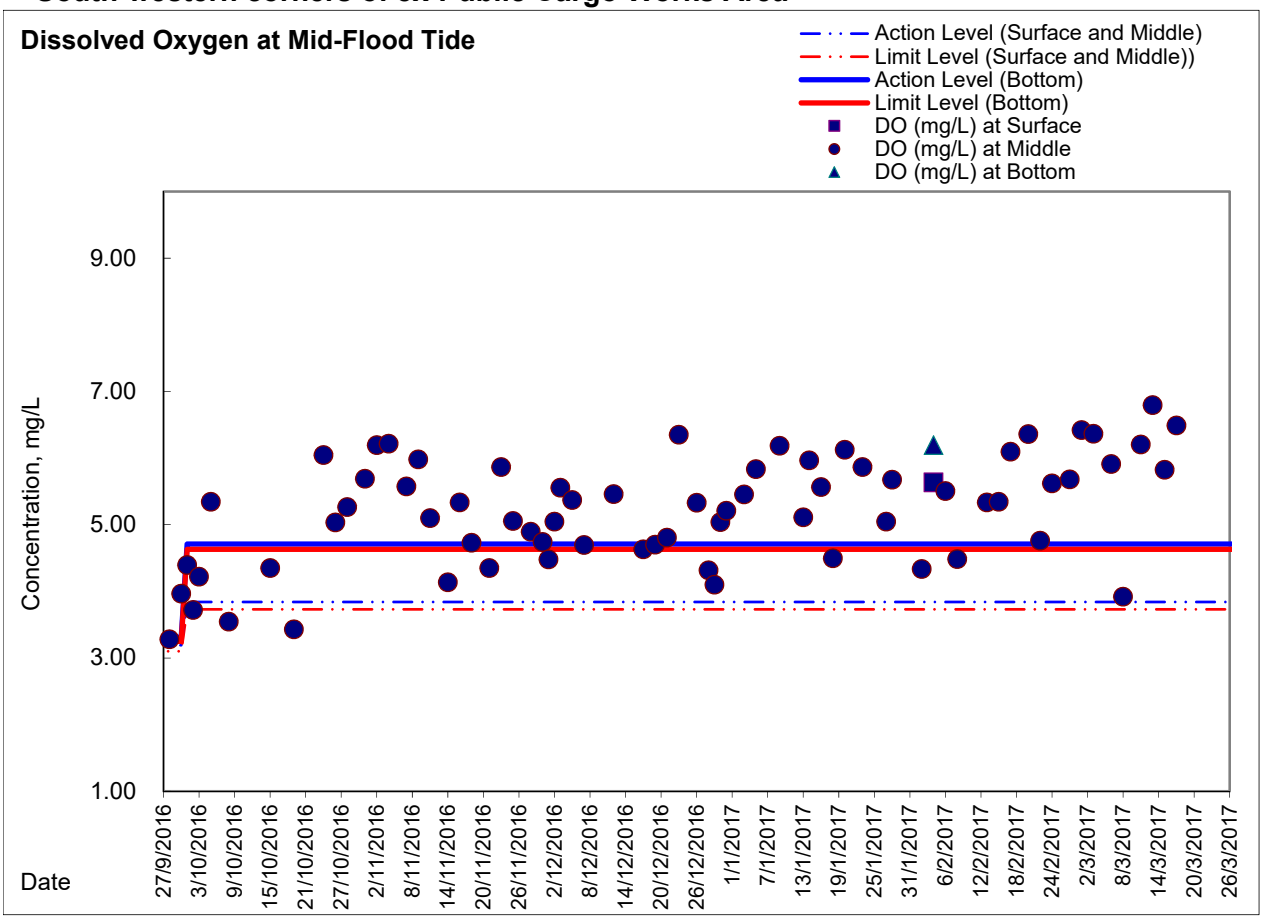


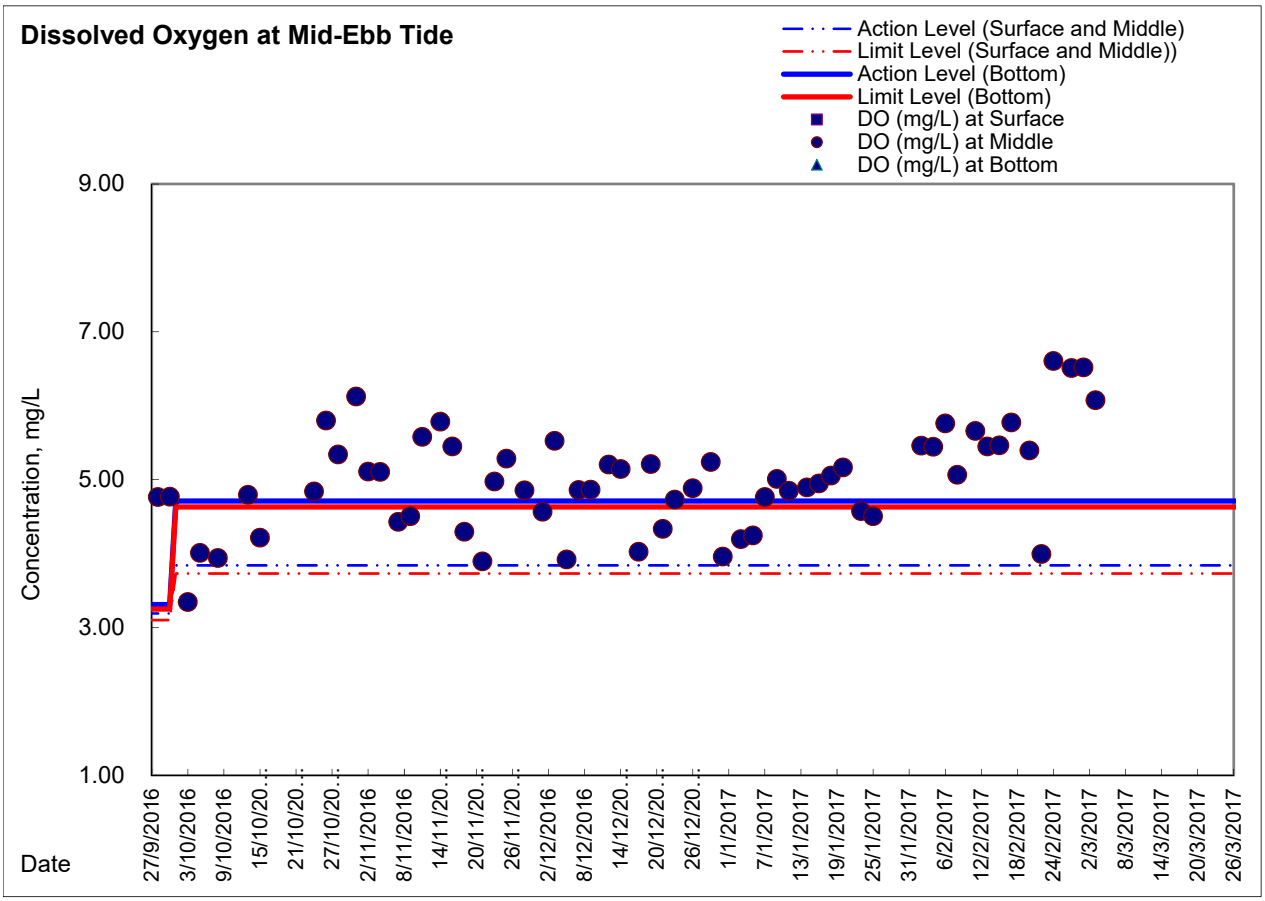
Graphic Presentation of Enhanced Water Monitoring Results (DO) at C6 - Excelsior Hotel



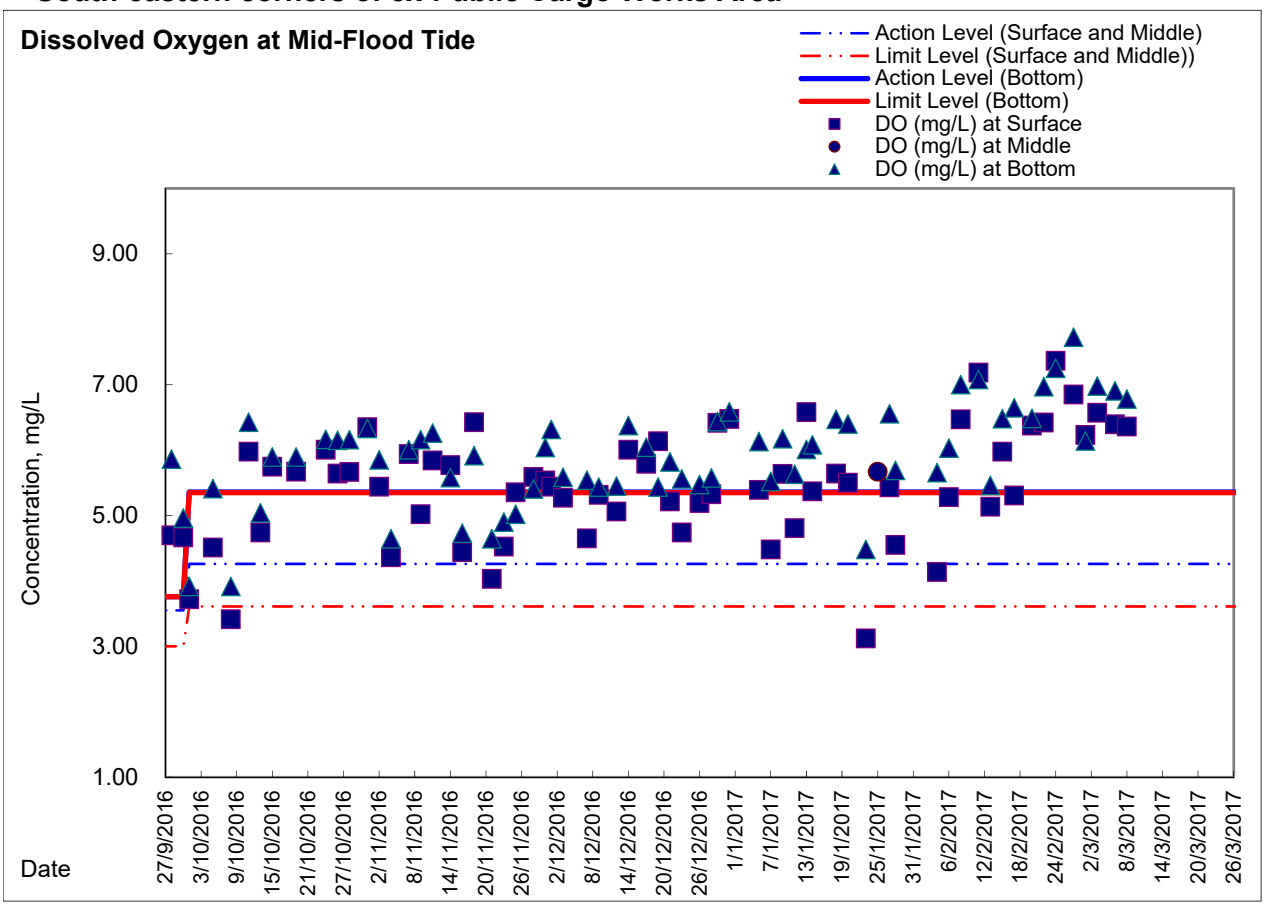


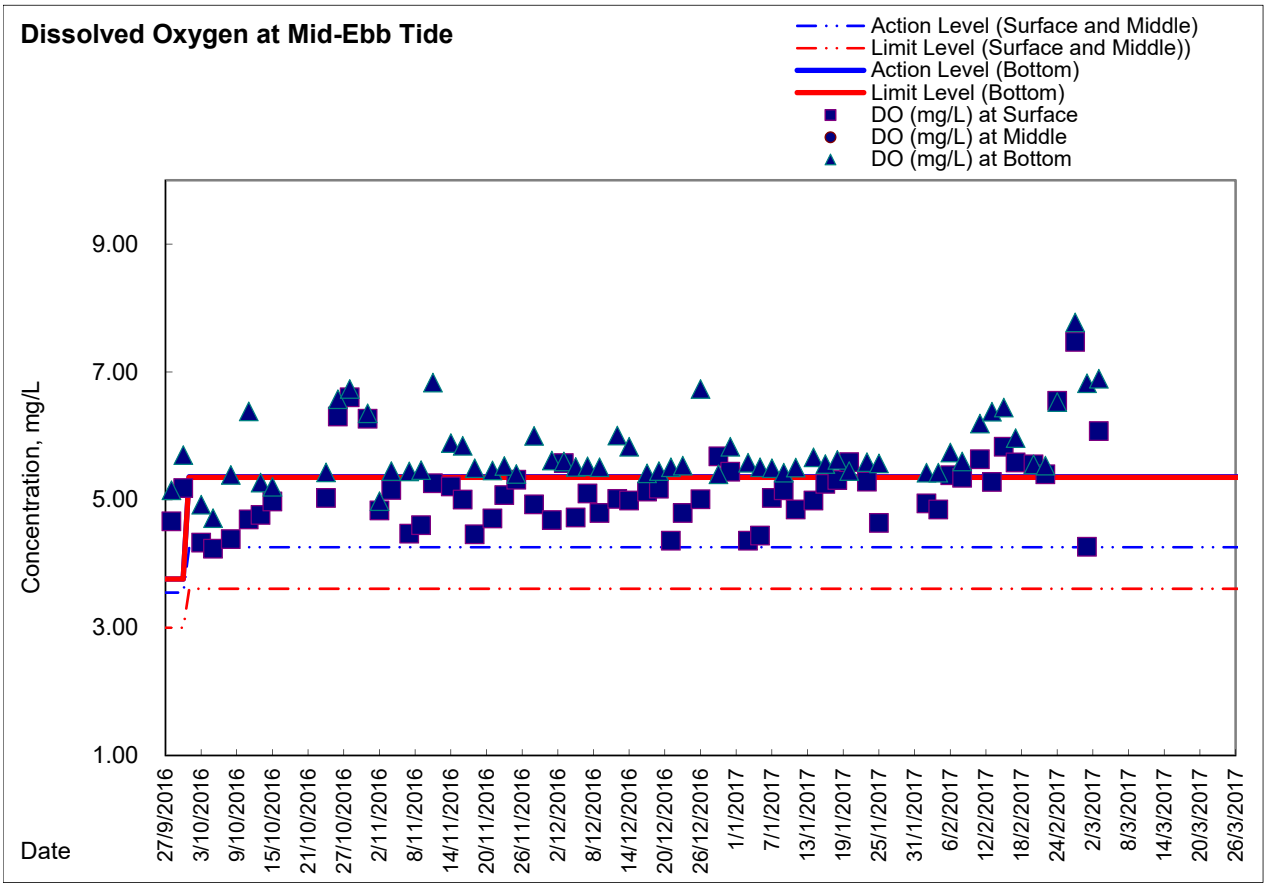
Graphic Presentation of Enhanced Water Monitoring Results (DO) at Ex-WPCWA SW - South-western corners of ex-Public Cargo Works Area





Graphic Presentation of Enhanced Water Monitoring Results (DO) at Ex-WPCWA SE - South-eastern corners of ex-Public Cargo Works Area





Appendix 5.1

Event Action Plans

Event/Action Plan for Construction Noise

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
Action Level being exceeded	1. Notify ER, IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the IEC and Contractor on remedial measures required; 5. Increase monitoring frequency to check mitigation effectiveness. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Review the investigation results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Advise the ER on the effectiveness of the proposed remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Submit noise mitigation proposals to IEC and ER; 2. Implement noise mitigation proposals. (The above actions should be taken within 2 working days after the exceedance is identified)

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
Limit Level being exceeded	1. Inform IEC, ER, Contractor and EPD; 2. Repeat measurements to confirm findings; 3. Increase monitoring frequency; 4. 4. Identify source and investigate the cause of exceedance; 5. 5. Carry out analysis of Contractor's working procedures; 6. 6. Discuss with the IEC, Contractor and ER on remedial measures required; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures; 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC and ER within 3 working days of notification; 3. Implement the agreed proposals; 4. Submit further proposal if problem still not under control; 5. Stop the relevant portion of works as instructed by the ER until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)

Event / Action Plan for Construction Air Quality

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Check monitoring data submitted by ET; 2. Check Contractor's working method. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Notify Contractor. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Rectify any unacceptable practice; 2. Amend working methods if appropriate. (The above actions should be taken within 2 working days after the exceedance is identified)
2. Exceedance for two or more consecutive samples	1. Identify source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and ER; 8. If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Submit proposals for remedial to ER within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate. (The above actions should be taken within 2 working days after the exceedance is identified)
LIMIT LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Amend proposal if appropriate. (The above actions should be taken within 2 working days after the exceedance is identified)
2. Exceedance for two or more consecutive samples	1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)

Event and Action Plan for Marine Water Quality

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action level being exceeded by one sampling day	Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform IEC and Contractor; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC and Contractor; (The above actions should be taken within 1 working day after the exceedance is identified) Repeat measurement on next day of exceedance.	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the ER and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET and IEC and propose mitigation measures to IEC and ER; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)
Action level being exceeded by more than one consecutive sampling days	Identify source(s) of impact; Inform IEC and Contractor; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC and Contractor; Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; (The above actions should be taken within 1 working day after the exceedance is identified) Repeat measurement on next working day of exceedance.	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the Engineer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET and IEC and propose mitigation measures to IEC and ER within 3 working days; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
Limit level being exceeded by one sampling day	Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform IEC, contractor and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, ER and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC, ET and Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the Engineer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET , IEC and ER and propose mitigation measures to IEC and ER within 3 working days; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)
Limit level being exceeded by more than one consecutive sampling days	Identify source(s) of impact; Inform IEC, contractor and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, ER and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC, ET and Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures; Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the marine work until no exceedance of Limit level. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the ER and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER within 3working days; Implement the agreed mitigation measures; As directed by the Engineer, to slow down or to stop all or part of the marine work or construction activities. (The above actions should be taken within 1 working day after the exceedance is identified)

Event and Action Plan for Odour Patrol

Event	ACTION	
	Person-in-charge of Odour Monitoring	**Implementation Agent Identified by CEDD**
Action Level		
Exceedance of Action Level	1. Identify source/reason of exceedance; 2. Repeat odour patrol to confirm finding.	1. Carry out investigation to identify the source/reason of exceedance; 2. Rectify any unacceptable practice 3. Implement more mitigation measures if necessary; 4. Inform EPD or MD if exceedance is considered to be caused by expedient connections or floating debris.
Limit Level		
Exceedance of Limit Level	1. Identify source / reason of exceedance; 2. Repeat odour patrol to confirm findings; 3. Increase odour patrol frequency; 4. If exceedance stops, cease additional odour patrol.	1. Carry out investigation to identify the source/reason of exceedance. Investigation shall be completed within 2 weeks; 2. Rectify any unacceptable practice; 3. Formulate remedial actions; 4. Ensure remedial actions properly implemented; 5. If exceedance continues, consider what more/enhanced mitigation measures shall be implemented; 6. Inform EPD or MD if exceedance is considered to be caused by expedient connections or floating debris.

Appendix 6.1

Complaints Log

Environmental Complaints Log

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
100321a	21/3/2010	ICC Case no. 1-224618029, Ms. Tsang	Location near Tin Hau	Complaint regarding the loud noise and dark smoke in the course of dredging works on 21 March 2010 (Sunday).	1) A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18th Feb. 2010 for the dredging works which carry out at area for North Point Reclamation. 2) Officer from Marine Department, Police and EPD's officer attended the scene for inspection and investigation. 3) The Contractor (CHEC-CRBC JV) strictly comply all the conditions in CNP and take all mitigation measures in order to minimize the potential impacts to surrounding sensitive receivers. A formal letter was issued out by CHEC-CRBC JV and to explain the status of the recent construction activities. 4) No limit level exceedance was recorded on the noise measurement during day time and evening time noise measurement on 23 March 2010. Additional restrict hours noise monitoring at Causeway Bay Community and City Garden was conducted on 5 April 2010 (Public Holiday). No limit level exceedance was recorded in the monitoring. 5) No further complaints were received from Mr. Tsang in the reporting month. The complaint is considered closed.	Closed
100321b	21/3/2010	Unknown	Near the eastern breakwater of the Causeway Bay Typhoon Shelter	A public complaint and enquiry regarding loud noises emanated from dredging activities on 21/3/2010 (Sunday) until 2220 hours and between 1920-1946 hours in the evening of 22 March 2010(Monday).	1) A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18th Feb. 2010 for the dredging works at area for North Point Reclamation during general holidays including Sunday between 0700-2300 hours and any day not being a general holiday between 1900-2300hours. It is complied with the condition of CNP. 2) Officer from Marine Department, Police and EPD's officer attended the scene for inspection and investigation. 3) No limit level exceedance was recorded on the noise measurement during day time and evening time noise measurement on 23 March 2010. Additional restrict hours noise monitoring at Causeway Bay Community and City Garden was conducted on 5 April 2010 (Public Holiday). No limit level exceedance was recorded in the monitoring. 4) No further complaints were received in the reporting month. The complaint is considered closed.	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
100504	4/5/2010	Public complainant received by ICC (ICC case: 1-233384048)	Watson Road	Complaint on the noise nuisance due to the large scale of dredging machine (face to Island East Corridor) in particular the hours 1900 to 0800 and request to reduce the noise level.	1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0119-10 for their dredging works. Contractor has implemented mitigation measures to reduce the working hour not later than 2230. 2) According to RSS 's record, no more daytime and night time dredging since the departure of the split hopper barge from the workplace on 29 April 2010 at 1900 hrs to 5 May 2010. 3) No further complaints were received in the reporting month. The complaint is considered closed.	Closed
100731	31/7/2010	Mr. Lee received by ICC (CC Case: 1-250702681)	Oil Street to Watson Road	Complaint on the noise nuisance due to the dredging works. Three construction plants were operated concurrently.	1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0371-10 for their dredging works. 2) There was only 1 grab dredger operated by Contractor within NPR project site area for dredging works. 3) No noise exceedance was recorded at noise monitoring station at Victoria Centre on 27 July and 3 August 2010 during daytime and evening time period. 4) It is considered as invalid from the EP and CNP point of view.	Closed
100812	12/8/2010	Mr. Wong, Harbour Heights (Management) Ltd.	Harbour Heights	Management office received their resident complained on the noise nuisance from the dredging works at the marine works area adjacent to the Harbour Height during the period from 0700 to 2200.	1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0371-10 for their dredging works. Contractor has implemented mitigation measures to reduce the working hour not later than 2230. 2) No noise exceedance was recorded at noise monitoring station at Victoria Centre on 10 and 17 August 2010 during daytime and evening time period. 3) It is considered as invalid complaint. No further complaints were received in the reporting month. The complaint is considered closed.	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
101108	8/11/2010	Mr. Nip received by ICC (CC Case)	Sai Wan Ho	Visual concern around the seaside silt screen outside the WSD freshwater intake pump at Sai Wan Ho (Monitoring station ref no.. WSD15)	1) Contractor for HY/2009/11has been regular checked of condition and removal of trapped rubbish before the dismantling of the floating silt screen to be replaced by wall mount silt screen. 2) Follow-up action had been immediately carried out to check and clear the floating refuse around the seaside silt screen after receipt of the complaint. 3) Removal of seaside silt screen outside the WSD freshwater intake (WSD15) by contractor HY/2009/11 was checked and confirmed dated 9 November 2010. Silt screen has been deployed into the existing steel frame at WSD15 for the protection of WSD salt water intake.	Closed
101110	10/11/2010	Mr. Wong, Harbour Heights (Management) Ltd.	Harbour Heights	Management office received their resident complained on the noise nuisance from the power mechanical equipment during the 0700 to 2200hrs	1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0870-10 for their dredging works during evening time. Contractor has implemented mitigation measures to reduce the working hour not later than 2230. 2) No noise exceedance was recorded at noise monitoring station at Victoria Centre on 4 and 10 November 2010 during daytime and evening time period. 3) It is considered as invalid complaint. No further complaints were received in the reporting month. The complaint is considered closed.	Closed
101203	3/12/2010, 01:45a.m.	The resident of Block 11, City Garden by ICC referral from Marine Department	North Point	Bad odour was generated from the dredging plant off North Point	1) The first investigation was carried out by Marine Department patrol in the morning on 3 Dec 2010 at around 10:00 and revealed that a few working barges were anchoring in the vicinity without carrying out dredging work. 2) A further specific investigation inspection on contractor's backhoe barge in the vicinity of City Garden was jointly conducted with Engineer Representatives (AECOM/RSS), and ET on 8 Dec 2010 at 11:30. No bad odour was noted during the investigation. 3) Routine dredging operation of the backhoe barge was performed during the jointed investigation inspection and it was revealed that no bad odour was attributed by the dredged materials inspected.	Closed
101206	6/12/2010	Ms Lui, the resident of 27/F, Block 10, City	City Garden, North Point	Two barges were generating noise at 22:00 on 6 December 2010 in which the noise from	1) ET confirmed the following information with resident site staff on the complaint: • It was referred to the filling operation at North Point	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
		Garden by ICC (ICC case: 1-266039336)		filling operation was louder than the traffic noise & visual impact was generated due to the spot-light pointing directly to the complainant flat, suspected the filling operation was part of Wanchai Development Phase II; Complainant also raised the same complaint to District Councillor, Mr. Hui on 7 Dec 2010 regarding the night-time noise and suspected earlier start of work at 06:30. Complaint also requested for limiting the plant operating hours from 09:00-21:00.	Reclamation of Central Wan Chai Bypass site area instead of part of Wanchai Development Phase II; • Two derrick barges were in operation at the time of complaint for placing 400 rockfill onto the excavation trench and for levelling the formation level to receive the pre-cast caisson seawall; • Flood light on the control mast of derrick barge have no lighting shields for the prevention of glare of flood lights; • No starting work on 7 Dec 2010 at 0630hours. 2) PME used in restricted hours were checked and confirmed compliant with valid CNP no. GW-RS0870-10. The noise level recorded on 6 Dec 2010 was complied with the noise criteria during restricted hour; 3) It was found that the occasional noise nuisance might be caused by the hitting or scratching onto the rock surface during loading down the grab onto the Grade 400 rockfill; 4) The absence of the lighting shields at flood light results in visual glare to the complainant at night-time. 5) Contractor was advised to minimize the finishing time of placing Grade 400 rockfill at 2100hrs and switch off all unnecessary flood lights apart from the light for the safety and security purpose; 6) No further complaint was received after implementation of proposed measures	
110415	15/04/2011	The resident, Mr Law at Victoria Centre by ICC (ICC#1-281451236)	North Point	A dust generation and a concern of mosquitoes breeding complaint in which suspected the filling operation was part of North Point Reclamation.	1) The concerned stockpile was a working stockpile under Contract HY/209/15 and was covered at night time after work. 2) Water spraying on the haul road and potential dust generating material at least 4 times a day was conducted by contractor that complies with the requirement. 3) It is considered invalid but preventive actions can be taken because the stockpile is relatively large and easily visible by complainant. 4) It was recommended that increasing the frequency of water spraying shall be conducted to all potential dust generating materials and activities. Besides, Contractor should consider to cover the idle part of the stockpile 5) The concern of mosquitoes breeding is out the scope of EM&A, the follow-up action is not reported in this monthly EM&A report.	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
110419	19/04/2011	Ms Chiu at Victoria Centre at Victoria Centre by ICC (ICC# 1-272874759)	North Point	The episode of night noise on 19/4/11 and 20/4/11 at 2:50 am and the noise lasted for 30 minutes per night.	1) According to the RSS's record, there was no construction works undertaken under the EP-356/2009 during the concern time period. 2) There was no abnormal real-time noise monitoring data recorded in RTN1 - FEHD Hong Kong Transport Section Whitefield Depot which is next to the Victoria Centre. 3) It is considered as invalid complaint under this Project.	Closed
110617	9/06/2011	Mr. Law from Victoria Centre Management Office	North Point	An odour nuisance suspected generating from the discharge point – Channel T at Watson Road in part of the site area was related to CWB under Contract no. HY/2009/11	1) The complaint was received by ET on 13 Jun 2011. During the weekly site inspection on 7 and 17 June 2011, there was no any odour impact detected in the site area. 2) According to the site record, there was muddy water discharged from the unknown source at upstream of Channel T during heavy rainstorm. No any site surface runoff to the Channel T and out of site boundary was observed in the inspection. 3) In order to prevent muddy water washing out to the water body under heavy rainstorm, a silt curtain was installed at the outfall of the channel by Contractor. ET confirmed with the Resident Site Staff that a silt curtain was installed at the outfall of the channel to prevent muddy water washing out to the water body under heavy rainstorm. Besides, regular cleaning of refuse in the channel has been conducted by Contractor. 4) A further site investigation on 28 June 2011 revealed that no odour nuisance was detected at the upstream of the Channel T and no source of odour nuisance was identified at site. As such, it was concluded that the source of odour nuisance was not related to the Project works. 5) Although no source of odour nuisance was identified at site, the muddy water and dirt from the unknown source at upstream of Channel T may cause a potential smell during low tide and low water flow. Contractor was reminded to remove the silt curtain at the channel on non-rainy day so as to avoid the accumulation of the sediment and dirt in the water channel.	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
110709	09/07/2011	Mr. Au from City Garden Management Office	North Point	A complaint letter to Contractor HY/2009/11 was raised by Cayley Property Management Limit on 9 July 2011 regarding a series of pump breakdown events at seawater intake of City Garden on 4, 6, 7 and 8 July 2011. A lot of rubbish such as plastic bags, nylon bags, nylon-wire mesh was observed sucking from the seawater intake at the seawater front of Block 7 of City Garden affecting the operation of seawater pump plant.	1) Contractor conducted formation works for installation of caisson seawall at C27, C28, C29 and C30 on 4, 6, 7 and 8 July 2011 and no dredging work was conducted during this time period 2) Water mitigation measures of an 80m long silt curtain at the site boundary in front of City Garden Relocation of silt curtain and silt curtain at the outfall of the channel were provided and maintained to accommodate the site works. All vessels are equipped with rubbish collection facilities and disposed the rubbish regularly. Also, daily cleaning actions had been taken by contractor to minimize floating refuse within the site boundary. 3) Moreover, it has been reported several times that discharged from outfall pipeline outside the site boundary near the intake of the pump maybe considered as another source of rubbish generation. 4) Referring to the record provided by Cayley Property Management Limit, the trapped rubbish was unlikely generated from the construction works. It was considered that complaint is invalid and not related to project.	Closed
110710	09/07/2011	Complainant by ICC (ICC no. 1-301520309	North Point	It was received at 00:56 on 10 July 2011. There was complained a derrick barge unloading rockfill material off the shore facing the Harbour Grant HK Hotel causing noise nuisance.	1) ET confirmed with the Resident Site Staff that the complaint was referred to Contract HY/2009/15 for the loading and unloading of fill material at two barges operation in the sea at around 300m adjacent to Island Eastern Corridor (Oil Street Chainage) where is outside the Site of HY/2009/15 in the period of around 19:45 on 9 July to 1:00 on 10 July 2011. 2) The material loading and unloading operation processed in restricted hours was checked without a valid CNP. It was found that the operation was due to an unexpected water leakage of the hopper barge and considered an incident. 3) According to the incident report provided from RSS on 20 July 2011, around 7:30 pm the barge S22 was inclined slightly and slightly water leakage might occur. Due to marine safety concern, the hopper barge would open the hopper to release the contained materials in order to reduce the weight and stabilize the barge. In consider of slight water leakage, the operator decided to use the nearby Derrick Barge ST32 to help for unload the general fill materials first and the unloading operation was started at around 7:45pm, and end at around 1:00 am. Contractor was reminder to provide frequent check of vessel condition	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					so as to prevent recurrent by barge defect	
110723a	23/07/2011	Ms. Law at Victoria Centre by ICC no. 1-303887687	North Point	She concerned that Highways Department published a notice in their Management Office about construction works will be conducted from 0700 hours to 2300 hours during July to December 2011 including Saturday, Sunday and public holiday.	1) It was referred by AECOM to ET on 28 July 2011 2) RSS confirmed that the notice was prepared by Victoria Centre's Management office to their resident and the advice was only given on the extension construction works (for Contract HY/2009/15) to 7am-9pm from Monday to Saturday except Public Holidays and Sundays. 3) As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am and is expected to be completed by mid-August 2011. 4) No noise exceedance was recorded at construction noise monitoring station at Victoria Centre on 19 and 25 July 2011 during daytime while breaking and excavation works were undertaken during monitoring. 5) In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. The complainant was satisfied with the arrangement and no further complaint was received after proposed measures.	Closed
110723b	23/07/2011	Ms. Yau at Block 2, Victoria Centre by ICC no. 1-304013959	North Point	Reclamation work was conducted at Causeway Bay Typhoon Shelter at 7am on 23 July 2011. She complained that the works shall be started later to minimize the noise nuisance to the vicinity of the residents in early morning	1) It was referred by AECOM to ET on 8 August 2011 2) With reference to the construction noise monitoring at Vitoria Centre, no exceedance was recorded on 19 and 25 July 2011 during daytime while breaking and excavation works were undertaken during monitoring 3) As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am and is expected to be completed by mid-August 2011. 4) In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. The complainant was satisfied with the arrangement and no further complaint was received after proposed measures.	Closed
110727a	27/07/2011	Mr. Law from Victoria Centre Management Office by ICC no. 1-304616162	North Point	It was complained by Mr. Law from Victoria Centre Management Office on 27 July 2011 regarding construction noise generated by the construction operations of	1) It was referred by AECOM to ET on 28 July 2011 2) RSS confirmed to start the rock breaking activities for Contract HY/2009/15 at 8am as a mitigation measure to minimize the noise nuisance in the vicinity of the residents. 3) No noise exceedance was recorded at construction noise	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
				Central-Wanchai Bypass at noon rather than in morning at 7am.	monitoring station at Victoria Centre on 25 July and 4 August 2011 during daytime while breaking and excavation works were undertaken during monitoring. 4) In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. No further complaint from complainant was received after proposed the mitigation measure.	
110727b	27/07/2011	Ms. Chiu by ICC no.1-304615409	North Point	Noise nuisance from the excavation works for the Highways Department adjacent to the Victoria Centre was conducted from 7am	1) It was referred by AECOM to ET on 28 July 2011 2) With reference to the construction noise monitoring at Vitoria Centre, no exceedance was recorded on 25 July and 4 and 10 August 2011 during daytime while breaking and excavation works were undertaken during monitoring. 3) As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am.	Closed
	08/08/2011				4) However, complainant did not satisfy with the response on the noise nuisance from the rock-breaking during morning in front of Victoria Centre and then further complaint via 1823 on 7 August 2011. 5) Highways contacted the complainant on 15 August 2011 that the noisy rock breaking operation had been completed. *Remarks: There will be counted as two complaints in this complaint log.*	
110810	10/08/2011	Mr. Yip by ICC no. 1 – 306740207	North Point	Muddy water was discharged from work site to the seafront near Oil Street during heavy rain. The environmental protection measures were not good enough and are needed to rectify.	1) It was referred by AECOM to ET on 17 August 2011. 2) Confirmed with RE, Muddy water was caused by a heap of earth being washed to the sea by heavy rain. The heap of earth was referred as a small stockpile placed close to the seafront in front of Oil Street within the site area under handover transition period from contract HY/2009/11 to contract HY/2009/19. The necessary mitigation measures to protect the small stockpile against rainfall were missing at the time of complaint. 3) Due to the missing of mitigation measures to protect the small stockpile during handover transition period, loose material was washed into the harbour when heavy rain came. Muddy water was formed and dispersed in the sea that caused the water quality and visual concern to the public. The complaint was considered as valid. 4) Contractors were advised to relocate the loose materials	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					away from the coastline as far as practicable. Any loose material placed which needed to be placed near the coastline shall be properly compacted or covered as appropriate. To avoid any further environmental deficiency, Contractors shall ensure all necessary environmental mitigation measures will not be missing during site area handover.	
110826	26/08/2011	Grand Hyatt and a complainant by ICC	Wan Chai	Construction noise and vibration nuisance generated from the works at Convention Avenue and inside the HKCEC1 reclamation area.	1) Confirmed with the Resident Site Staff that the construction works were referred to the Contractor HK/2009/01. 2) The Excavator mounted breaker at Convention Avenue and Drilling rig at HKCEC1 reclamation area were the dominant construction noise source during this period. 3) The drilling rig at HKCEC1 reclamation area and excavator mounted breaker at Convention Avenue were then temporary suspended after received the complaint. 4) Investigation revealed that the erected noise barrier (4m cantilevered movable noise barrier for the drilling rig and 1m movable noise barrier for the excavator mounted breaker) were not located close to the plants to provide adequate noise screening. 5) Contractor was advised to avoid concurrent operation of construction plants at site. Further enhancement of movable noise barriers at HKCEC1 and providing noise enclosure for the excavator mounted breaker at Convention Avenue are needed. 6) Further site investigation and checking on 31 August and 7 September 2011 revealed that the implemented noise mitigation measures were in proper and minimize the noise impact.	Closed
110826A	26/08/2011	A complaint letter from Mr. Au of Cayley Property of City Garden	North Point	Harbor front adjacent to their cooling water intake suction which caused 3 times of system breakdown of the sea water pump on 9, 22 and 25 August 2011.	1) It was referred by AECOM to ET on 29 August 2011. Confirmed with the Resident Site Staff that the • construction works were referred to the Contractors HY/2009/11 and HY/2009/19. • The pump is located on the site area of HY/2009/19 • A temporary garbage defender was installed on 23 July 2011 by HY/2009/11 and the shape of the defender was adjusted on 8 August 2011 in order to excluse the outfall. • An ad hoc inspection of the effectiveness of garbage defender was conducted with RSS (CWB project	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					team), contractor of HY/200911 and HY/2009/19 and IECon 29 August 2011. Inspection report of it was submitted to RSS on 19 September 2011. • Daily cleaning near the water intake was conducted twice a day by contractor HY/2009/19. • In response to City Garden request, the contractors have set up the temporary garbage defender in function and collect the floating refuses, but cannot eliminate all refuses, in particular the refuse coming from the seabed 2) According to the complaint letter from Cayley Property, the outcomes of the preventive measures were not complying wih their expectation. 3) During on-site inspection, floating refuses observed occasionally outside the garbage defender. No conclusion could be made for the source of these floating refuses. On the other hand, some of the refuses were observed floating behind the garbage defender during investigation. 4) All daily cleaning actions had been taken by contractor to minimize floating refuse inside the construction site. 5) It was noted that the cooling water intake was accessible to the public. As such, fish breeding and fishing activities were observed even though a notice has already hoisted. Also, tripping of rubbish by the passers-by could result in a lot of rubbish accumulated around the intake point. 6) Referring to the record provided by CPML, there were a lot of nylon/ plastic bags and nylon wire mesh that matched those rubbishes generated from the public activities. 7) Contractors have fulfilled the requirement of site cleanness and no exceedance was recorded during Water Quality Monitoring. It is consider the cause of this complaint is not related to project and environmental issue in this project as well. No more complaint received after ad-hoc inspection	
111014	14/10/2011	The complainant, Ms. Tam complained via hotline 1823	Wan Chai	The polluted fumes and exhaust from the excavation by sub-contractor of CEDD on pedestrian way outside no.25 Harbour Road (in front of the Harbour Centre)	1) RSS notified ET to carry out investigation on 17 October 2011. 2) ET confirmed with the Resident Site Staff that the location of the excavator was within site area of Contract no. HK/2009/02 undertaking the water cooling main reprovision works along the Harbour Road. The plants including the excavator have been checked before using	Closed

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					at the site. However, the polluted fumes and exhausted from the excavator was caused due to insufficient maintenance of the plant after using at site. 3) After receiving the complaint, the excavator was then removal off-site for checking and maintenance works on 17 October 2011. 4) Contractor was reminded to enhance regular checking and maintenance to all plants at site. 5) RSS has replied to the complainant on the arrangement of the measures taken on 17 October 2011. Complainant was satisfied with the response and follow-up action taken by the Contractor.	
111104	04/11/2011	Mr. Liu from LCSD complained via Contractor Complaint Hotline	Wan Chai	Complain about a tree near the site of pipe installation works outside Wan Chai Swimming Pool at Harbour Road, the status is not healthy and roof ball of two trees inside the site near Renaissance Hong Kong Harbour View Hotel at Convention Avenue were half cut.	1) ET confirmed with the Resident Site Staff that • A tree near the site of pipe installation works outside Wan Chai Swimming Pool at Harbour Road is the Tree no. TA1122 under Contract no. HK/2009/02. Leaves of a branch of this tree were shrivelled. • Two trees inside the site near Renaissance Hong Kong Harbour View Hotel at Convention Avenue are the tree nos. A160 and A161 under Contract no. HK/2009/01. Part of roof ball of these two trees was covered by the metal plate. 2) Independent Tree Specialists for these two inspected the trees. Contractor HK/2009/01 has taken the measure as recommend downgrading the soil level around the trunk base. Reinstating of the ground works will be conducted in mid-December 2011. For the tree no. TA1122 under Contract no. HK/2009/02, the brown leaves were removed and fenced the tree with orange net is provided to prevent damage of tree trunk by construction works. The distance between the tree and the edge of the trench is kept approximate 2m. Two Contractors were reminded to carry out regular watering to the trees within their site area.	Closed
111106	06/11/2011	Police officer	Wan Chai	Construction noise generated from the site at about 6:30 a.m on 6 November 2011 and require to stop the machine operation	1) According to the information reported by Contractor, one BC cutter and hoist were operated for Diaphragm Wall construction of Shatin-Central Link to inspect bentonite pipes and ensure no damages and all the joints are tightened in good position. Then, the subcontractor for Diaphragm wall, SAMBO Korean foreman stopped the engine of the BC cutter immediately. The police officer recorded the details and HKID number of the foreman and then left. Due to the different language communication between the police officer and the Korean foreman, no	Closed

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					CNP was checked by the police officer. 2) ET confirmed with the Resident Site Staff that same issue was also raised out by RSS at about 7:00a.m on the same day. Besides, it was confirmed that there is no valid Construction Noise Permit for the conducted construction works in the period between 2300 and 0700. 3) Due to insufficient communication between Contractor HK/2009/01 and their Korean Sub-contractor, Korean Sub-contractor had not notified to Contractor before carrying out the inspection of the BC cutter, hoists and bentonite pipes at about 6:00a.m to ensure no damages and all the pipe joints should be tightened and in good position. 4) Contractor was advised to enhance the communication between Contractor and sub-contractor and provide sufficient environmental training to all foreman and operators on restricted hour operation. Futhermore, Construction Noise Permit should be checked and in place for the construction works during restricted hour 5) This complaint was considered in relation to the conducted construction works during restricted hours without valid Construction Noise Permit. No more construction works were conducted during night time period. The construction works will be conducted in accordance with the time period stated in valid CNP. This complaint will be kept in view of any follow-up action from the relevant government activities.	
120405	05/04/2012	N/A	North Point	A complaint regarding excessive noise from construction sites of CBTS was observed daily before 7:30am except on public holidays, and the noise source was mainly from piling works. The complainant requested that construction works should start after 8:30am to avoid nuisance to nearby residents and a speedy follow-up and reply.	1) RSS notified ET on 5 April 2012. 2) ET confirmed with the Resident Site Staff that no piling works were performed during the concerned period. 3) After reviewing the results of noise monitoring (M2b and M3a), no exceedance was recorded during daytime period and the noise level was below 75dB(A). Site inspection for HY/2009/15 was conducted on 10 April 2012. The condition of noise mitigation measures around CBTS was found satisfactory. RSS confirmed that no pilings were performed during the concerned period. The major works included drilling, diaphragm wall construction and excavations. 4) HyD made a reply to the complainant on 16 April 2012 via 1823. HyD replied that the current works at CBTS were drilling, diaphragm wall construction and deep excavations. In order to minimize the noise generated	Closed

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					from the above works, the Contractor had erected temporary noise barriers and provided noise blankets on plants. RSS would continue to work with the Contractor on the effectiveness of the environmental mitigation measures implemented on site. No further complaint was received after the response.	
130308	06/03/2013	ICC Case#1-407181502	Tin Hau	A complaint regarding the dropping of fine rock material into surrounding waterbody was observed during rock breaking operation with two excavators in active operation at the Eastern Breakwater of Causeway Bay Typhoon Shelter near the North Point lighthouse.	1) RSS notified ET on 8 March 2013 2) ET confirmed with RSS that excavation works, installation of buoy, flashing light and silt curtain and dredging works were undertaken at Eastern Breakwater during the concerned period on 6 March 2013. One backhoe equipped with breaker and one derrick barge were confirmed in operation while another backhoe was at idle during the concerned period on 6 March 2013. 3) Reviewing the photo record provided by RSS, the condition of the silt curtain deployed around the Eastern Breakwater on 6 March 2013 was found to be in good condition. It is considered that the silt curtain was properly in place during the concerned period and the concerned act of dropping of fine rock material was confined within the silt curtain boundary without adverse impact to the nearby water quality. Further follow up was conducted on 12 March 2013 during weekly environmental audit inspection, the silt curtain deployed around the concerned area was found to be maintained in good condition and the water quality at the concerned work area was generally satisfactory. No violation of the Environmental Permit condition was found. The contracotr was advised and committed to implement preventive meaures to miminize the potential impact of work including conducting regular diver check to ensure the integrity and the extend of silt curtain deployment and to provide adequtae back up stock of silt curtain for emergency use.	Closed
140612	12/06/2014	EPD ref: EP/860/F2/24 Annex IV	Wan Chai	The complaint is regarding to the water quality of the waterfront outside the Hong Kong Academy for Performing Arts Theatre Block, where a large piece of muddy water was found.	1) WSII RSS team notified ET on 12 June 2014; Notification letter from EPD (ref: EP/860/F2/24 Annex IV) was received by ET on 13 June 2014. 2) ET confirmed with RSS that neither marine construction works nor barge operation was conducted at the concerned location during the time of complaint. With respect to the complaint case, muddy dispersion was observed at HKCEC2W works area on 12 June 2014, and	Closed

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					the dispersion was observed partly extended beyond the outermost layer silt curtain at 1000hrs. Immediate follow up action was requested. 3) It is considered that Contractor's mitigation measures would require further review on the effectiveness to avoid seepage of muddy dispersion such as regular diver inspection check and daily visual checking of silt curtains. Additional silt curtain at marine access zone was installed by Contractor on 12 June 2014 and the double layer silt curtain were generally in order. Follow-up inspection was further conducted on 16 June 2014. The Contractor's investigation report on the complaint case was submitted to EPA via email on 18 June 2014.	
140723	21/07/2014	ICC Case Ref: 2-341537112	Works area opposite to Ngan Tao Building	The complaint is regarding to construction noise impact to the complainant who could not sleep due to work and machine at the project site opposite to the Ngan Tao Building.	1) Construction noise impact referred by RSS was received by ET on 25 July 2014 2) ET confirmed with RSS that horizontal cutting and removal of D-wall at Eastern, Southern and Northern side of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter before 23:00hrs on 20 July 2014 that total 3 numbers of derrick lighter and 3 numbers of saw cut machine were in operation, and removal of D-wall at Panel S30A-1 of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter around 00:25hrs to 00:56hrs on 21 July 2014 that total 1 number of derrick lighter was in operation. 3) According to the relevant site records under Contract HY/2009/15, before 23:00hrs on 20 July 2014, horizontal cutting and removal of Diaphragm Wall at Eastern, Southern and Northern side of TS2 was conducted under HY/2009/15 within Causeway Bay Typhoon Shelter. Total 3 nos. of derrick lighter and 3 nos. of saw cut machine were in operation at the above period. From around 00:25hrs to 00:56hrs on 21 July 2014, removal of D-wall at Panel S30A-1 of TS2 was undertaken by Contractor of HY/2009/15 within Causeway Bay Typhoon Shelter. Total 1 no. of derrick lighter was found operating at the above period 4) It was considered the condition of CNP GW-RS0592-14 was not fulfilled by the Contractor of HY/2009/15. "From 00:25hrs to 00:57hrs on 21 July 2014, the PME(s) (1 no. of Derrick Lighter) on-site could not follow with any given PME grouping requirement(s) as stated in condition 3.a. and condition 3.d. in no. GW-RS0592-14."	Final report (Issue1) issued on 31 July 2014. Further to complainant follow-up, Final report (Issue2) Issued on 12 Aug 2014.

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					Notwithstanding the above, according to the site recorded provided by the RSS, the derrick lighter was found malfunction at around 23:00hrs on 20 July 2014 while the diaphragm wall cutting procedure was incomplete. Under safety and navigation consideration, the completion of diaphragm wall removal was necessary and of imminent need. 5) The Contractor of HY/2009/15 was advised to review the construction sequence and emergency response procedure for construction activities during restricted hours and night time period to allow for sufficient buffer time for work completion such that the Construction Noise Permit would be followed. Furthermore, the Contractor of HY/2009/15 was suggested to conduct throughout checking of PME used on site prior to work commencement to minimize the potential malfunctioning of PME during the course of work which affect the duration of works.	
141016	14/10/2014	EPD Ref.: EP860/E2/24 Annex IV ICC complaint received by ET on 10 October 2014	Work site next to new Wan Chai Ferry Pier and opposite to Wan Chai Sports Ground.	Construction noise like piling works was heard on 14 October 2014 night until 23:45 hrs. It was suspected that the noise was emanated from the work site next to new Wan Chai Ferry Pier and opposite to Wan Chai Sports Ground.	A public complaint regarding construction noise impact referred by EPD was received by ET on 16 October 2014 (EPD Ref.: EP860/E2/24 Annex IV dated 16 October 2014). The complainant reported that construction noise like piling works was heard on 14 October 2014 night until 23:45 hrs. It was suspected that the noise was emanated from the work site next to new Wan Chai Ferry Pier and opposite to Wan Chai Sports Ground. ET confirmed with the Resident Site Staff that From 19:00hrs to 23:00hrs on 14 October 2014, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02. From 23:00 hrs to 05:00 hrs, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02.	Interim investigation report submitted to EPD on 23 October 2014. Updated interim investigation with supplementary information submitted to EPD on 17 November 2014 EPD

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					From 23:00 hrs to 06:00hrs, panel replacement works was conducted under Contractor of HK/2009/02 at the Temporary Covered Walkway. Total one scissor platform and two hand held drills (battery) were in operation. From 23:00 hrs to 06:00hrs, trial pit works was conducted under Contractor of HK/2009/02 at Hung Hing Road.Total one crane lorry was in operation. According to the relevant site records under Contract HK/2009/02, from 19:00hrs to 23:00hrs on 14 October 2014, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02. From 23:00 hrs to 05:00 hrs, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area.Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02. From 23:00 hrs to 06:00hrs, panel replacement works was conducted under Contractor of HK/2009/02 at the Temporary Covered Walkway. Total one scissor platform and two hand held drills (battery) were in operation. From 23:00 hrs to 06:00hrs, trial pit works was conducted under Contractor of HK/2009/02 at Hung Hing Road. Total one crane lorry was in operation. In view of the above findings, no direct information associated with the noise concern was considered available.	advised no further comment on the updated interim report and case closed on 27 Nov 2014.

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141110	07/11/2014	EPD Ref.: H05/RS/00027815-14 EPD complaint received by ET on 10 November 2014	Construction site at old Wan Chai Ferry Pier	Malodour of construction plant exhaust from the construction site at old Wan Chai Ferry Pier was scented that affecting the swimmers at Wan Chai Swimming Pool.	A public complaint regarding odour concern referred by EPD was received by ET on 07 November 2014 (EPD Ref.: H05/RS/00027815-14 dated 10 November 2014). The complainant reported that Malodour of construction plant exhaust from the construction site at old Wan Chai Ferry Pier was scented that affecting the swimmers at Wan Chai Swimming Pool. ET confirmed with the Resident Site Staff that ELS works was conducted on 7 November 2014 during daytime at Portion 2 (Area oppsite to WanChai Swimming Pool). Total 3 nos. of excavators, 2 nos. of crawler cranes, 2 nos. of generator, 1 no. of crane lorry and 2 no. of dump trucks were operated. Demolition works was conducted on 7 November 2014 during daytime at West of old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. of tug boat were operated. Dredging works was conducted on 7 November 2014 during daytime at WCR3 (East of old Wan Chai Ferry Pier) Total 1 no .of dredger, 1 no. of hopper and 1 no. of tug boat were operated. According to the relevant site records under Contract HK/2009/02, ELS works was conducted on 7 November 2014 during daytime at Portion 2 (Area oppsite to WanChai Swimming Pool). Total 3 nos. of excavators, 2 nos. of crawler cranes, 2 nos. of generator, 1 no. of crane lorry and 2 no. of dump trucks were operated. Demolition works was conducted on 7 November 2014 during daytime at West of old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. of tug boat were operated. Follow-up inspection was conducted during weekly environmental inspection on 13 November 2014, no dark smoke emission was observed from the PMEs operating on-site. The condition of chemical waste storage was considered satisfactory and no malodour was identified. Despite no information related to malodour was identified, the Contractor was reminded to conduct regular checking on the condition of PMEs to ensure only well maintained PMEs are used on site.	Interim investigation report submitted to EPD on 17 November 2014. EPD advised no comment on the interim report and case closed on 1 Dec 2014.

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					Based on the relevant information provided by RSS, despite no information associated with the malodour concern was identified after investigation, the Contractor was reminded to conduct regular checking on the condition of PME used on site to ensure only well maintained PME are used on site The interim report would be submitted to EPD on 17 November 2014.	
141113	12/11/2014	EPD Ref.: H05/RS/00028253-14 EPD complaint received by ET on 13 November 2014	Construction site at old Wan Chai Ferry Pier	Malodour and dark smoke emission from an excavator located at the construction site at old Wan Chai Ferry Pier was observed that affecting the pedestrians.	A public complaint regarding odour concern referred by EPD was received by ET on 13 November 2014 (EPD Ref.: H05/RS/00028253-14 dated 13 November 2014). The complainant reported thatMalodour and dark smoke emission from an excavator located at the construction site at old Wan Chai Ferry Pier was observed that affecting the pedestrians. (Contract HK/2009/02) ET confirmed with the Resident Site Staff that demolition works was conducted under Contract HK/2009/02 on 12 November 2014 during daytime at old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. tug boat were operated. According to the relevant site records under Contract HK/2009/02, demolition works was conducted on 12 November 2014 during daytime at old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. tug boat were operated. In addition, investigation found that due to malfunctioning of one of the excavators deployed at old Wan Chai Ferry Pier, dark smoke was emitted from the defective excavator for a short period of approximately 30 seconds at around 15:00 hrs on 12 November 2014. The operation of excavator was immediately suspended and followed by repair works. The normal operation of the excavator was resumed after repair. Follow-up inspection was conducted during weekly environmental inspection on 13 November 2014, no dark smoke emission was observed from the PMEs operating on-site and the Contractor of HK/2009/02 was reminded to conduct regular checking on the condition of PMEs to ensure only well maintained PMEs are used on site.	Interim investigation report submitted to EPD on 19 November 2014. EPD advised no comment on the interim report and case closed on 8 Dec 2014.

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141121	Not Specified	EPD Ref: H08/RS/28263-14 EPD complaint information and findings was received by ET via email on 21 Nov 2014	Causeway Bay Typhoon Shelter	Resident in Hing Fat Street complaining about loud noise from dredging work in CBTS up to 10pm at night.	EPD received a construction noise complaint from dredging works at Causeway Bay Typhoon Shelter and a resident in Hing Fat Street complaining about loud noise from dredging work in CBTS up to 10pm at night. EPD investigation found that the operation of a derrick barge is covered by CNP no. GW-RS0701-14. EPD reminded the Contractor of HY/2011/08 to ensure the work strictly follow the permit conditions and endeavor to minimize the noise as so not to disturb the nearby residents.	Complaint case handled by EPD and relevant investigation findings was sent to ET on 21 November 2014
150127	21 Jan 2015	EPD complaint (EPD Ref.: H05/RS/00001725-15) received by ET on 27 January 2015 and further information from EPD regarding the updated location under complaint was received by ET on 30 January 2015	A portion of Hung Hing Road immediately to the east of Marsh Road near SPCA	Construction dust and grit was emitted from the construction site to the carriageway causing nuisance to the public.	A public complaint regarding air quality impact referred by EPD was received by ET on 27 January 2015 (EPD Case Ref.: H05/RS/00001725-15 dated 27 January 2015) and further information from EPD regarding the updated location under complaint was received by ET on 30 January 2015. The complainant reported that construction dust and grit was emitted from the construction site to the carriageway causing nuisance to the public. ET confirmed with the Resident Site Staff that the major construction activities around the concerned location conducted on 21 January 2015 include breaking of seawall blocks and D-wall at TPCWAW; concreting, grouting and drilling works at TPCWAW;reclamation/ backfilling works at TPCWAW Mitigation measures implemented by the Contractor for the above construction works include spraying haul road with water; covering bagged cement with tarpaulin; providing three sided and top covering for grouting stations; providing water spraying to dusty activities such as breaking works According to the relevant site records, breaking of seawall blocks and D-wall, concreting, grouting and drilling works and reclamation/ backfilling works were	Interim report submitted to EPD on 9 February 2015, EPD advised no comment on 27 February 2016 on the interim report submitted and case closed.

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					conducted at TPCWAW. Dust mitigation measures including spraying haul road with water, covering bagged cement with tarpaulin, providing three sided and top covering for grouting stations and water spraying to dusty activities such as breaking works were implemented by the Contractor of HY/2009/15 near the concerned location on 21 January 2015. Follow-up investigation was conducted on 27 January 2015 during weekly environmental inspection, dust mitigation measures including water spraying for dusty haul road and major dust generation works; and provision of three sides and top covering for grouting station were confirmed in place. In addition, based on the review of the monitoring data of the monitoring station located at the concerned location raised by the complainant, namely monitoring station CMA3a , no action or limit level exceedance was recorded during air quality monitoring conducted on 20 and 21 January 2015. Nevertheless, the Air Quality Health Index (AQHI) recorded by EPD across Western District and Eastern District on the complaint date was ranged from 4 to 10+ indicating a severely high concentration of ambient air pollutants. As such, the site condition under Contract HY/2009/15 at the concerned location was considered to be generally satisfactory and no non-conformity related to cumulative air quality impact was observed. Nevertheless, in view of the public concern, the contractor was reminded to enhance the dust mitigation measures implemented to minimize potential nuisance to nearby public.	
150622	18 June 2015	EPD Ref.:H05/RS/ 00015054-15 dated 8 June	A mooring location near shore and at location outside Wan Chai Sports	Dark smoke and malodour emission was observed from a hopper barge moored near shore and	A public complaint regarding dark smoke and malodour concern referred by EPD was received by ET on 22 June 2015 (EPD Ref.: H05/RS/00015054-15 dated 22 June 2015). The complainant reported that dark smoke and malodour emission was observed from a hopper barge	Interim report submitted to EPD on 29 June 2015 and EPD

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		2015	Ground	other construction plants under operation from the reclamation construction site	moored near shore and other construction plants under operation from the reclamation construction site with Contract no. HK/2009/02 at location outside Wan Chai Sports Ground caused air pollution. The complainant alleged that the said situation had been observed for a prolonged period. ET confirmed with the Resident Site Staff that reinforced bar fixing and concreting work (on 17 June 2015 only) were conducted at Portion 2 from 15 June 2015 to 19 June 2015. Total 3 nos. of mobile crane were in operation. On 17 June 2015, one no. of concrete pump truck and two nos. of concrete mixer were in operation.Excavation and Lateral Support was conducted at Portions 3 & 4 from 15 June 2015 to 19 June 2015. Total 4 nos. of excavator, 2 nos. of truck and 2 nos. of crawler crane were in operation. In addition, on 15 June 2015, 17 June 2015 and 19 June 2015, 1 no. of derrick barge was moored near Portions 3 & 4 for transportation of the excavated material away from site. According to the relevant site records under Contract HK/2009/02, from 15 June 2015 to 19 June 2015, reinforced bar fixing and concreting work (on 17 June 2015 only) were conducted at Portion 2 and total 3 nos. of mobile crane, one no. of concrete pump truck (on 17 June 2015 only) and two nos. of concrete mixer (on 17 June 2015 only) were in operation; excavation and lateral support was conducted at Portions 3 & 4 and total 4 nos. of excavator, 2 nos. of truck and 2 nos. of crawler crane were in operation. Based on relevant site record, no hopper barge was moored under Contract HK/2009/02 around the concerned location while 1 no. of derrick barge was moored under Contract HK/2009/02 near Portions 3 & 4 for transportation of the excavated material from Portions 3 & 4 away from site on 15 June 2015,17 June 2015 and 19 June 2015 respectively. Follow-up inspection was conducted during weekly	advised no comment on 20 July 2016 on the interim report submitted and case closed.

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					environmental inspection on 25 June 2015, no dark smoke and malodour emission was observed from the PMEs operating on-site. A derrick barge was observed moored near Portions 3 & 4 and excavated material was transferred to the derrick barge by the excavators on land without barge operation and no particular dark smoke and malodour emission was observed. Nevertheless, the Contractor was reminded to conduct regular checking on the condition of the derrick barge and other PMEs deployed on site to ensure only well maintained PMEs are used to avoid potential dark smoke and maldour emission affecting nearby public.	
150723	20 July 2015	EPD Ref.:H05/RS/ 00018040-15 dated 23 July 2015	Ex-Wanchai Ferry Pier near 720 & & 722 Bus stop	Malodour from marine sediment	A public complaint regarding malodour referred by EPD was received by ET on 23 July 2015 (EPD Ref.: H05/RS/00018040-15 dated 23 July 2015). The complainant reported that malodour from marine sediment was scented at ex-Wanchai ferry pier near route 720 & 722 bus stop. (Contract HK/2009/02). ET confirmed with the Resident Site Staff that Rockfill placing works was conducted by one derrick barge at the concerned location (WCR3) under Contract HK/2009/02 on 20 July 2015. No marine sediment was stored or placed on site at the concerned location under Contract HK/2009/02 on 20 July 2015. According to the relevant site records under Contract HK/2009/02, rockfill placing works was conducted by one derrick barge at WCR3 area on 20 July 2015 and no marine sediment was stored or placed on site at the concerned location on the concerned date. Follow-up inspection was conducted during weekly environmental inspection on 29 July 2015. No marine sediment was observed stored or placed at the concerned location while it was noted that a culvert outfall with potential odour concern is located adjacent to the concerned location.	Interim report submitted to EPD on 30 July 2015. EPD advised no comment on 17 August 2015 on the interim report submitted and case closed.

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					Nevertheless, the Contractor was reminded to review the handling procedures in case of any future marine sediment handling at the concerned location and to consider the implementation of mitigation measures as appropriate to minimize potential malodour impact to nearby public.	
150904	01 Sept 2015	EPD Ref.: H05/RS/00022241-15 dated 04 September 2015 received by ET on 4 September 2015	East of New WanChai Ferry Pier	Dropping of excavated material from land to sea during laoding of material	A public complaint regarding dropping of excavated material from land to sea referred by EPD was received by ET on 04 September 2015 (EPD Ref.: H05/RS/00022241-15 dated 04 September 2015). The complainant reported that dropping of excavated materials from land to sea during loading of materials by excavator at the construction site to work boat. (Contract HK/2009/02) ET confirmed with the Resident Site Staff that transferring of C&D materials from land to hopper barge by excavator at seaside along CWB Tunnel Portions 3 and 4 was undertaken by Contract HK/2009/02 on 01 September 2015. Mitigation measure including providing tarpaulin sheet to cover the gap between seawall and the hopper barge to prevent dropping of material to the sea was implemented by the Contractor. According to the relevant site records under Contract HK/2009/02, transferring of C&D materials from land to hopper barge by excavator at seaside along CWB Tunnel Portions 3 and 4 was carried out on 01 September 2015 and mitigation measures including provision of tarpaulin sheet between seawall and the hopper barge was implemented by the Contractor of HK/2009/02 on the concerned date. Follow-up inspection was conducted during weekly environmental inspection on 10 September 2015. Transferring of C&D materials from land to barge by excavator was observed at the concerned location and mitigation measures including provision of tarpaulin sheet between seawall and hopper	Interim report submitted to EPD on 14 September 2015. EPD advised no comment on 5 October 2015 on the interim report submitted and case closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					barge and the material transfer works was generally in order. Nevertheless, the Contractor of HK/2009/02 was reminded to maintain the handling procedure for C&D materials transfer from land to hopper barge and regularly inspect the condition of the tarpaulin sheet provided to ensure the nearby water quality are not affected by the loading and unloading of material from land side to hopper barge. The Contractor was reminded to maintain the handling procedure for C&D materials transfer from land to hopper barge and regularly inspect the condition of the tarpaulin sheet provided to ensure the nearby water quality are not affected by the loading and unloading of material from land side to hopper barge.	
150904	02 Sept 2015	EPD Ref.: H04/RS/00022385-15 dated 04 September 2015 received by ET on 04 September 2015	Location outside Fleet Arcade	Construction noise was generated from the construction site of HK/2012/08 at location outside Fleet Arcade during night time on weekdays and daytime during General Holidays. The complainant also concerned construction dust and exhaust emission from derrick barges during transporting C&D material at the site.	A public complaint regarding construction noise and dust and exhaust emission referred by EPD was received by ET on 04 September 2015 (EPD Ref.: H04/RS/00022385-15 dated 04 September 2015). The complainant reported that construction noise was generated from the construction site of HK/2012/08 at location outside Fleet Arcade during night time on weekdays and daytime during General Holidays. The complainant also concerned construction dust and exhaust emission from derrick barges during transporting C&D material at the site. (Contract HK/2012/08) ET confirmed with the Resident Site Staff that from 0800 hrs to 1800 hrs on 30 August 2015, removal of scaffold and timber and installation of bulkhead was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one generator and one circular saw were in operation. From 1900hrs on 30 August 2015 to 0700 on 31 August 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location.	Interim report submitted to EPD on 14 September 2015. 2nd interim report submitted to EPD on 17 Dec 2015 3rd interim report submitted to EPD on 31 Dec 2015

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					From 1900hrs on 31 August 2015 to 0700hrs on 01 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location. From 1900hrs to 2115 hrs on 01 September 2015, unloading of soil was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one derrick barge was in operation. From 2300hrs on 01 September 2015 to 0700hrs on 02 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location. One derrick barge was deployed for unloading of soil on 02 September 2015 during daytime under Contract HK/2012/08 at the concerned location. Based on the relevant site records, from 0800 hrs to 1800 hrs on 30 August 2015, removal of scaffold and timber and installation of bulkhead was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one generator and one circular saw were in operation and the relevant Construction Noise Permit GW-RS0296-15 for the concerned operation was confirmed in place. From 1900hrs on 30 August 2015 to 0700 on 31 August 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location and from 1900hrs on 31 August 2015 to 0700hrs on 01 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location. From 1900hrs to 2115 hrs on 01 September 2015, unloading of soil was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one derrick barge was in operation and the Construction Noise Permit GW-RS0296-15 for the concerned operation was confirmed in place.	

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					From 2300hrs on 01 September 2015 to 0700hrs on 02 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location. In view of the above, the construction activities conducted under Contract HK/2012/08 during the concerned period was in compliance with the statutory requirement. In addition, one derrick barge was deployed for unloading of soil on 02 September 2015 during daytime under Contract HK/2012/08 at the concerned location. Follow-up inspection was conducted during weekly environmental inspection on 08 September 2015 and no dark smoke emission was observed from the derrick barge moored outside the concerned location. Nevertheless, the Contractor of HK/2012/08 was reminded to conduct regular checking on the condition of the all derrick barges deployed on site to ensure only well maintained equipment are used to avoid potential dark smoke emission affecting nearby public and the Contractor of HK/2012/08 was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance. The Contractor was reminded to conduct regular checking on the condition of derrick barges deployed on site to ensure only well maintained equipments are used on site to avoid potential dark smoke emission affecting nearby public. The Contractor of HK/2012/08 was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance.	
150917	17 Sep 2015	A public complaint regarding water quality referred by EPD was	Central and Wan Chai Reclamation coastline (between LUNG WUI ROAD to LUNG WO ROAD,	Silt from Central and Wan Chai Reclamation was spotted along the coastline (between LUNG WUI ROAD to LUNG WO ROAD, Central & Wan	Based on the site records confirmed by RSS, removal of seawall blocks by derrick barge was undertaken by Contract HK/2012/08 at Central Reclamation Phase III works area while mitigation measures including provision of silt curtain implemented by the Contractor of HK/2012/08 during the	Interim investigation report submitted to EPD on 25

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
		received by ET on 17 September 2015	Central & Wan Chai, Hong Kong)	Chai, Hong Kong)	seawall block removal works. According to relevant record, muddy dispersion at HKCEC2W (area opposite to Lung King Street) was observed by the Environmental Team on 14 September 2015 afternoon. The muddy patch was observed dispersing outside the outer layer silt curtain deployed by the Contractor of HK/2012/08 towards the Central Reclamation Phase III area while the outer layer silt curtain was observed partially opened. In view of the above observations, the Contractor was advised to rectify any environmental deficiencies such that adequate protection such as silt curtain shall be provided for exposed soil slope to mitigate for potential runoff related water quality impact to the surrounding waters; outer layer silt curtain deployed shall be entirely closed during works to safeguard the surrounding water quality. Any opening for marine vessel shall be closed promptly after passage and localized silt curtain deployed on site shall be properly maintained to avoid any gap or opening to effectively safeguard the nearby waters.	September 2015. EPD advised no comment on 14 October 2015 and case closed.
151015	11 Oct 2015	A public complaint regarding direct discharge of muddy effluent referred by RSS was received by ET on 14 October 2015	Seafront opposite to Watson Road adjacent to Eastern Breakwater	Pink fluid was observed discharged into marine waters at seafront opposite to Watson Road adjacent to the Eastern Breakwater on 11 October 2015.	Based on the site records confirmed by RSS, no construction activity near the seaside between Eastern Breakwater and the Dumping Jetty was undertaken by Contract HY/2009/19 while at site area away from the seawall, construction of EVB substructure, EVB and APS structure was undertaken on 11 October 2015. In addition, no works involving the use of paint was carried out at the concerned site area (Site Portion between Eastern Breakwater and the Dumping Jetty) and along the alignment of the Culvert T1 under Contract HY/2009/19 and no temporary storage of paint was located at the concerned site area and along the alignment of the Culvert T1 under HY/2009/19 on 11 October 2015. Follow-up inspection was conducted during weekly environmental inspection on 14 October 2015. No construction works involving the use of paint was observed undertaken at the concerned location while a few number of small containers of paint was observed placed around the concerned location and the paint containers were sealed and no sign of leakage was observed. The few containers were further checked and was found not matching the pink fluid observed on the complaint date. On the other hand, a culvert discharge outfall was found located within the concerned area where the pink fluid was observed. Based on the above, no direct information indicating the pink	HyD will consolidate all input from relevant parties to form a reply to ICC.

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					fluid was originated from the worksarea under HY/2009/19 was considered available. Nevertheless, the Contractor was reminded that paints stored on site shall be properly labelled and stored in sealed container at weather proof location to avoid potential spillage.	
151028	26 Oct 2015	A public complaint regarding construction noise impact referred by EPD was received by ET on 28 October 2015 (EPD Ref:H05/RS/00027330-15 Dated 28 October 2015)	Construction Site next to ex-Wan Chai Ferry Pier	Operation of grab dredger at construction site near the ex-Wan Chai Ferry Pier from around 0100 to 0400 hours on 26 October 2015 caused noise nuisance.	According to the relevant site records under Contract HK/2009/02, from 01:00hrs to 04:00hrs on 26 October 2015, rock filling was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02 and the relevant Construction Noise Permit GW-RS1121-15 for the concerned construction works was in place. The construction activity conducted under Contract HK/2009/02 during the concerned period was in compliance with the statutory requirement. Nevertheless, the Contractor was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance in view of the nearby public concern.	The interim report would be submitted to EPD on 05 November 2015 and EPD advised no comment on 16 November 2016 and case closed.
151116	13 November 2015	A public complaint regarding water quality referred by EPD was received by ET on 16 November 2015 (EPD Ref: H05/RS/00029126-15)	Construction Site at HKCEC and seafront outside Lung Wo Road	Muddy water was discharged from the construction site at HKCEC and dispersed to seafront outside Lung Wo Road on 13 November 2015 afternoon. The complainant also alleged that the deployment of the silt curtain did not follow the design requirement under the environmental permit that the curtain should be hanged to seabed level	Based on the site records, rock mound trimming works was conducted under Contract HK/2012/08 at HKECE2 area on 13 November 2015 and mitigation measures including provision of localized silt curtain around the works area was implemented by the Contractor. Follow-up inspection was conducted during weekly environmental inspection on 17 November 2015, both outer layer silt curtain and localized layer of silt curtain around the active works area were observed deployed while the localized silt curtain deployed around the marine works area was observed partially opened for marine access. Despite no muddy dispersion was generated around the localized silt curtain enclosed area, the Contractor was advised to promptly improve the condition of the silt curtain to ensure the effectiveness of the mitigation measure deployed and to ensure the silt curtain is closed after marine vessel movement. Based on further review on the current construction stage at HKECE2, the dredging works and trench filling works were completed and filling works were conducted behind seawall or temporarily seawall in form of rockbund, the outer layer of silt curtain currently serves as the additional mitigation measure to	The interim investigation report would be submitted to EPD on 1 December 2015 and record of diving inspection conducted on 27 November 2016 was forwarded to EPD on 4 Dec 2016. EPD advised no further comment on 14 Dec 2015 and case closed.

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					the required silt curtain deployment for safeguarding the water quality in the area. To clarify for the current silt curtain arrangement, the Contractor was advised to submit an updated silt curtain deployment plan with respect to the latest silt curtain arrangement for the current construction stage. In addition, contaminated discharge at Culvert L originating from upstream locations was intermittently observed based on previous site records. Nevertheless, in view of the public concern, the Contractor was reminded to conduct regular checking on the condition and maintenance for the silt curtain deployed on site to ensure the effectiveness of the mitigation measure. A joint meeting for the complaint was held amongst the EPD, WDII RSS team, the ET and the Contractor of HK/2012/08 on 24 November 2015 and a joint silt curtain diver inspection check amongst EPD, ET, IEC, WDII RSS and the Contractor was conducted on 27 November 2015 to confirm the silt curtain condition and the silt curtain deployed at the HKCEC2 water channel was found generally in order.	
160413 (HK201208)	13 April 2016	A public complaint referred by EPD was received by ET on 13 April 2016 (EPD Ref.: H05/RS/00008367-16 dated 13 April 2016)	Outside the Hong Kong Academy for Performing Arts	Muddy water discharge from construction site	A public complaint regarding muddy water discharge referred by EPD was received by ET on 13 April 2016 (EPD Ref.: H05/RS/00008367-16 dated 13 April 2016). The complainant reported that muddy water was discharged from the construction work of Contract HK/2012/08 to the sea outside the Hong Kong Academy for Performing Arts on 13 April 2016 morning. ET confirmed with the Resident Site Staff that internal transport of soil to the hopper barge for storage via landing barge was conducted by Contractor of HK/2012/08 during 0800 hours to 1000 hours on 13 April 2016 at the sea outside the concerned location and 3 nos. of dump trucks were deployed for the operation. Protection measure including provision of sandbag bunding along the side of the landing barge was implemented by the Contractor of HK/2012/08. According to the relevant site records provided by RSS, internal transport of soil to the hopper barge for storage via landing barge was conducted by Contractor of HK/2012/08 during 0800 hours to 1000 hours on 13	Interim investigation report was submitted to the EPD on 21 April 2016. EPD advised no further comment on 6 June 2016 on the interim report submitted and case closed.

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					April 2016 at the sea outside the concerned location and 3 nos. of dump trucks were deployed for the operation. Protection measure including provision of sandbag bunding along the side of the landing barge was implemented by the Contractor of HK/2012/08. In addition, amber rainstorm warning signal was hoisted from 0630 hours to 1200 hours on 13 April 2016 and during the above time period, muddy water was observed from the upstream of culvert L outside the HK/2012/08 site. Follow up inspection was conducted on 19 April 2016, protection measures including provision of sandbag bunding along the side of the landing barge was implemented and no mud or soil deposition was observed along the seawall and no discharge point was located within the temporary water channel connecting the Culvert L outfall location to the Victoria Harbour. In addition, piling works was observed at the north side of Zone A1 on 19 April 2016 and construction effluent collection from piling work via sedimentation tank to wastewater treatment facility was implemented and steel barrier was installed around the piling works area to mitigate against potential surface runoff related impact. Nevertheless, in view of the public concern, the Contractor was reminded to maintain adequate perimeter embankment protection along the seawall boundary and maintain proper construction effluent collection system to avoid potential runoff related impact to nearby waters.	
160706	30 June 2016	A public complaint referred by EPD was received by ET on 06 July	Construction area near Royal Hong Kong Yacht Club	Derrick barge moored near Royal Hong Kong Yacht Club emitted dark smoke since mid of June 2016.	A public complaint referred by EPD was received by ET on 06 July 2016 (Case Ref.: H05/RS/0016226-16). The complainant reported that a derrick barge in green colour under Contract HY/2009/15 moored near Royal Hong Kong Yacht Club emitted dark smoke since mid of June 2016.	Interim report was submitted to EPD on 14 July 2016.

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
		2016 (Case Ref:. H05/RS/00016 226-16),			ET confirmed with Resident Site Staff that the concerned green derrick barge was identified as Yue Fat 206 (YF 206) and the concerned green derrick barge was operated within the Ex-PCWA area for excavation works intermittently across the period from 15 June 2016 to 30 June 2016. The concerned green derrick barge YF206 within Ex-PCWA area was no longer deployed under Contract HY/2009/15 after 02 July 2016. Follow-up inspection was conducted on 11 July 2016, the concerned derrick barge YF206 was not deployed at the concerned location and no dark smoke was observed from other derrick barge operating on-site. Nevertheless, in view of the public concern, the Contractor of HY/2009/15 was reminded to conduct regular checking and maintenance of all derrick barges deployed on site to ensure only well maintained equipment is used to avoid potential dark smoke emission affect nearby surroundings.	EPD advised no further comment on 20 September 2016 on the interim report submitted and case closed.

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
160825	25 August 2016	A public complaint referred by EPD was received by ET on 25 August 2016 (Case Ref.: H08/RS/00012592-16)	East of Temporary Reclamation Zone TS3, Causeway Bay Typhoon Shelter	Muddy water was observed at Causeway Bay Typhoon Shelter	A public complaint referred by EPD was received on 25 August 2016 (Case Ref.: H08/RS/00012592-16). The complainant reported that muddy water was observed at Causeway Bay Typhoon Shelter. ET confirmed with the Resident Site Staff that no marine construction activities were undertaken at the concerned location at East of Temporary Reclamation Zone TS3 within Causeway Bay Typhoon Shelther from 14:00hrs to 17:00hrs on 25 May 2016. Site control measures including the following were implemented by the Contractor of HY/2010/08 around the concerned location. Site control measures including i) Wastewater treatment facilities (AquaSed) were installed at TS3 for treatment of wastewater generated during construction activities. Sampling of effluent from AquaSed was conducted by the Contractor of HY/2010/08 and all results complied with the requirements in the Discharge Licence. Visual inspection and pH measurement of effluent were conducted daily by Environmental Supervisors and all results passed. ii) Brick/ earth/ sandbag bunds were installed alongside the site perimeter of TS3 to prevent muddy runoff into the sea. iii) Piping with idled ends were removed to prevent accidental discharge of untreated wastewater. iv) Diver inspection for silt curtains and/ or impermeable barriers was conducted on an ad-hoc basis. vii) Temporary cut slopes were shotcreted or properly covered with tarpaulin sheets. viii) Regular inspections were conducted by the RSS and Contractor's environmental representatives on regular basis on the conditions of mitigation measures implemented on site. Based on the complainant photo information, the exposed soil slope at Temporary Reclamation Zone TS3 were observed protected by covering and enclosed by double layer of impermeable barrier/ silt curtain and no contaminated discharge was identified. In addition, based on information from Hong Kong Observatory, the tidal condition on 25 May 2016 afternoon was found to	The Interim investigation report was submitted to EPD on 2 September 2016. EPD advised no further comment on 31 October 2016 on the interim report submitted and case closed.

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					be ebb-tide while non construction works marine vessel movements around the identified muddy plume within Causeway Bay Typhoon Shelter was observed in the complainant photo information. Based on review on relevant records, no contaminated surface runoff and no contaminated discharge was identified at the concerned location during the environmental site inspection conducted on 25 May 2016. Follow up inspection was conducted on 31 August 2016 and seawall construction and filing works at the Temporary Reclamation Zone TS3 was observed completed. No contaminated discharge and no contaminated surface runoff was found. Nevertheless, the contractor of HY/2010/08 was reminded to maintain appropriate bunding at seawall boundary for protection against potential surface runoff related impact. Also, the Contractor of HY/2010/08 was reminded to maintain proper site drainage for effluent collection and treatment system to ensure the compliance with relevant discharge license.	

Appendix 7.1

Construction Programme of Individual Contracts

Contract No. HK/2009/01
Wan Chai Development Phase II – Central -Wan Chai Bypass at
Hong Kong Convention and Exhibition Centre

Construction Activities for Three Months Rolling

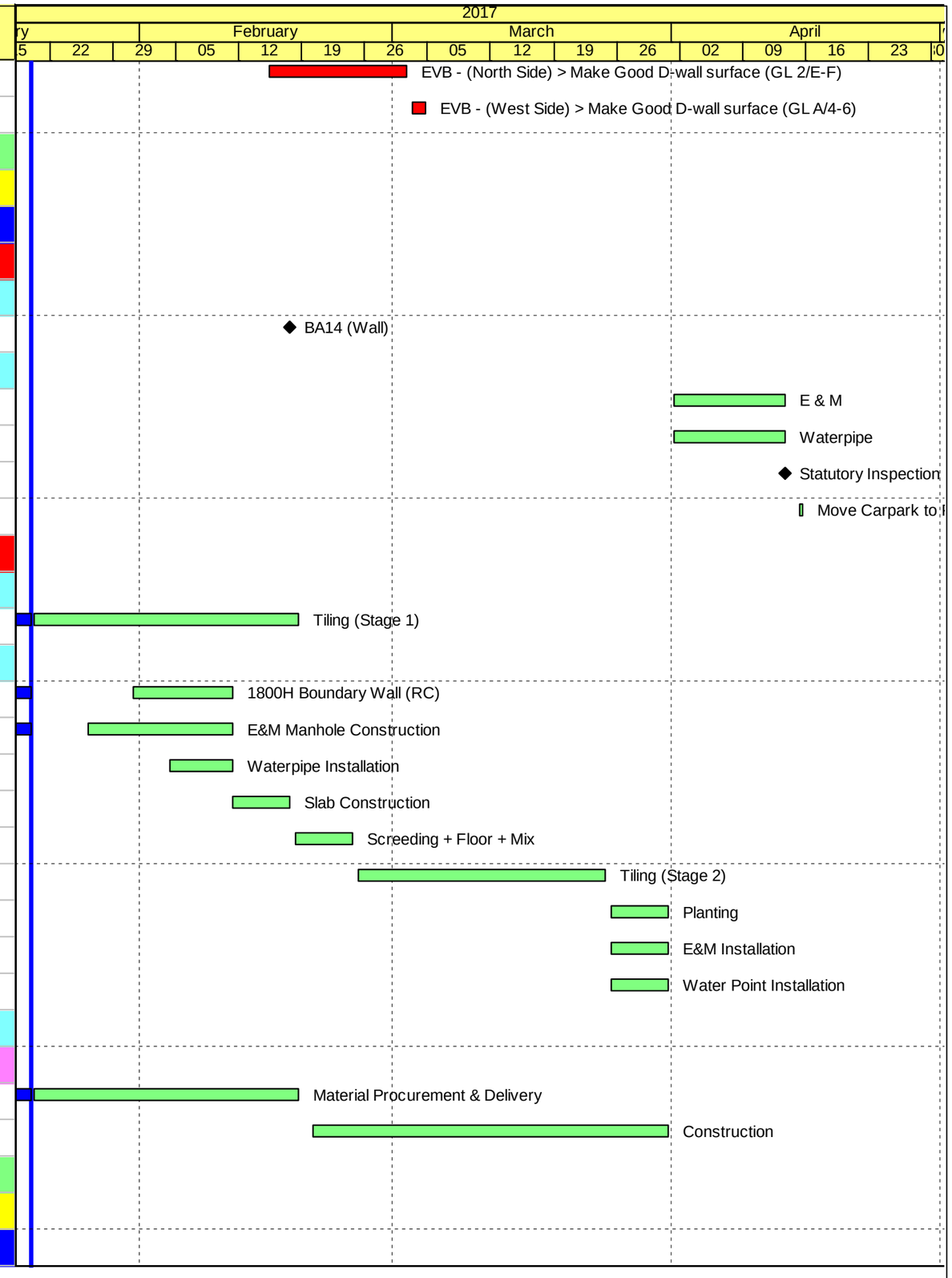
Construction Activities	May 2017	June 2017	July 2017
Reinstatement of Amenity Area			
Road and Drain Works			

Activity ID	Activity Name	Rem Dur	Start	Finish
3MRP - Jan 2017 to Apr 2017				
02 - PRE-CONSTRUCTION WORKS				
02.3 - Method Statement / Shop Drawings				
0230-1410	MS Landscape Deck Structure - ER Approval	28	20-Jan-17	16-Feb-17
0240-1280	Landscaping Design - ER Review/Resubmission	28	20-Jan-17	16-Feb-17
0240-1290	Landscaping Design - ER Approval	28	07-Dec-16 A	16-Mar-17
0240-1295	Landscaping Design - Fabrication & Delivery	28	17-Mar-17	13-Apr-17
0240-1297	Green Wall Minimum 2 years Establishment - Finish	0		20-Apr-17
0240-1298	Green Roof Minimum 2 years Establishment - Start	0	04-Feb-17	
0240-2470	MS for for trial erection of green roof - No Adverse Comment	15	30-Oct-16 A	03-Feb-17
02.5 - Bridge Segment/Beam Off-site Precasting				
0250-4015	Bridge F2B - Pier F3B Segment - 5 nos. - Mould 2	29	20-Jan-17	24-Feb-17
0250-4016	Bridge F2B - Pier F4B Segment - 7 nos. - Mould 2	23	25-Feb-17	23-Mar-17
0250-4017	Bridge F1B2 - Pier D12 Segment - 6 nos.- Mould 2	24	24-Mar-17	24-Apr-17
0250-4018	Bridge F1B2 - Pier F2B Segment - 6 nos. - Mould 2	23	25-Apr-17	22-May-17
0250-4045	Bridge F3B - Pier F6B & F7B Segment - 11 nos. - Mould 1	52	20-Jan-17*	23-Mar-17
0250-4050	Bridge F2B - Pier F4B Segment - 6 nos. - Mould 1	18	24-Mar-17	15-Apr-17
0250-4055	Bridge F1B2 - Pier F1B Segment - 6 nos. - Mould 1	20	18-Apr-17	11-May-17
0250-4100	Bridge F1B1 - Abut D12 Segment - 5 nos. - Mould 3	15	06-Mar-17*	22-Mar-17
0250-4110	Bridge F1B1 - Pier F1A Segment - 13 nos. - Mould 3	36	23-Mar-17	08-May-17
A3160	Delivery of Segments - Bridge F3B	14	11-Mar-17	27-Mar-17
A3170	Delivery of Segments - Bridge F2B	18	28-Mar-17	20-Apr-17
05 - SECTION 2 & 2A OF THE WORKS				
05.1 - Cut & Cover Tunnel Ch 4855-4932 (APS Footprint)				
05.1.6 - EVB Sub-structure & Tunnel				
05.1.7 - EVB & Tunnel Remedial Works				
A2275	EVB - Rectification of Concrete Defects to Plenum B1-07	12	20-Feb-17	04-Mar-17
A2276	EVB - Rectification of Concrete Defects to Vent Shaft B1-18	5	14-Feb-17	18-Feb-17
A2277	EVB - Rectification of Concrete Defects to Plenum B1-24 & 26	10	02-Feb-17	13-Feb-17
A2278	EVB - Rectification of Concrete Defects to Plenum B1-23	6	24-Jan-17	01-Feb-17
A2279	EVB - Rectification of Concrete Defects to GL A-E/3-5	3	12-Jan-17 A	23-Jan-17
A2314	EVB - (South Side) > Make Good D-wall surface (GL 6/M-O)	3	09-Jan-17 A	23-Jan-17
A2315	EVB - (North Side) > Make Good D-wall surface (GL 2/E-F)	14	24-Jan-17	10-Feb-17

Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Contract HY/2009/19
Three Months Rolling Programme (20 Jan 2017 to 19 Apr 2017)

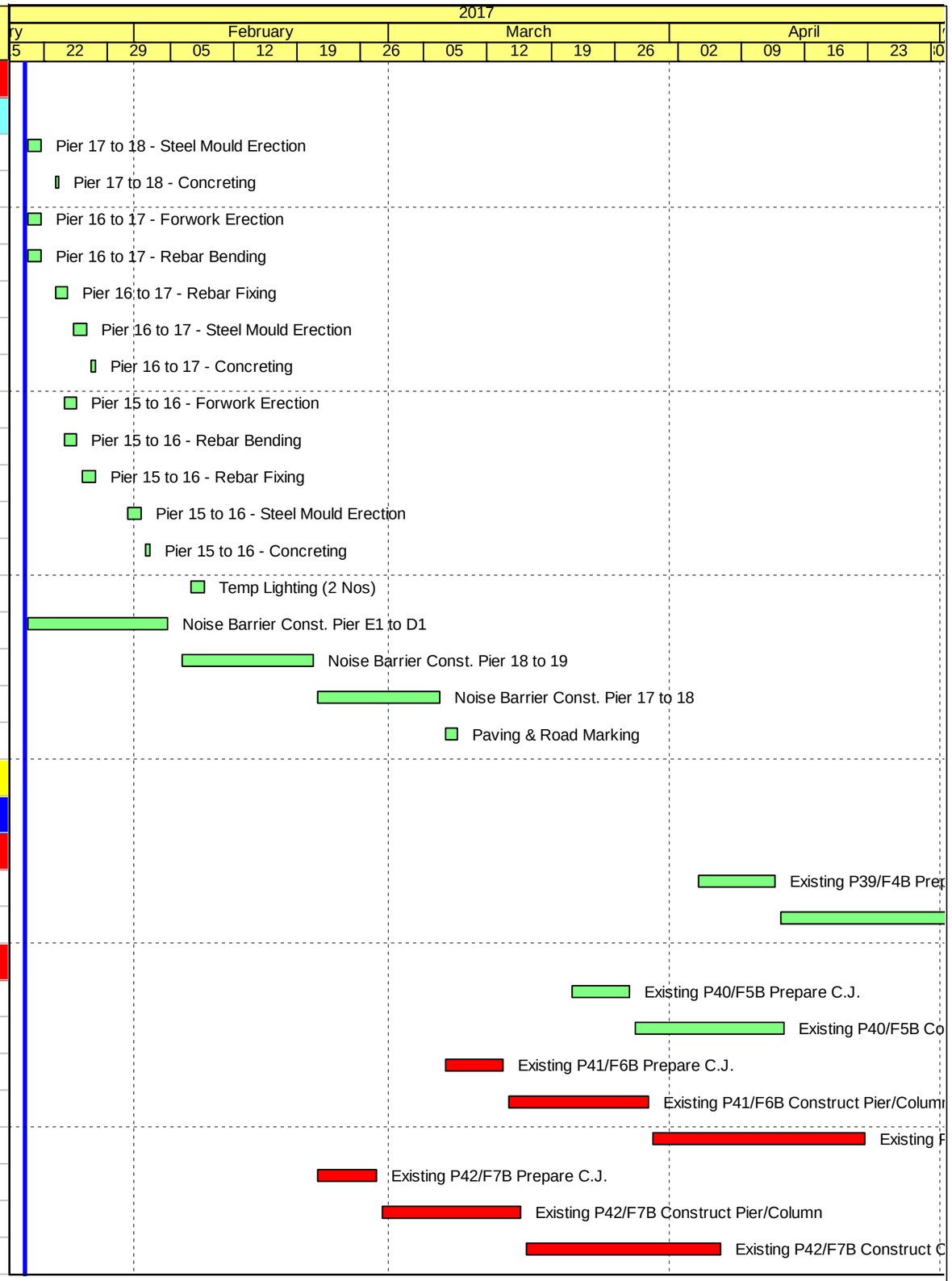
Activity ID	Activity Name	Rem Dur	Start	Finish
A2315.5	EVB - (North Side) > Make Good D-wall surface (GL 2/E-F)	14	15-Feb-17	02-Mar-17
A2316	EVB - (West Side) > Make Good D-wall surface (GL A/4-6)	2	03-Mar-17	04-Mar-17
09 - SECTION 6 OF THE WORKS				
09.1 - Carparks for Harbour Grand Hong Kong				
HGHK Reprovision				
Design, Submission, Material Approval				
Revised Boundary Wall				
A3710	BA14 (Wall)	0		17-Feb-17
Testing and Commissioning				
A3770	E & M	10	01-Apr-17	13-Apr-17
A3780	Waterpipe	10	01-Apr-17	13-Apr-17
A3780.3	Statutory Inspection by DB & HGHK	0		13-Apr-17
A3780.5	Move Carpark to Permanent	1	15-Apr-17	15-Apr-17
Construction				
Stage 1 Construction (Below IEC W/B)				
A3880	Tiling (Stage 1)	24	06-Jan-17 A	18-Feb-17
Stage 2 Construction (Below IEC E/B)				
A3910	1800H Boundary Wall (RC)	10	12-Jan-17 A	11-Feb-17
A3920	E&M Manhole Construction	12	16-Jan-17 A	11-Feb-17
A3930	Waterpipe Installation	6	04-Feb-17	11-Feb-17
A3940	Slab Construction	6	11-Feb-17	17-Feb-17
A3950	Screeding + Floor + Mix	6	18-Feb-17	24-Feb-17
A3960	Tiling (Stage 2)	24	25-Feb-17	24-Mar-17
A3970	Planting	6	25-Mar-17	31-Mar-17
A3980	E&M Installation	6	25-Mar-17	31-Mar-17
A3990	Water Point Installation	6	25-Mar-17	31-Mar-17
Alfresco Cafe Area (outside works boundary)				
Reprovision (Alfresco Cafe Area)				
A4060	Material Procurement & Delivery	24	19-Dec-16 A	18-Feb-17
A4080	Construction	35	20-Feb-17	31-Mar-17
10 - SECTION X OF THE WORKS				
10.2 - W/B Bridges (Bridge C and F)				
10.2.3 - Bridge Construction				



Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Contract HY/2009/19
Three Months Rolling Programme (20 Jan 2017 to 19 Apr 2017)

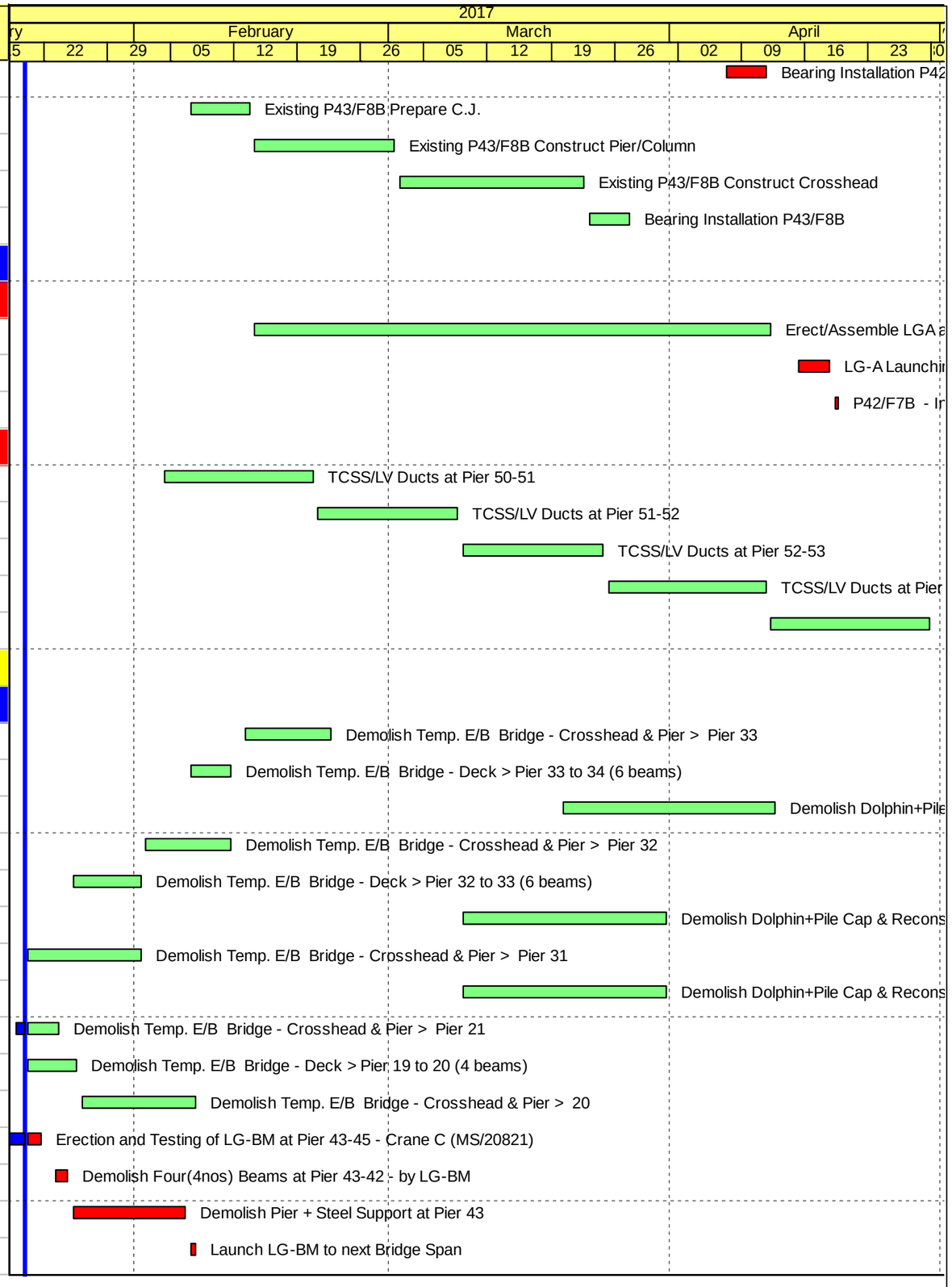
Activity ID	Activity Name	Rem Dur	Start	Finish
	Bridge C1			
	Outstanding Works Between Bridge C1 & E			
A4530	Pier 17 to 18 - Steel Mould Erection	2	20-Jan-17	21-Jan-17
A4550	Pier 17 to 18 - Concreting	1	23-Jan-17	23-Jan-17
A4570	Pier 16 to 17 - Forwork Erection	2	20-Jan-17	21-Jan-17
A4590	Pier 16 to 17 - Rebar Bending	2	20-Jan-17	21-Jan-17
A4610	Pier 16 to 17 - Rebar Fixing	2	23-Jan-17	24-Jan-17
A4630	Pier 16 to 17 - Steel Mould Erection	2	25-Jan-17	26-Jan-17
A4650	Pier 16 to 17 - Concreting	1	27-Jan-17	27-Jan-17
A4670	Pier 15 to 16 - Forwork Erection	2	24-Jan-17	25-Jan-17
A4690	Pier 15 to 16 - Rebar Bending	2	24-Jan-17	25-Jan-17
A4710	Pier 15 to 16 - Rebar Fixing	2	26-Jan-17	27-Jan-17
A4730	Pier 15 to 16 - Steel Mould Erection	2	31-Jan-17	01-Feb-17
A4750	Pier 15 to 16 - Concreting	1	02-Feb-17	02-Feb-17
A4770	Temp Lighting (2 Nos)	2	07-Feb-17	08-Feb-17
A4790	Noise Barrier Const. Pier E1 to D1	12	20-Jan-17	04-Feb-17
A4810	Noise Barrier Const. Pier 18 to 19	13	06-Feb-17	20-Feb-17
A4830	Noise Barrier Const. Pier 17 to 18	12	21-Feb-17	06-Mar-17
A4850	Paving & Road Marking	2	07-Mar-17	08-Mar-17
	10.3 - Middle Bridge (Bridge F)			
	10.3.1 - Pier Construction			
	Pier F1B2 to F4B			
1031-1440	Existing P39/F4B Prepare C.J.	7	04-Apr-17	12-Apr-17
1031-1460	Existing P39/F4B Construct Pier/Column	14	13-Apr-17	02-May-17
	Pier F5B to F8B			
1031-1520	Existing P40/F5B Prepare C.J.	6	21-Mar-17	27-Mar-17
1031-1540	Existing P40/F5B Construct Pier/Column	14	28-Mar-17	13-Apr-17
1031-1600	Existing P41/F6B Prepare C.J.	6	07-Mar-17	13-Mar-17
1031-1620	Existing P41/F6B Construct Pier/Column	14	14-Mar-17	29-Mar-17
1031-1640	Existing P41/F6B Construct Crosshead	18	30-Mar-17	22-Apr-17
1031-1680	Existing P42/F7B Prepare C.J.	6	21-Feb-17	27-Feb-17
1031-1700	Existing P42/F7B Construct Pier/Column	14	28-Feb-17	15-Mar-17
1031-1720	Existing P42/F7B Construct Crosshead	18	16-Mar-17	06-Apr-17



Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Contract HY/2009/19
Three Months Rolling Programme (20 Jan 2017 to 19 Apr 2017)

Activity ID	Activity Name	Rem Dur	Start	Finish
1031-1740	Bearing Installation P42/F7B	4	07-Apr-17	11-Apr-17
1031-1760	Existing P43/F8B Prepare C.J.	6	07-Feb-17	13-Feb-17
1031-1780	Existing P43/F8B Construct Pier/Column	14	14-Feb-17	01-Mar-17
1031-1800	Existing P43/F8B Construct Crosshead	18	02-Mar-17	22-Mar-17
1031-1820	Bearing Installation P43/F8B	4	23-Mar-17	27-Mar-17
10.3.2 - Bridge Construction				
Bridge F3B				
1032-1820	Erect/Assemble LGA at P43-45 + T&C for Erection of Segment	48	14-Feb-17	12-Apr-17
1032-1840	LG-A Launching - Engage FL at F7B/Pier42	2	15-Apr-17	18-Apr-17
1032-1860	P42/F7B - Install Pier Segment - Place Pier Segment	1	19-Apr-17	19-Apr-17
All Middle Bridge F (Common)				
1032-4350	TCSS/LV Ducts at Pier 50-51	14	04-Feb-17	20-Feb-17
1032-4353	TCSS/LV Ducts at Pier 51-52	14	21-Feb-17	08-Mar-17
1032-4354	TCSS/LV Ducts at Pier 52-53	14	09-Mar-17	24-Mar-17
1032-4355	TCSS/LV Ducts at Pier 53-54	14	25-Mar-17	11-Apr-17
1032-4356	TCSS/LV Ducts at Pier 55-56	14	12-Apr-17	29-Apr-17
10.4 - Bridge Deck Demolition				
10.4.3 - Existing E/B Bridge				
10412-1710	Demolish Temp. E/B Bridge - Crosshead & Pier > Pier 33	9	13-Feb-17	22-Feb-17
10412-1720	Demolish Temp. E/B Bridge - Deck > Pier 33 to 34 (6 beams)	5	07-Feb-17	11-Feb-17
10412-1730	Demolish Dolphin+Pile Cap & Reconstruct Pier 32 Pile Cap	20	20-Mar-17	12-Apr-17
10412-1740	Demolish Temp. E/B Bridge - Crosshead & Pier > Pier 32	9	02-Feb-17	11-Feb-17
10412-1750	Demolish Temp. E/B Bridge - Deck > Pier 32 to 33 (6 beams)	5	25-Jan-17	01-Feb-17
10412-1760	Demolish Dolphin+Pile Cap & Reconstruct Pier 31 Pile Cap	20	09-Mar-17	31-Mar-17
10412-1770	Demolish Temp. E/B Bridge - Crosshead & Pier > Pier 31	9	20-Jan-17	01-Feb-17
10412-1790	Demolish Dolphin+Pile Cap & Reconstruct Pier 30 Pile Cap	20	09-Mar-17	31-Mar-17
10412-2340	Demolish Temp. E/B Bridge - Crosshead & Pier > Pier 21	3	19-Jan-17 A	23-Jan-17
10412-2360	Demolish Temp. E/B Bridge - Deck > Pier 19 to 20 (4 beams)	5	20-Jan-17	25-Jan-17
10412-2380	Demolish Temp. E/B Bridge - Crosshead & Pier > 20	9	26-Jan-17	07-Feb-17
A2790	Erection and Testing of LG-BM at Pier 43-45 - Crane C (MS/20821)	2	19-Dec-16 A	21-Jan-17
A2800	Demolish Four(4nos) Beams at Pier 43-42 - by LG-BM	2	23-Jan-17	24-Jan-17
A2830	Demolish Pier + Steel Support at Pier 43	9	25-Jan-17	06-Feb-17
A2832	Launch LG-BM to next Bridge Span	1	07-Feb-17	07-Feb-17



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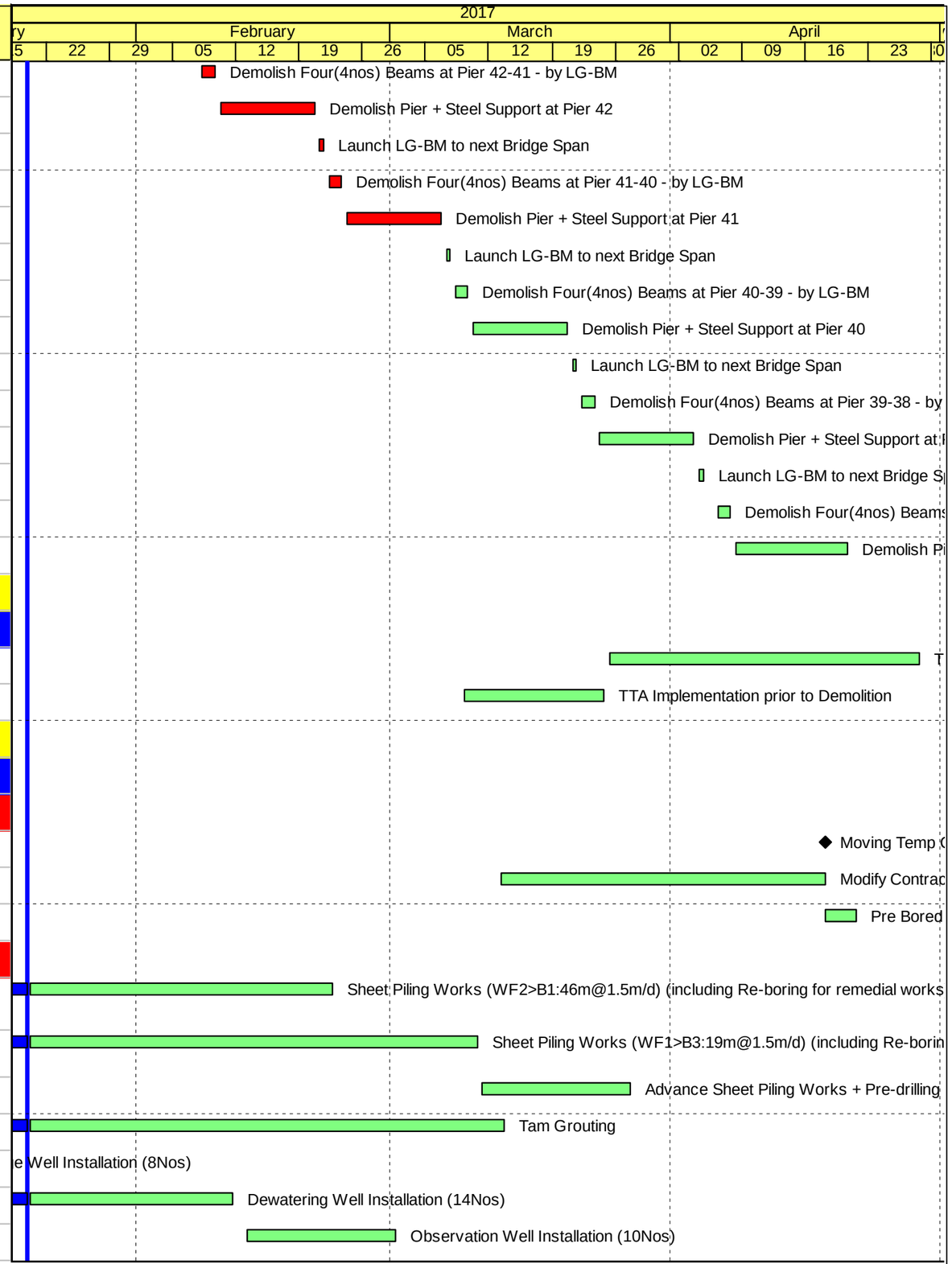
Activity ID	Activity Name	Rem Dur	Start	Finish
A3240	Demolish Four(4nos) Beams at Pier 42-41 - by LG-BM	2	08-Feb-17	09-Feb-17
A3250	Demolish Pier + Steel Support at Pier 42	9	10-Feb-17	20-Feb-17
A3260	Launch LG-BM to next Bridge Span	1	21-Feb-17	21-Feb-17
A3270	Demolish Four(4nos) Beams at Pier 41-40 - by LG-BM	2	22-Feb-17	23-Feb-17
A3280	Demolish Pier + Steel Support at Pier 41	9	24-Feb-17	06-Mar-17
A3290	Launch LG-BM to next Bridge Span	1	07-Mar-17	07-Mar-17
A3300	Demolish Four(4nos) Beams at Pier 40-39 - by LG-BM	2	08-Mar-17	09-Mar-17
A3310	Demolish Pier + Steel Support at Pier 40	9	10-Mar-17	20-Mar-17
A3320	Launch LG-BM to next Bridge Span	1	21-Mar-17	21-Mar-17
A3330	Demolish Four(4nos) Beams at Pier 39-38 - by LG-BM	2	22-Mar-17	23-Mar-17
A3340	Demolish Pier + Steel Support at Pier 39	9	24-Mar-17	03-Apr-17
A3350	Launch LG-BM to next Bridge Span	1	04-Apr-17	04-Apr-17
A3360	Demolish Four(4nos) Beams at Pier 38-37 - by LG-BM	2	06-Apr-17	07-Apr-17
A3370	Demolish Pier + Steel Support at Pier 38	9	08-Apr-17	20-Apr-17
10.5 - Temporary Bridge				
10.5.2 - Temporary Bridge 'TB'				
1052-1260	TB > Demolition of Temporary Bridge "TB'	27	25-Mar-17	28-Apr-17
A4140	TTA Implementation prior to Demolition	14	09-Mar-17	24-Mar-17
10.6 - Tunnel Approach Ramp				
10.6.1 - Approach Ramp (Excluding Portion IIB)				
Piling Works				
1061-3490	Moving Temp Car Park to Permanent Car Park Completed	0		18-Apr-17
1061-3495	Modify Contractor's Temp Site Office	28	13-Mar-17	18-Apr-17
1061-3500	Pre Bored H-Pile > Pile Ramp - BM03 A	4	18-Apr-17	21-Apr-17
Excavation & ELS Works				
1061-4901.1	Sheet Piling Works (WF2>B1:46m@1.5m/d) (including Re-boring for remedial works)	27	10-Oct-16 A	22-Feb-17
1061-4901.2	Sheet Piling Works (WF1>B3:19m@1.5m/d) (including Re-boring for remedial works)	41	12-Jul-16 A	10-Mar-17
1061-4910	Advance Sheet Piling Works + Pre-drilling in Phase 2 - Cul de sac Area (30m)	14	11-Mar-17	27-Mar-17
1061-4915	Tam Grouting	43	14-Sep-16 A	13-Mar-17
1061-5040	Recharge Well Installation (8Nos)	0	22-Dec-16 A	10-Jan-17 A
1061-5060	Dewatering Well Installation (14Nos)	18	11-Jan-17 A	11-Feb-17
1061-5080	Observation Well Installation (10Nos)	15	13-Feb-17	01-Mar-17



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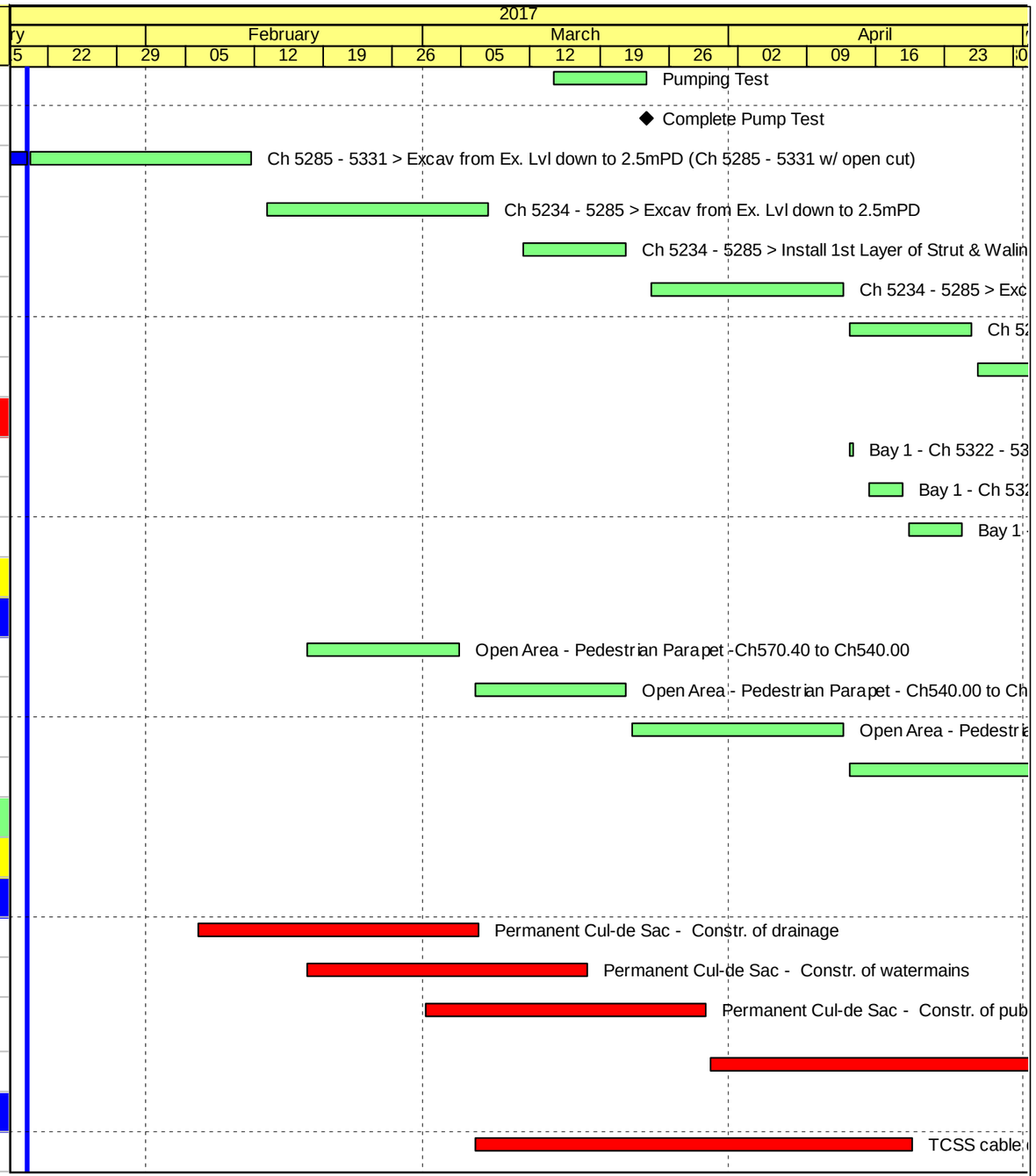
1061-5100	Pumping Test	9	14-Mar-17	23-Mar-17
1061-5120	Complete Pump Test	0		23-Mar-17
1061-5140	Ch 5285 - 5331 > Excav from Ex. Lvl down to 2.5mPD (Ch 5285 - 5331 w/ open cut)	18	15-Aug-16 A	11-Feb-17
1061-5160	Ch 5234 - 5285 > Excav from Ex. Lvl down to 2.5mPD	20	13-Feb-17	07-Mar-17
1061-5180	Ch 5234 - 5285 > Install 1st Layer of Strut & Waling	9	11-Mar-17	21-Mar-17
1061-5200	Ch 5234 - 5285 > Excav from 2.5mPD to 1m Below 2nd Layer of Struts	16	24-Mar-17	12-Apr-17
1061-5220	Ch 5234 - 5285 > Install 2nd Layer of Strut & Waling	9	13-Apr-17	25-Apr-17
1061-5240	Ch 5234 - 5285 > Excav to FEL	13	26-Apr-17	11-May-17
Structure Works				
1061-5260	Bay 1 - Ch 5322 - 5331 > Base Slab - Blinding Layer	1	13-Apr-17	13-Apr-17
1061-5280	Bay 1 - Ch 5322 - 5331 > Base Slab - Water Proofing Membrane	2	15-Apr-17	18-Apr-17
1061-5300	Bay 1 - Ch 5322 - 5331 > Base Slab - Rebar Fixing	5	19-Apr-17	24-Apr-17
10.7 - Section X - Miscellaneous Works				
10.7.3 - Open Area				
1073-1010	Open Area - Pedestrian Parapet -Ch570.40 to Ch540.00	14	17-Feb-17*	04-Mar-17
1073-1010.3	Open Area - Pedestrian Parapet - Ch540.00 to Ch520.00	14	06-Mar-17	21-Mar-17
1073-1010.5	Open Area - Pedestrian Parapet - Ch0.00 - Ch40.00	18	22-Mar-17	12-Apr-17
1073-1010.7	Open Area - Pedestrian Parapet - Ch40.00 - 80.00	18	13-Apr-17	06-May-17
11 - SECTION 11 OF THE WORKS				
11.1 - Portion XIIA - Stage 1				
11.1.1 - Along Watson Road - Waterwork & Roadworks (Portion XIIA)				
1110-2820	Permanent Cul-de Sac - Constr. of drainage	25	06-Feb-17*	06-Mar-17
1110-2830	Permanent Cul-de Sac - Constr. of watermains	25	17-Feb-17	17-Mar-17
1110-2840	Permanent Cul-de Sac - Constr. of public lighting & telecom (conduits & drawpits)	25	01-Mar-17	29-Mar-17
1110-2850	Permanent Cul-de Sac - Constr. of (kerbs & pavements)	25	30-Mar-17	02-May-17
11.1.3 - Along Tsing Fung St. - TCSS cable ducting (Portion XIIA)				
1110-2930	TCSS cable ducting along Tsing Fung St	36	06-Mar-17*	19-Apr-17



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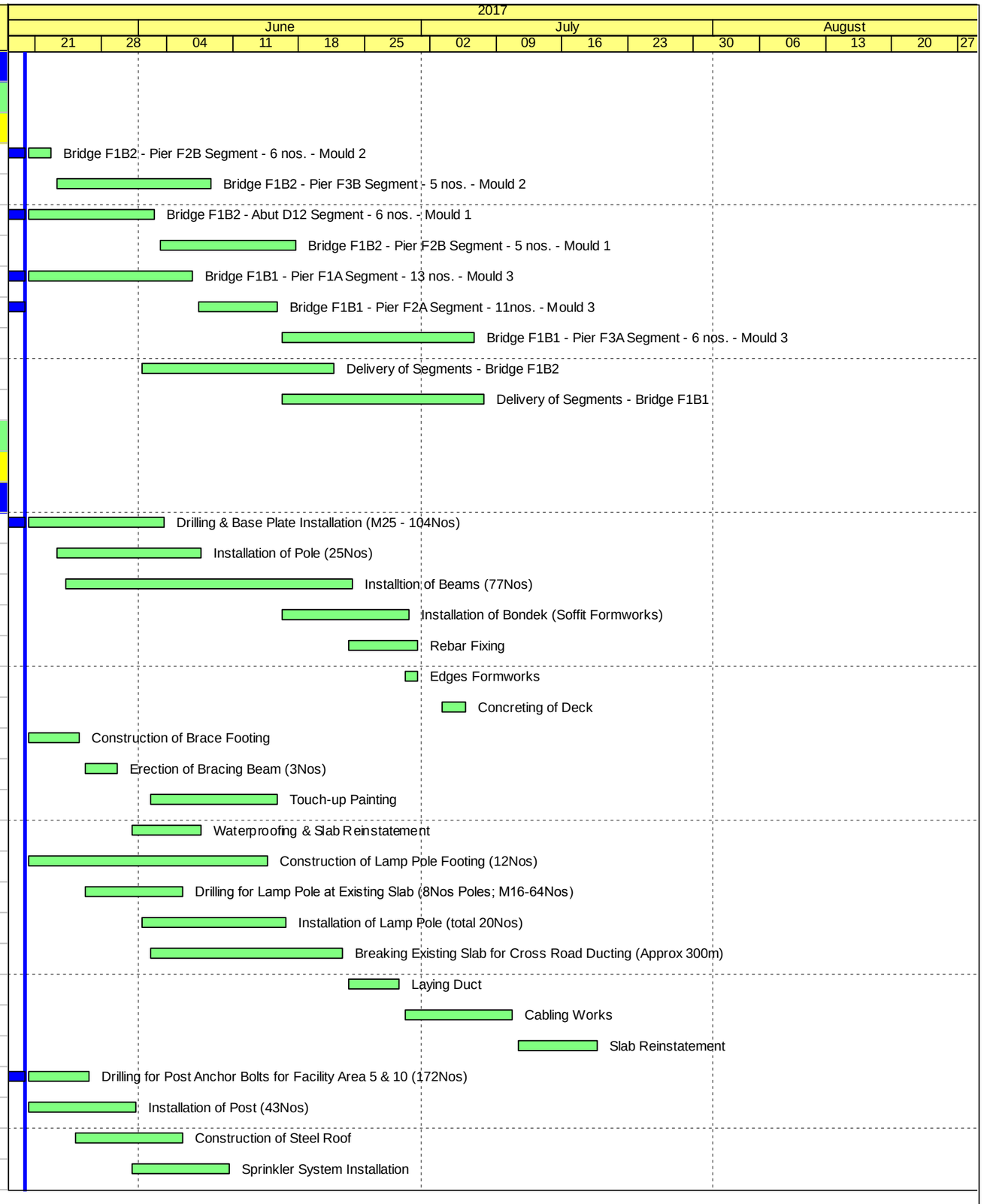
3MRP - May 2017 to Aug 2017				
02 - PRE-CONSTRUCTION WORKS				
02.5 - Bridge Segment/Beam Off-site Precasting				
0250-4018	Bridge F1B2 - Pier F2B Segment - 6 nos. - Mould 2	2	25-Apr-17 A	22-May-17
0250-4019	Bridge F1B2 - Pier F3B Segment - 5 nos. - Mould 2	14	23-May-17	08-Jun-17
0250-4057	Bridge F1B2 - Abut D12 Segment - 6 nos. - Mould 1	11	12-May-17 A	02-Jun-17
0250-4059	Bridge F1B2 - Pier F2B Segment - 5 nos. - Mould 1	13	03-Jun-17	17-Jun-17
0250-4110	Bridge F1B1 - Pier F1A Segment - 13 nos. - Mould 3	14	24-Apr-17 A	06-Jun-17
0250-4115	Bridge F1B1 - Pier F2A Segment - 11nos. - Mould 3	8	09-May-17 A	15-Jun-17
0250-4120	Bridge F1B1 - Pier F3A Segment - 6 nos. - Mould 3	17	16-Jun-17	06-Jul-17
A3180	Delivery of Segments - Bridge F1B2	18	01-Jun-17	21-Jun-17
A3190	Delivery of Segments - Bridge F1B1	18	16-Jun-17	07-Jul-17
03 - PRELIMINARY WORKS				
03.3 - Interface Works				
FEHD Permanent Depot				
0330-1023	Drilling & Base Plate Installation (M25 - 104Nos)	12	16-May-17 A	03-Jun-17
0330-1025	Installation of Pole (25Nos)	13	23-May-17	07-Jun-17
0330-1027	Installtion of Beams (77Nos)	26	24-May-17	23-Jun-17
0330-1029	Installation of Bondek (Soffit Formworks)	12	16-Jun-17	29-Jun-17
0330-1031	Rebar Fixing	7	23-Jun-17	30-Jun-17
0330-1033	Edges Formworks	2	29-Jun-17	30-Jun-17
0330-1035	Concreting of Deck	3	03-Jul-17	05-Jul-17
0330-1043	Construction of Brace Footing	5	20-May-17	25-May-17
0330-1047	Erection of Bracing Beam (3Nos)	3	26-May-17	29-May-17
0330-1049	Touch-up Painting	12	02-Jun-17	15-Jun-17
0330-1051	Waterproofing & Slab Reinstatement	7	31-May-17	07-Jun-17
0330-1055	Construction of Lamp Pole Footing (12Nos)	21	20-May-17	14-Jun-17
0330-1057	Drilling for Lamp Pole at Existing Slab (8Nos Poles; M16-64Nos)	8	26-May-17	05-Jun-17
0330-1059	Installation of Lamp Pole (total 20Nos)	14	01-Jun-17	16-Jun-17
0330-1061	Breaking Existing Slab for Cross Road Ducting (Approx 300m)	18	02-Jun-17	22-Jun-17
0330-1063	Laying Duct	5	23-Jun-17	28-Jun-17
0330-1065	Cabling Works	9	29-Jun-17	10-Jul-17
0330-1067	Slab Reinstatement	8	11-Jul-17	19-Jul-17
0330-1069	Drilling for Post Anchor Bolts for Facility Area 5 & 10 (172Nos)	6	15-May-17 A	26-May-17
0330-1071	Installation of Post (43Nos)	9	20-May-17	31-May-17
0330-1073	Construction of Steel Roof	9	25-May-17	05-Jun-17
0330-1075	Sprinkler System Installation	10	31-May-17	10-Jun-17



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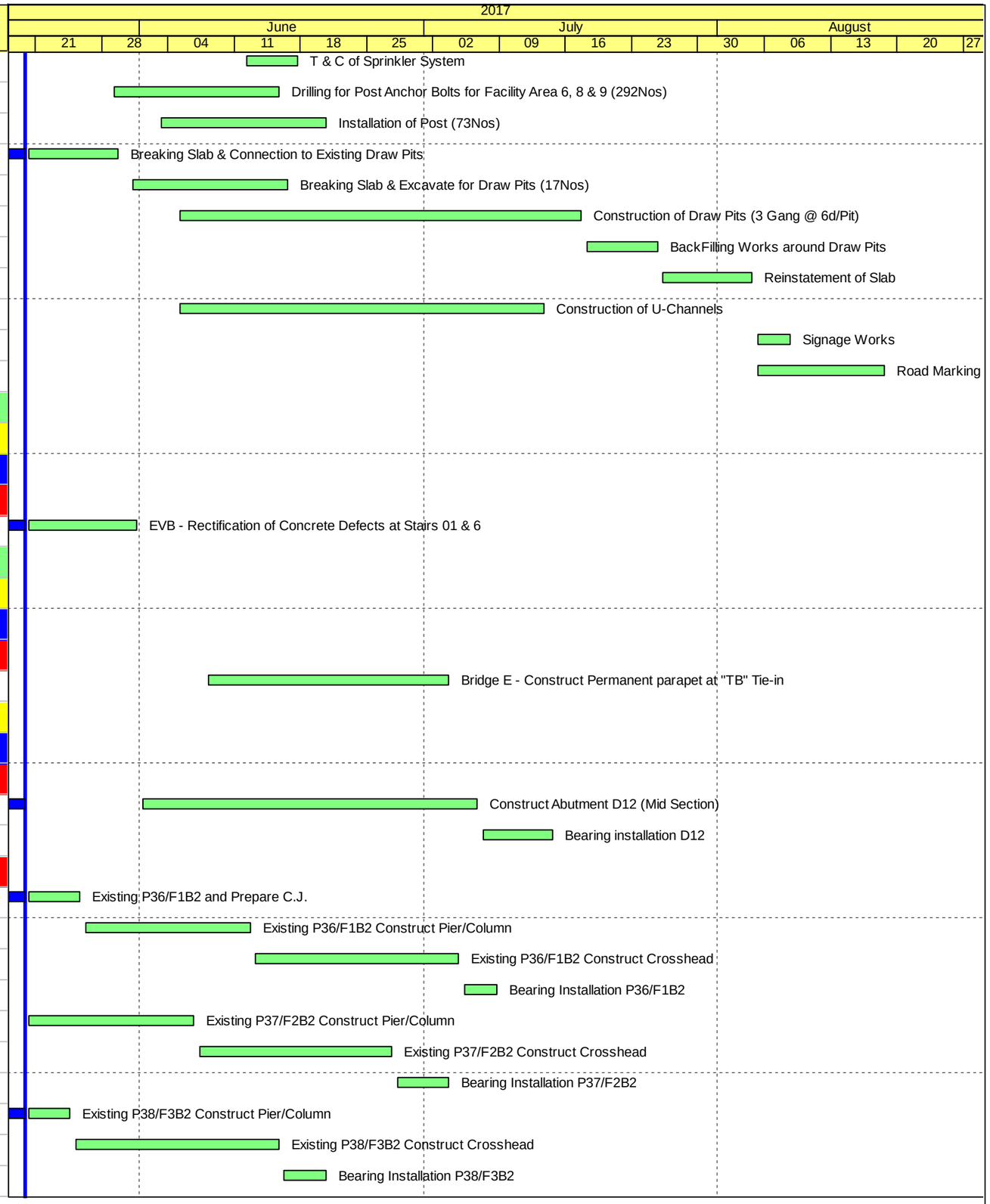
Activity ID	Activity Name	Rem Dur	Start	Finish
0330-1077	T & C of Sprinkler System	6	12-Jun-17	17-Jun-17
0330-1079	Drilling for Post Anchor Bolts for Facility Area 6, 8 & 9 (292Nos)	15	29-May-17	15-Jun-17
0330-1081	Installation of Post (73Nos)	15	03-Jun-17	20-Jun-17
0330-1083	Breaking Slab & Connection to Existing Draw Pits	8	15-May-17 A	29-May-17
0330-1085	Breaking Slab & Excavate for Draw Pits (17Nos)	15	31-May-17	16-Jun-17
0330-1087	Construction of Draw Pits (3 Gang @ 6d/Pit)	36	05-Jun-17	17-Jul-17
0330-1089	BackFilling Works around Draw Pits	7	18-Jul-17	25-Jul-17
0330-1091	Reinstatement of Slab	9	26-Jul-17	04-Aug-17
0330-1093	Construction of U-Channels	33	05-Jun-17	13-Jul-17
0330-1095	Signage Works	3	05-Aug-17	08-Aug-17
A4910	Road Marking & Misc Works	12	05-Aug-17	18-Aug-17
05 - SECTION 2 & 2A OF THE WORKS				
05.1 - Cut & Cover Tunnel Ch 4855-4932 (APS Footprint)				
05.1.6 - EVB Sub-structure & Tunnel				
05.1.7 - EVB & Tunnel Remedial Works				
A2273	EVB - Rectification of Concrete Defects at Stairs 01 & 6	9	20-Dec-16 A	31-May-17
10 - SECTION X OF THE WORKS				
10.1 - E/B Bridges (Bridge D, E and F)				
10.1.4 - Bridge E / Hing Fat Slip Road				
Bridge Construction				
1014-2280	Bridge E - Construct Permanent parapet at "TB" Tie-in	21	08-Jun-17	03-Jul-17
10.3 - Middle Bridge (Bridge F)				
10.3.1 - Pier Construction				
Abutment D12				
1031-1930	Construct Abutment D12 (Mid Section)	30	10-Apr-17 A	06-Jul-17
1031-1940	Bearing installation D12	7	07-Jul-17	14-Jul-17
Pier F1B2 to F4B				
1031-1040	Existing P36/F1B2 and Prepare C.J.	5	18-May-17 A	25-May-17
1031-1060	Existing P36/F1B2 Construct Pier/Column	14	26-May-17	12-Jun-17
1031-1080	Existing P36/F1B2 Construct Crosshead	18	13-Jun-17	04-Jul-17
1031-1100	Bearing Installation P36/F1B2	4	05-Jul-17	08-Jul-17
1031-1300	Existing P37/F2B2 Construct Pier/Column	14	20-May-17	06-Jun-17
1031-1320	Existing P37/F2B2 Construct Crosshead	18	07-Jun-17	27-Jun-17
1031-1340	Bearing Installation P37/F2B2	4	28-Jun-17	03-Jul-17
1031-1380	Existing P38/F3B2 Construct Pier/Column	4	28-Apr-17 A	24-May-17
1031-1400	Existing P38/F3B2 Construct Crosshead	18	25-May-17	15-Jun-17
1031-1420	Bearing Installation P38/F3B2	4	16-Jun-17	20-Jun-17



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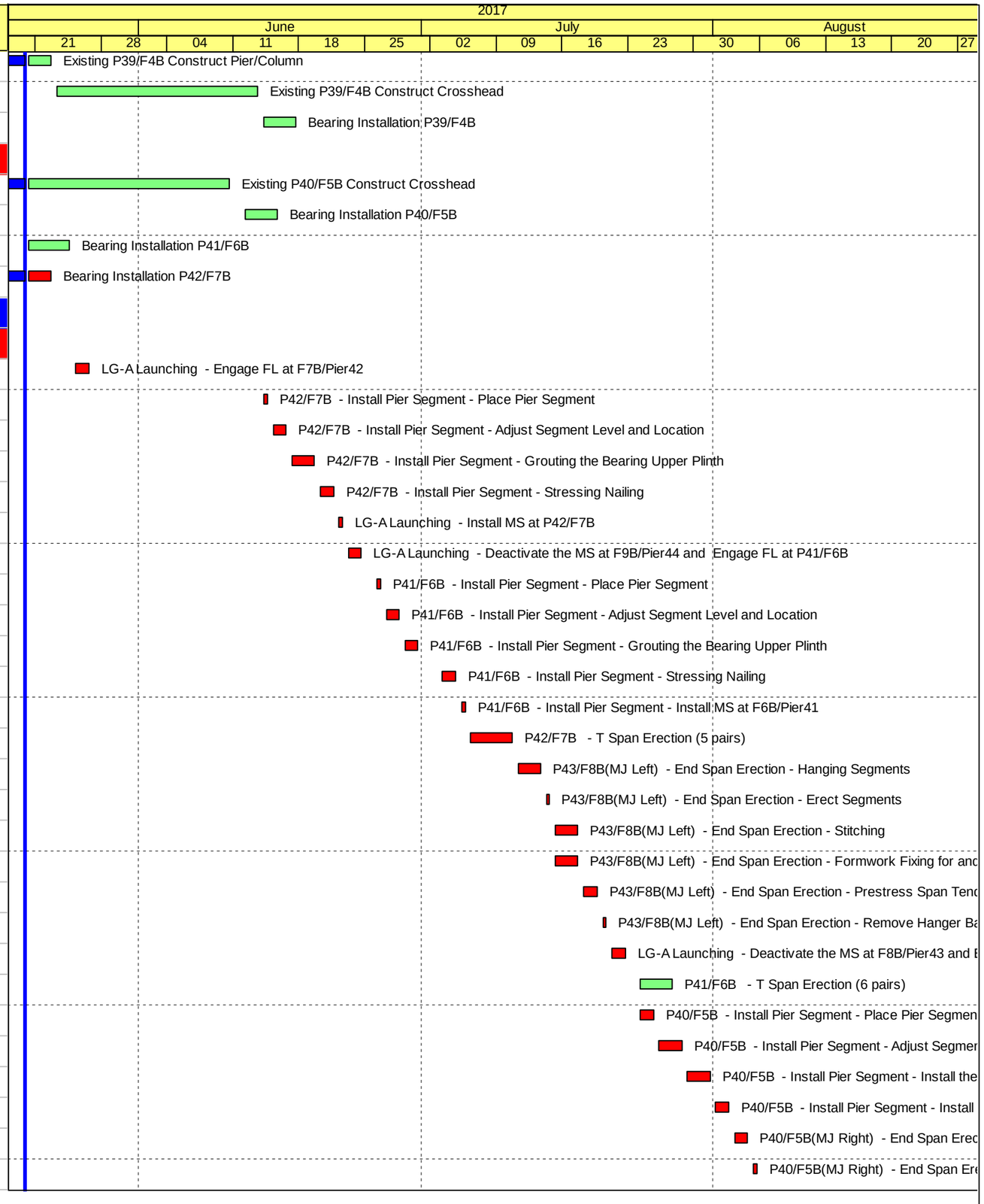
1031-1460	Existing P39/F4B Construct Pier/Column	2	14-Apr-17 A	22-May-17
1031-1480	Existing P39/F4B Construct Crosshead	18	23-May-17	13-Jun-17
1031-1500	Bearing Installation P39/F4B	4	14-Jun-17	17-Jun-17
Pier F5B to F8B				
1031-1560	Existing P40/F5B Construct Crosshead	18	27-Apr-17 A	10-Jun-17
1031-1580	Bearing Installation P40/F5B	4	12-Jun-17	15-Jun-17
1031-1660	Bearing Installation P41/F6B	4	20-May-17	24-May-17
1031-1740	Bearing Installation P42/F7B	2	10-May-17 A	22-May-17
10.3.2 - Bridge Construction				
Bridge F3B				
1032-1840	LG-A Launching - Engage FL at F7B/Pier42	2	25-May-17	26-May-17
1032-1860	P42/F7B - Install Pier Segment - Place Pier Segment	1	14-Jun-17	14-Jun-17
1032-1880	P42/F7B - Install Pier Segment - Adjust Segment Level and Location	2	15-Jun-17	16-Jun-17
1032-1900	P42/F7B - Install Pier Segment - Grouting the Bearing Upper Plinth	2	17-Jun-17	19-Jun-17
1032-1920	P42/F7B - Install Pier Segment - Stressing Nailing	2	20-Jun-17	21-Jun-17
1032-1940	LG-A Launching - Install MS at P42/F7B	1	22-Jun-17	22-Jun-17
1032-1960	LG-A Launching - Deactivate the MS at F9B/Pier44 and Engage FL at P41/F6B	2	23-Jun-17	24-Jun-17
1032-1980	P41/F6B - Install Pier Segment - Place Pier Segment	1	26-Jun-17	26-Jun-17
1032-2000	P41/F6B - Install Pier Segment - Adjust Segment Level and Location	2	27-Jun-17	28-Jun-17
1032-2020	P41/F6B - Install Pier Segment - Grouting the Bearing Upper Plinth	2	29-Jun-17	30-Jun-17
1032-2040	P41/F6B - Install Pier Segment - Stressing Nailing	2	03-Jul-17	04-Jul-17
1032-2060	P41/F6B - Install Pier Segment - Install MS at F6B/Pier41	1	05-Jul-17	05-Jul-17
1032-2080	P42/F7B - T Span Erection (5 pairs)	4	06-Jul-17	10-Jul-17
1032-2100	P43/F8B(MJ Left) - End Span Erection - Hanging Segments	3	11-Jul-17	13-Jul-17
1032-2120	P43/F8B(MJ Left) - End Span Erection - Erect Segments	1	14-Jul-17	14-Jul-17
1032-2140	P43/F8B(MJ Left) - End Span Erection - Stitching	2	15-Jul-17	17-Jul-17
1032-2160	P43/F8B(MJ Left) - End Span Erection - Formwork Fixing for and Grouting for Bearing	2	15-Jul-17	17-Jul-17
1032-2180	P43/F8B(MJ Left) - End Span Erection - Prestress Span Tendons	2	18-Jul-17	19-Jul-17
1032-2200	P43/F8B(MJ Left) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	20-Jul-17	20-Jul-17
1032-2220	LG-A Launching - Deactivate the MS at F8B/Pier43 and Engage FL at P40/F5B	2	21-Jul-17	22-Jul-17
1032-2240	P41/F6B - T Span Erection (6 pairs)	4	24-Jul-17	27-Jul-17
1032-2260	P40/F5B - Install Pier Segment - Place Pier Segment (2nos.)	2	24-Jul-17	25-Jul-17
1032-2280	P40/F5B - Install Pier Segment - Adjust Segment Level and Location	3	26-Jul-17	28-Jul-17
1032-2300	P40/F5B - Install Pier Segment - Install the Tie & Packing System	2	29-Jul-17	31-Jul-17
1032-2320	P40/F5B - Install Pier Segment - Install MS at P40/F5B (Right) and Engage FL at P39/F4B	2	01-Aug-17	02-Aug-17
1032-2340	P40/F5B(MJ Right) - End Span Erection - Hanging Segments	2	03-Aug-17	04-Aug-17
1032-2360	P40/F5B(MJ Right) - End Span Erection - Erect Segments	1	05-Aug-17	05-Aug-17



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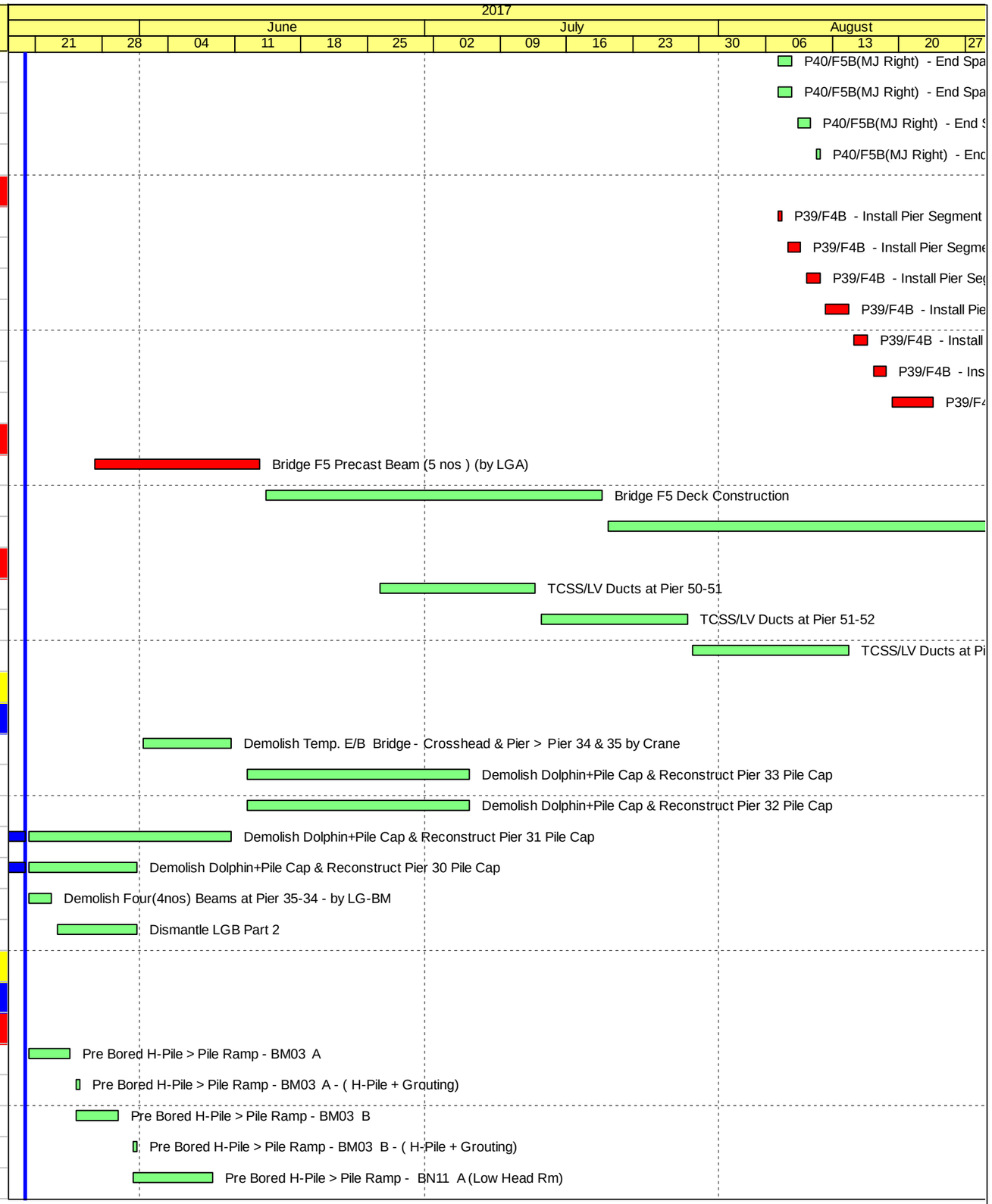
1032-2380	P40/F5B(MJ Right) - End Span Erection - Stitching	2	07-Aug-17	08-Aug-17
1032-2400	P40/F5B(MJ Right) - End Span Erection - Formwork Fixing for and Grouting for Bearing	2	07-Aug-17	08-Aug-17
1032-2420	P40/F5B(MJ Right) - End Span Erection - Prestress Span Tendons	2	09-Aug-17	10-Aug-17
1032-2440	P40/F5B(MJ Right) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	11-Aug-17	11-Aug-17
Bridge F2B				
1032-2580	P39/F4B - Install Pier Segment - Place Pier Segment	1	07-Aug-17	07-Aug-17
1032-2600	P39/F4B - Install Pier Segment - Adjust Segment Level and Location	2	08-Aug-17	09-Aug-17
1032-2620	P39/F4B - Install Pier Segment - Grouting the Bearing Upper Plinth	2	10-Aug-17	11-Aug-17
1032-2640	P39/F4B - Install Pier Segment - Stressing Nailing	2	12-Aug-17	14-Aug-17
1032-2660	P39/F4B - Install MS at P39/F4B	2	15-Aug-17	16-Aug-17
1032-2680	P39/F4B - Install Pier Segment - Relocate MS at P40/F5B to left and Engage FL at P39/F3B	2	17-Aug-17	18-Aug-17
1032-2700	P39/F4B - T Span Erection (6 pairs)	4	19-Aug-17	23-Aug-17
Bridge F5				
1032-3920	Bridge F5 Precast Beam (5 nos) (by LGA)	14	27-May-17	13-Jun-17
1032-3940	Bridge F5 Deck Construction	30	14-Jun-17	19-Jul-17
1032-3960	Middle Bridge > Erect Noise Enclosure	40	20-Jul-17	04-Sep-17
All Middle Bridge F (Common)				
1032-4350	TCSS/LV Ducts at Pier 50-51	14	26-Jun-17	12-Jul-17
1032-4353	TCSS/LV Ducts at Pier 51-52	14	13-Jul-17	28-Jul-17
1032-4354	TCSS/LV Ducts at Pier 52-53	14	29-Jul-17	14-Aug-17
10.4 - Bridge Deck Demolition				
10.4.3 - Existing E/B Bridge				
10412-1670	Demolish Temp. E/B Bridge - Crosshead & Pier > Pier 34 & 35 by Crane	9	01-Jun-17	10-Jun-17
10412-1700	Demolish Dolphin+Pile Cap & Reconstruct Pier 33 Pile Cap	20	12-Jun-17	05-Jul-17
10412-1730	Demolish Dolphin+Pile Cap & Reconstruct Pier 32 Pile Cap	20	12-Jun-17	05-Jul-17
10412-1760	Demolish Dolphin+Pile Cap & Reconstruct Pier 31 Pile Cap	18	08-Mar-17 A	10-Jun-17
10412-1790	Demolish Dolphin+Pile Cap & Reconstruct Pier 30 Pile Cap	9	02-Mar-17 A	31-May-17
A3450	Demolish Four(4nos) Beams at Pier 35-34 - by LG-BM	2	20-May-17	22-May-17
A3460	Dismantle LGB Part 2	7	23-May-17	31-May-17
10.6 - Tunnel Approach Ramp				
10.6.1 - Approach Ramp (Excluding Portion IIB)				
Piling Works				
1061-3500	Pre Bored H-Pile > Pile Ramp - BM03 A	4	20-May-17	24-May-17
1061-3520	Pre Bored H-Pile > Pile Ramp - BM03 A - (H-Pile + Grouting)	1	25-May-17	25-May-17
1061-3540	Pre Bored H-Pile > Pile Ramp - BM03 B	4	25-May-17	29-May-17
1061-3560	Pre Bored H-Pile > Pile Ramp - BM03 B - (H-Pile + Grouting)	1	31-May-17	31-May-17
1061-3820	Pre Bored H-Pile > Pile Ramp - BN11 A (Low Head Rm)	8	31-May-17	08-Jun-17



Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

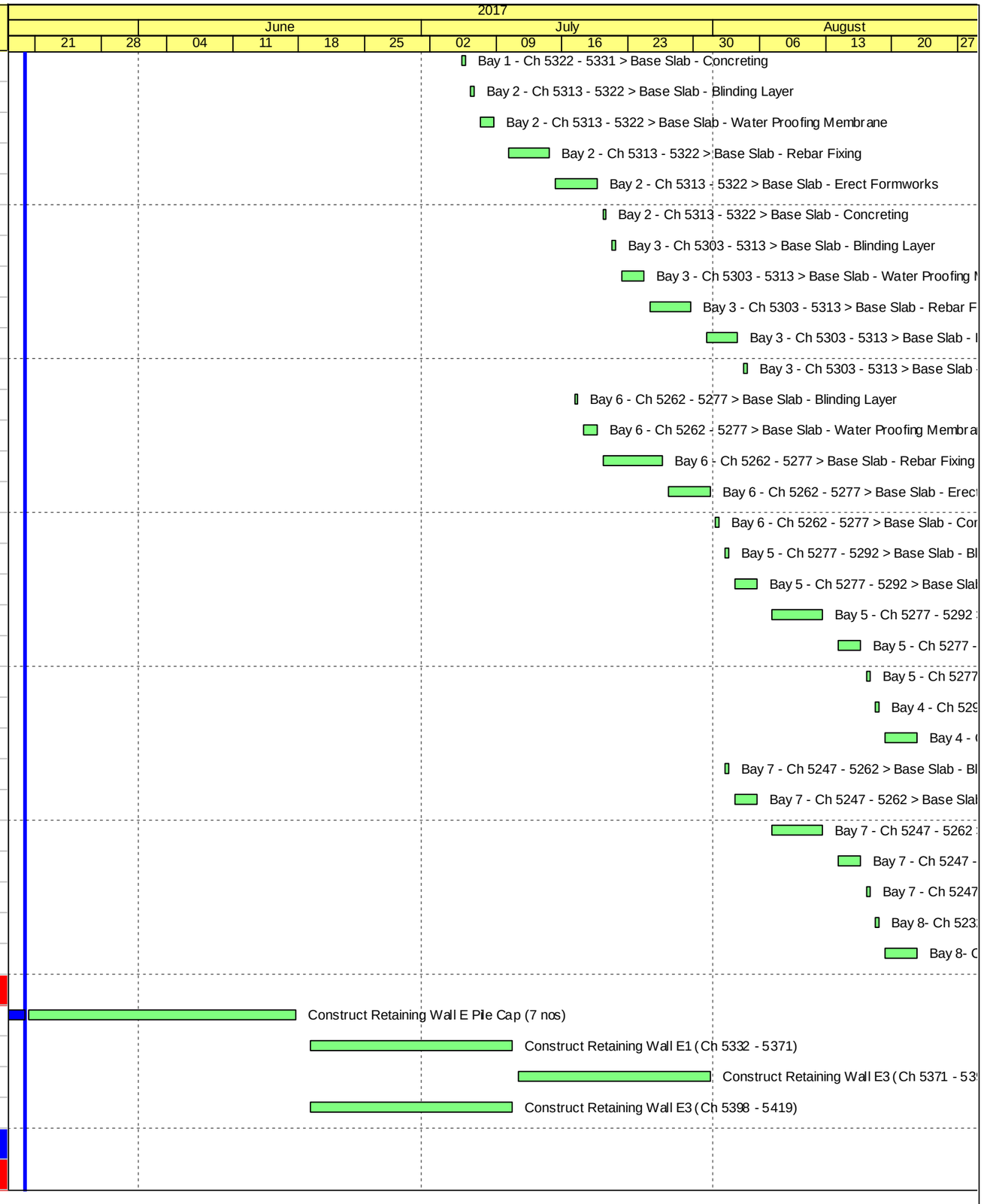
Contract HY/2009/19
Three Months Rolling Programme (20 May 2017 to 19 August 2017)

Activity ID	Activity Name	Rem Dur	Start	Finish
1061-3840	Pre Bored H-Pile > Pile Ramp - BN11 A - (H-Pile + Grouting)	1	09-Jun-17	09-Jun-17
1061-3860	Pre Bored H-Pile > Pile Ramp - BN11 B (LHR)	8	31-May-17	08-Jun-17
1061-3880	Pre Bored H-Pile > Pile Ramp - BN11 B - (H-Pile + Grouting)	1	09-Jun-17	09-Jun-17
1061-3900	Pre Bored H-Pile > Pile Ramp - BN12 A (LHR)	8	09-Jun-17	17-Jun-17
1061-3920	Pre Bored H-Pile > Pile Ramp - BN12 A - (H-Pile + Grouting)	1	19-Jun-17	19-Jun-17
1061-3940	Pre Bored H-Pile > Pile Ramp - BN12 B (LHR)	8	09-Jun-17	17-Jun-17
1061-3960	Pre Bored H-Pile > Pile Ramp - BN12 B - (H-Pile + Grouting)	1	19-Jun-17	19-Jun-17
1061-3980	Pre Bored H-Pile > Pile Ramp - BN13 A (LHR)	8	19-Jun-17	27-Jun-17
1061-4000	Pre Bored H-Pile > Pile Ramp - BN13 A - (H-Pile + Grouting)	1	28-Jun-17	28-Jun-17
1061-4020	Pre Bored H-Pile > Pile Ramp - BN13 B (LHR)	8	19-Jun-17	27-Jun-17
1061-4040	Pre Bored H-Pile > Pile Ramp - BN13 B - (H-Pile + Grouting)	1	28-Jun-17	28-Jun-17
1061-4060	Pre Bored H-Pile > Pile Ramp - BN01 A (LHR)	8	28-Jun-17	07-Jul-17
1061-4080	Pre Bored H-Pile > Pile Ramp - BN01 A - (H-Pile + Grouting)	1	08-Jul-17	08-Jul-17
1061-4100	Pre Bored H-Pile > Pile Ramp - BN01 B (LHR)	8	28-Jun-17	07-Jul-17
1061-4120	Pre Bored H-Pile > Pile Ramp - BN01 B - (H-Pile + Grouting)	1	08-Jul-17	08-Jul-17
1061-4140	Pre Bored H-Pile > Pile Ramp - BN05 A (LHR)	8	08-Jul-17	17-Jul-17
1061-4160	Pre Bored H-Pile > Pile Ramp - BN05 A - (H-Pile + Grouting)	1	18-Jul-17	18-Jul-17
1061-4180	Pre Bored H-Pile > Pile Ramp - BN05 B (LHR)	8	08-Jul-17	17-Jul-17
1061-4200	Pre Bored H-Pile > Pile Ramp - BN05 B - (H-Pile + Grouting)	1	18-Jul-17	18-Jul-17
1061-4220	Pre Bored H-Pile > Pile Ramp - BN06 A (LHR)	8	18-Jul-17	26-Jul-17
1061-4240	Pre Bored H-Pile > Pile Ramp - BN06 A - (H-Pile + Grouting)	1	27-Jul-17	27-Jul-17
1061-4260	Pre Bored H-Pile > Pile Ramp - BN06 B (LHR)	8	18-Jul-17	26-Jul-17
1061-4280	Pre Bored H-Pile > Pile Ramp - BN06 B - (H-Pile + Grouting)	1	27-Jul-17	27-Jul-17
1061-4300	Remaining Bored Piles & Pre-Bored H-Pile Testing	30	22-Jun-17	27-Jul-17
Excavation & ELS Works				
1061-4910	Advance Sheet Piling Works + Pre-drilling in Phase 2 - Cul de sac Area (30m)	14	04-Apr-17 A	06-Jun-17
1061-5100	Pumping Test	9	16-May-17 A	31-May-17
1061-5120	Complete Pump Test	0		31-May-17
1061-5180	Ch 5234 - 5285 > Install 1st Layer of Strut & Waling	7	24-Apr-17 A	27-May-17
1061-5200	Ch 5234 - 5285 > Excav from 2.5mPD to 1m Below 2nd Layer of Struts	16	01-Jun-17	19-Jun-17
1061-5220	Ch 5234 - 5285 > Install 2nd Layer of Strut & Waling	9	20-Jun-17	29-Jun-17
1061-5240	Ch 5234 - 5285 > Excav to FEL	13	30-Jun-17	15-Jul-17
Structure Works				
1061-5260	Bay 1 - Ch 5322 - 5331 > Base Slab - Blinding Layer	1	20-Jun-17	20-Jun-17
1061-5280	Bay 1 - Ch 5322 - 5331 > Base Slab - Water Proofing Membrane	2	21-Jun-17	22-Jun-17
1061-5300	Bay 1 - Ch 5322 - 5331 > Base Slab - Rebar Fixing	5	23-Jun-17	28-Jun-17
1061-5320	Bay 1 - Ch 5322 - 5331 > Base Slab - Erect Formworks	4	29-Jun-17	04-Jul-17

Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Contract HY/2009/19
Three Months Rolling Programme (20 May 2017 to 19 August 2017)

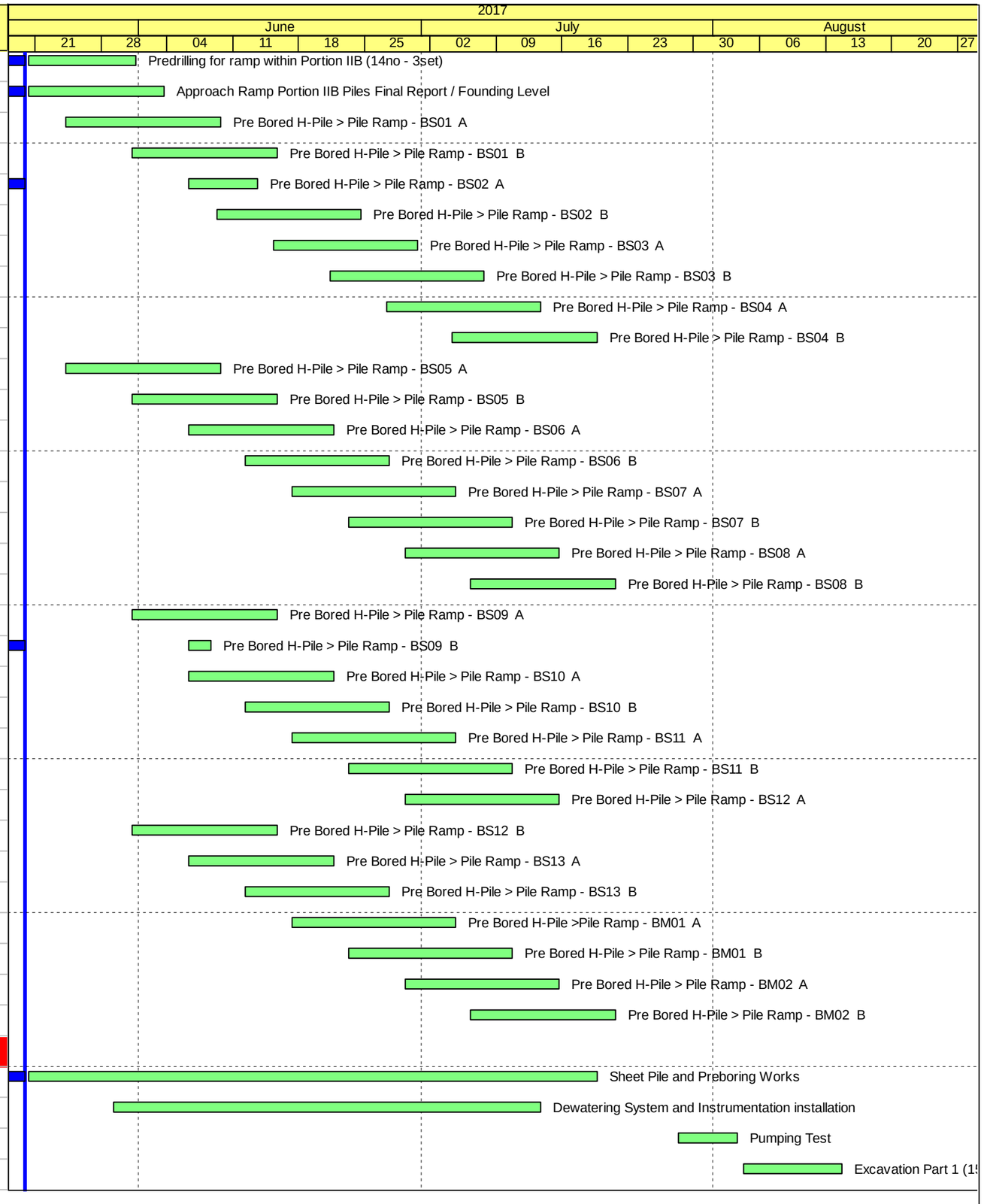
Activity ID	Activity Name	Rem Dur	Start	Finish
1061-5340	Bay 1 - Ch 5322 - 5331 > Base Slab - Concreting	1	05-Jul-17	05-Jul-17
1061-5360	Bay 2 - Ch 5313 - 5322 > Base Slab - Blinding Layer	1	06-Jul-17	06-Jul-17
1061-5380	Bay 2 - Ch 5313 - 5322 > Base Slab - Water Proofing Membrane	2	07-Jul-17	08-Jul-17
1061-5400	Bay 2 - Ch 5313 - 5322 > Base Slab - Rebar Fixing	5	10-Jul-17	14-Jul-17
1061-5420	Bay 2 - Ch 5313 - 5322 > Base Slab - Erect Formworks	4	15-Jul-17	19-Jul-17
1061-5440	Bay 2 - Ch 5313 - 5322 > Base Slab - Concreting	1	20-Jul-17	20-Jul-17
1061-5460	Bay 3 - Ch 5303 - 5313 > Base Slab - Blinding Layer	1	21-Jul-17	21-Jul-17
1061-5480	Bay 3 - Ch 5303 - 5313 > Base Slab - Water Proofing Membrane	2	22-Jul-17	24-Jul-17
1061-5500	Bay 3 - Ch 5303 - 5313 > Base Slab - Rebar Fixing	5	25-Jul-17	29-Jul-17
1061-5520	Bay 3 - Ch 5303 - 5313 > Base Slab - Erect Formworks	4	31-Jul-17	03-Aug-17
1061-5540	Bay 3 - Ch 5303 - 5313 > Base Slab - Concreting	1	04-Aug-17	04-Aug-17
1061-5560	Bay 6 - Ch 5262 - 5277 > Base Slab - Blinding Layer	1	17-Jul-17	17-Jul-17
1061-5580	Bay 6 - Ch 5262 - 5277 > Base Slab - Water Proofing Membrane	2	18-Jul-17	19-Jul-17
1061-5600	Bay 6 - Ch 5262 - 5277 > Base Slab - Rebar Fixing	6	20-Jul-17	26-Jul-17
1061-5620	Bay 6 - Ch 5262 - 5277 > Base Slab - Erect Formworks	4	27-Jul-17	31-Jul-17
1061-5640	Bay 6 - Ch 5262 - 5277 > Base Slab - Concreting	1	01-Aug-17	01-Aug-17
1061-5660	Bay 5 - Ch 5277 - 5292 > Base Slab - Blinding Layer (WF1)	1	02-Aug-17	02-Aug-17
1061-5680	Bay 5 - Ch 5277 - 5292 > Base Slab - Base Slab - Water Proofing Membrane (WF1)	3	03-Aug-17	05-Aug-17
1061-5700	Bay 5 - Ch 5277 - 5292 > Base Slab - Rebar Fixing (WF1)	6	07-Aug-17	12-Aug-17
1061-5720	Bay 5 - Ch 5277 - 5292 > Base Slab - Erect Formworks (WF1)	3	14-Aug-17	16-Aug-17
1061-5740	Bay 5 - Ch 5277 - 5292 > Base Slab - Concreting (WF1)	1	17-Aug-17	17-Aug-17
1061-5760	Bay 4 - Ch 5292 - 5303 > Base Slab - Blinding Layer (WF1)	1	18-Aug-17	18-Aug-17
1061-5780	Bay 4 - Ch 5292 - 5303 > Base Slab - Base Slab - Water Proofing Membrane (WF1)	3	19-Aug-17	22-Aug-17
1061-5860	Bay 7 - Ch 5247 - 5262 > Base Slab - Blinding Layer (WF2)	1	02-Aug-17	02-Aug-17
1061-5880	Bay 7 - Ch 5247 - 5262 > Base Slab - Base Slab - Water Proofing Membrane (WF2)	3	03-Aug-17	05-Aug-17
1061-5900	Bay 7 - Ch 5247 - 5262 > Base Slab - Rebar Fixing (WF2)	6	07-Aug-17	12-Aug-17
1061-5920	Bay 7 - Ch 5247 - 5262 > Base Slab - Erect Formworks (WF2)	3	14-Aug-17	16-Aug-17
1061-5940	Bay 7 - Ch 5247 - 5262 > Base Slab - Concreting (WF2)	1	17-Aug-17	17-Aug-17
1061-5960	Bay 8- Ch 5232 - 5247 > Base Slab - Blinding Layer (WF2)	1	18-Aug-17	18-Aug-17
1061-5980	Bay 8- Ch 5232 - 5247 > Base Slab - Base Slab - Water Proofing Membrane (WF2)	3	19-Aug-17	22-Aug-17
Retaining Walls & Trough Structure B,C & D				
1061-6860	Construct Retaining Wall E Pile Cap (7 nos)	24	06-Mar-17 A	17-Jun-17
1061-6880	Construct Retaining Wall E1 (Ch 5332 - 5371)	18	19-Jun-17	10-Jul-17
1061-6900	Construct Retaining Wall E3 (Ch 5371 - 5398)	18	11-Jul-17	31-Jul-17
1061-6920	Construct Retaining Wall E3 (Ch 5398 - 5419)	18	19-Jun-17	10-Jul-17
10.6.2 - Approach Ramp (Within Portion IIB)				
Pre-Bored H-Piles				



Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Contract HY/2009/19
Three Months Rolling Programme (20 May 2017 to 19 August 2017)

Activity ID	Activity Name	Rem Dur	Start	Finish
1062-1020	Predrilling for ramp within Portion IIB (14no - 3set)	9	11-May-17 A	31-May-17
1062-1040	Approach Ramp Portion IIB Piles Final Report / Founding Level	12	17-May-17 A	03-Jun-17
1062-1400	Pre Bored H-Pile > Pile Ramp - BS01 A	14	24-May-17	09-Jun-17
1062-1420	Pre Bored H-Pile > Pile Ramp - BS01 B	14	31-May-17	15-Jun-17
1062-1440	Pre Bored H-Pile > Pile Ramp - BS02 A	7	18-May-17 A	13-Jun-17
1062-1460	Pre Bored H-Pile > Pile Ramp - BS02 B	14	09-Jun-17	24-Jun-17
1062-1480	Pre Bored H-Pile > Pile Ramp - BS03 A	14	15-Jun-17	30-Jun-17
1062-1500	Pre Bored H-Pile > Pile Ramp - BS03 B	14	21-Jun-17	07-Jul-17
1062-1520	Pre Bored H-Pile > Pile Ramp - BS04 A	14	27-Jun-17	13-Jul-17
1062-1540	Pre Bored H-Pile > Pile Ramp - BS04 B	14	04-Jul-17	19-Jul-17
1062-1560	Pre Bored H-Pile > Pile Ramp - BS05 A	14	24-May-17	09-Jun-17
1062-1580	Pre Bored H-Pile > Pile Ramp - BS05 B	14	31-May-17	15-Jun-17
1062-1600	Pre Bored H-Pile > Pile Ramp - BS06 A	14	06-Jun-17	21-Jun-17
1062-1620	Pre Bored H-Pile > Pile Ramp - BS06 B	14	12-Jun-17	27-Jun-17
1062-1640	Pre Bored H-Pile > Pile Ramp - BS07 A	14	17-Jun-17	04-Jul-17
1062-1660	Pre Bored H-Pile > Pile Ramp - BS07 B	14	23-Jun-17	10-Jul-17
1062-1680	Pre Bored H-Pile > Pile Ramp - BS08 A	14	29-Jun-17	15-Jul-17
1062-1700	Pre Bored H-Pile > Pile Ramp - BS08 B	14	06-Jul-17	21-Jul-17
1062-1720	Pre Bored H-Pile > Pile Ramp - BS09 A	14	31-May-17	15-Jun-17
1062-1740	Pre Bored H-Pile > Pile Ramp - BS09 B	3	15-May-17 A	08-Jun-17
1062-1760	Pre Bored H-Pile > Pile Ramp - BS10 A	14	06-Jun-17	21-Jun-17
1062-1780	Pre Bored H-Pile > Pile Ramp - BS10 B	14	12-Jun-17	27-Jun-17
1062-1800	Pre Bored H-Pile > Pile Ramp - BS11 A	14	17-Jun-17	04-Jul-17
1062-1820	Pre Bored H-Pile > Pile Ramp - BS11 B	14	23-Jun-17	10-Jul-17
1062-1840	Pre Bored H-Pile > Pile Ramp - BS12 A	14	29-Jun-17	15-Jul-17
1062-1860	Pre Bored H-Pile > Pile Ramp - BS12 B	14	31-May-17	15-Jun-17
1062-1880	Pre Bored H-Pile > Pile Ramp - BS13 A	14	06-Jun-17	21-Jun-17
1062-1900	Pre Bored H-Pile > Pile Ramp - BS13 B	14	12-Jun-17	27-Jun-17
1062-1920	Pre Bored H-Pile >Pile Ramp - BM01 A	14	17-Jun-17	04-Jul-17
1062-1940	Pre Bored H-Pile > Pile Ramp - BM01 B	14	23-Jun-17	10-Jul-17
1062-1960	Pre Bored H-Pile > Pile Ramp - BM02 A	14	29-Jun-17	15-Jul-17
1062-1980	Pre Bored H-Pile > Pile Ramp - BM02 B	14	06-Jul-17	21-Jul-17
ELS				
A1000	Sheet Pile and Preboring Works	50	08-May-17 A	19-Jul-17
A1010	Dewatering System and Instrumentation installation	38	29-May-17	13-Jul-17
A1020	Pumping Test	6	28-Jul-17	03-Aug-17
A1030	Excavation Part 1 (1500m^3 / day)	9	04-Aug-17	14-Aug-17



Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Contract HY/2009/19
Three Months Rolling Programme (20 May 2017 to 19 August 2017)

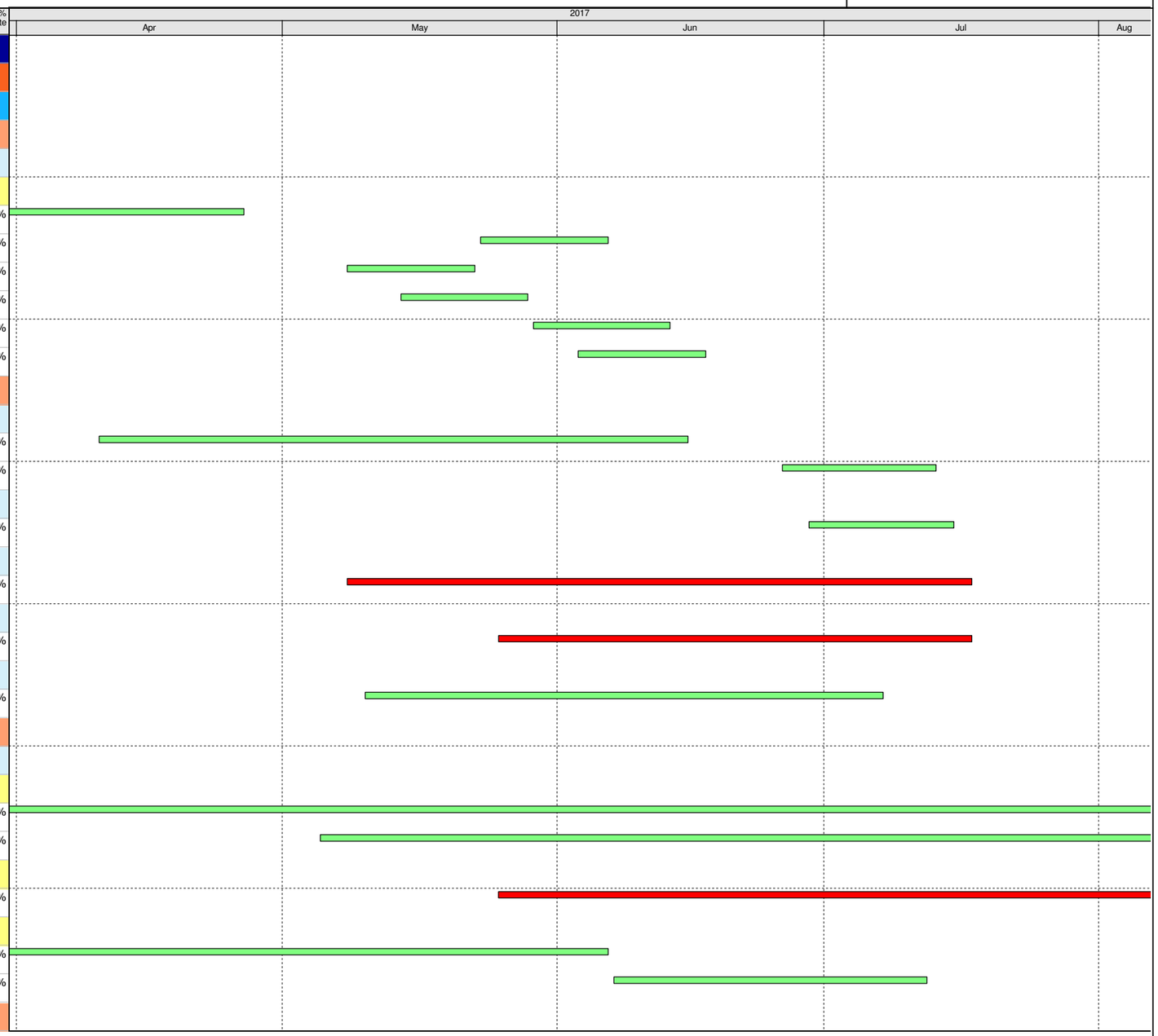
China State Construction Engineering (Hong Kong) Ltd.
Contract No. HY/2009/15 - Central Wan Chai By Pass - Tunnel (Causeway Bay Typhoon Shelter Section)

Activity Name	Start	Finish	2017		
			Apr	May	Jun
Hung Hing Road Resurfacing	1/6/2017	30/6/2017			
Defect works inside tunnel	1/4/2017	30/9/2017			

中國建築-利達聯營
CHINA STATE - LEADER JOINT VENTURE

CEDD Contract No. HK/2012/08
Wan Chai Development Phase II
Central - Wan Chai Bypass at Wan Chai West

Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	Activity % Complete
HK/2012/08 Works Programme Rev.10(DD 31 March 2017)						
Works for Section Completion						
Construction						
Section II A - CWB Tunnel & Slip Road Structures and Facilities						
CWB D - Slip Road 1 - Trough / Retaining Wall						
CWB D - Slip Road 1 - Trough/Retaining Wall Structure						
SIIA12788	Sec II A - CWB SR1 Trough & RW: jet grout for seepage at SR1 trough	27	11-Mar-17 A	26-Apr-17	48	0%
SIIA12800	Sec II A - CWB SR1 Trough & RW: Trough Structure - Base Slab & Wall (bay 1)	15	23-May-17	06-Jun-17	59	0%
SIIA13720	Sec II A - CWB SR1 Trough & RW: Trough Structure -Base Slab & Wall (bay 2)	15	08-May-17	22-May-17	48	0%
SIIA13740	Sec II A - CWB SR1 Trough & RW: Trough Structure - Base Slab & Wall (bay 3)	15	14-May-17	28-May-17	48	0%
SIIA13800	Sec II A - CWB SR1 Trough & RW: Retaining Walls RW3 & RW4 (bay 1)	16	29-May-17	13-Jun-17	48	0%
SIIA13860	Sec II A - CWB SR1 Trough & RW: Retaining Walls RW3 & RW4 (bay 2)	15	03-Jun-17	17-Jun-17	48	0%
Section III A - Road A2, A4 & A5						
Roadwork & Utilities - Section 1 (L1806 - L1801)						
SIIIA10280	Sec III A - roadwork and utlities section 1 carriageway - Drainage works (TTA Stage 4A, 4B & 4C)	52	10-Apr-17*	15-Jun-17	15	0%
SIIIA10290	Sec III A - roadwork and utlities section 1 carriageway - TTA Stage 5	15	26-Jun-17*	13-Jul-17	7	0%
Roadwork & Utilities - Section 2 (L1810 - L1806)						
SIIIA12470	Sec III A - roadwork and utlities section 2 carriageway - Relocate site access	14	29-Jun-17*	15-Jul-17	8	0%
Roadwork & Utilities - Section 4 (L1406 - L1401)						
SIIIA12930	Sec III A - roadwork and utlities section 4 carriageway - Drainage works (L1406 -L1401)	59	08-May-17*	17-Jul-17	0	0%
Roadwork & Utilities - Section 5 (L1411 - L1406)						
SIIIA13150	Sec III A - roadwork and utlities section 5 carriageway - Drainage works (L1411 - L1406)	44	25-May-17*	17-Jul-17	0	0%
Roadwork & Utilities - Section 6 (L1102 - L1411)						
SIIIA13370	Sec III A - roadwork and utlities section 1 carriageway - Drainage works (Culvert L - L1411)	49	10-May-17*	07-Jul-17	14	0%
Section V - Remaining At-Grade Road; Remove 2nd Stage ITA						
Roadwork & Utilities						
Section 1 (L1504 - L1900)						
SV12420	Sec V - Roadwork & Utilities Section 1 Carriageway - Drainage Works at MVB North	112	16-Mar-17 A	17-Aug-17	57	0%
SV12450	Sec V - Roadwork & Utilities Section 1 Carriageway - Gully pipe	109	05-May-17	11-Sep-17	57	0%
Section 2 (L1510 - L1504)						
SV12600	Sec V - Roadwork & Utilities Section 2 Carriageway - Drainage Works (L1501-L1507, L1406B-L1406A,	82	25-May-17*	30-Aug-17	0	0%
Section 3 (Culvert L - L1504)						
SIV12760	Sec V - Roadwork & Utilities Section 3 Carriageway - Drainage Works (Culvert L - L1504 & L1406B - L1406C)	51	16-Mar-17 A	06-Jun-17	130	0%
SIV12800	Sec V - Roadwork & Utilities Section 3 Carriageway - Gully pipe (Culvert L - L1504)	30	07-Jun-17	12-Jul-17	130	0%
Box Culvert L1 & FRP-L - Bay 8						



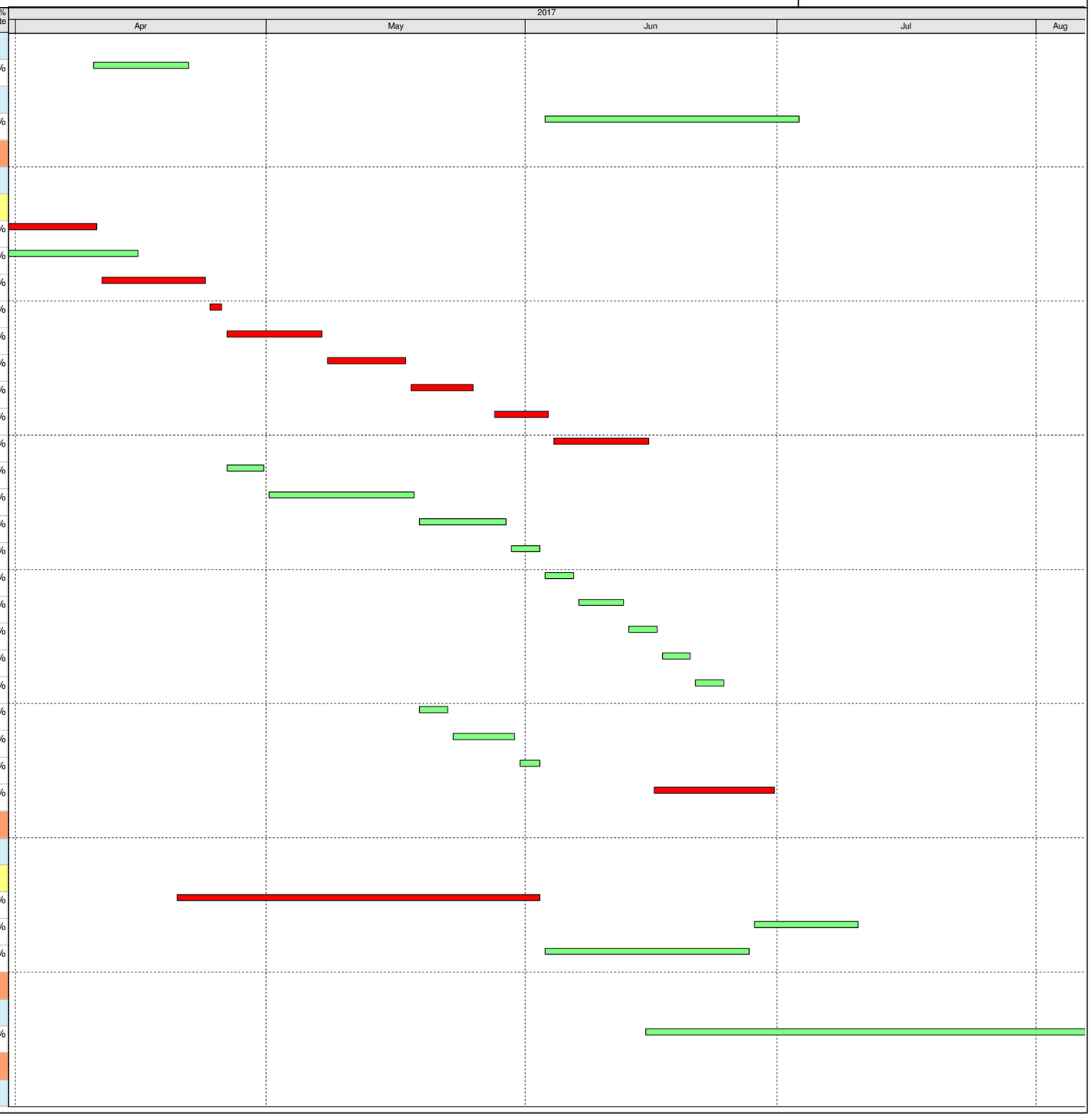
Data Date:
31-Mar-17

Current Milestone
Actual Work
Critical Remaining Work
Remaining Work
Remaining Level of Effort

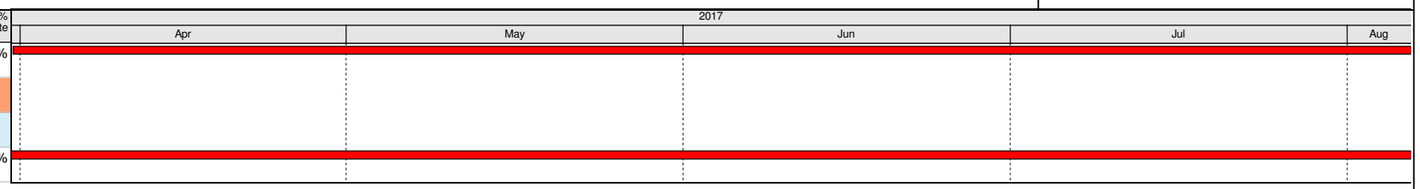
Three Months Rolling Programme for Non-CRIII (Apr 2017 to Jun 2017)
(Ref. to Works Programme Rev.10)

Date	Revision	Checked	Approved
11-May-17			

Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	Activity % Complete
Box Culvert L1 & FRP-L - Bay 8 Structure						
CUL11328	Culvert L - bay 8 - construt top slab	12	10-Apr-17*	21-Apr-17	79	0%
Box Culvert L1 & FRP-L - Bay 8 Others						
CUL11340	Culvert L - bay 8 - backfill above box section	25	03-Jun-17*	03-Jul-17	30	0%
Section VI D - Area 8B & 10						
WDII Box 1 Construction						
WDII Box 1 Remaining Structure						
WD-C6075	Sec VID -Remaining of Box I: Construct sacarfical wall (2.3m)	11	19-Mar-17 A	10-Apr-17	0	60.71%
WD-C6080	Sec VID - Remaining of Box I: Construct Wall 13(23m run)	16	07-Mar-17 A	15-Apr-17	8	46.67%
WD-C6090	Sec VID - Remaining of Box I:Construct 2.5m wall 13	13	11-Apr-17	23-Apr-17	0	0%
WD-C6120	Sec VID - Remaining of Box I: Blasting and final sink box to -10.0 mPD	2	24-Apr-17	25-Apr-17	0	0%
WD-C6122	Sec VID - Remaining of Box I: Stiching of 4 bored piles	12	26-Apr-17	07-May-17	0	0%
WD-C6124	Sec VID - Remaining of Box I: Scaffoding and soffit work at 4 bored piles	10	08-May-17	17-May-17	0	0%
WD-C6126	Sec VID - Remaining of Box I: Roof rebar and concreting flat roof	8	18-May-17	25-May-17	0	0%
WD-C6128	Sec VID - Remaining of Box I: Construct remaining roof half joint	7	28-May-17	03-Jun-17	0	0%
WD-C6130	Sec VID - Remaining of Box I: Waterproofing work of roof	12	04-Jun-17	15-Jun-17	0	0%
WD-C6140	Sec VID - Backfilling at South of Box I : Backfilling bagged cement to -6.5mPD	5	26-Apr-17	30-Apr-17	6	0%
WD-C6160	Sec VID - Backfilling at South of Box I : Remove all ELS shoring and cut off P7 to P58 at -6.5mPD	18	01-May-17	18-May-17	6	0%
WD-C6200	Sec VID - Backfilling at South of Box I : Remove SIC coarse screen hood	11	19-May-17	29-May-17	6	0%
WD-C6220	Sec VID - Backfilling at South of Box I : Install pipe cap for box beam	4	30-May-17	02-Jun-17	6	0%
WD-C6222	Sec VID - Backfilling at South of Box I : Stiching of H-pile	4	03-Jun-17	06-Jun-17	6	0%
WD-C6223	Sec VID - Backfilling at South of Box I : Bagged lighweight concrete btw cap & seawall	6	07-Jun-17	12-Jun-17	6	0%
WD-C6240	Sec VID - Backfilling at South of Box I : Install box beam	4	13-Jun-17	16-Jun-17	6	0%
WD-C6250	Sec VID - Backfilling at South of Box I : Place 400mm thk precast cover to SIC	4	17-Jun-17	20-Jun-17	6	0%
WD-C6255	Sec VID - Backfilling at South of Box I : Bagged lightweight concrete btw precast cover and box beam	4	21-Jun-17	24-Jun-17	6	0%
WD-C6275	Sec VID - Backfilling at North of Box I : Type C concrete block at Box I half joint	4	19-May-17	22-May-17	13	0%
WD-C6295	Sec VID - Backfilling at North of Box I : Install ceramsite concrete blocks	8	23-May-17	30-May-17	13	0%
WD-C6315	Sec VID - Backfilling at North of Box I : Type A concrete block at roof of Box 1/2	3	31-May-17	02-Jun-17	13	0%
WD-C6320	Sec VI D - Public fill on the top of Box I	15	16-Jun-17	30-Jun-17	0	0%
Section IV - Slip Road 3						
Roadwork & Utilities						
Section 2 (L2301 - L2103)						
SIV11940	Sec IV - Roadwork & Utilities at SR3 Section 2 Carriageway - Drainage Works	35	20-Apr-17*	02-Jun-17	0	0%
SIV11960	Sec IV - Roadwork & Utilities at SR3 Section 2 Carriageway - Watermain	10	28-Jun-17	10-Jul-17	161	0%
SIV12000	Sec IV - Roadwork & Utilities at SR3 Section 2 Carriageway - Gully pipe	21	03-Jun-17	27-Jun-17	161	0%
Section VII - Remainder Works						
Promenade Seawall Parapet Construction						
SVII10400	Sec VII - construct block seawall mass concrete coping & backfill to pavement formation	50	15-Jun-17*	12-Aug-17	13	0%
Section VIII - Landscape Softworks						
Soft Landscaping Works						

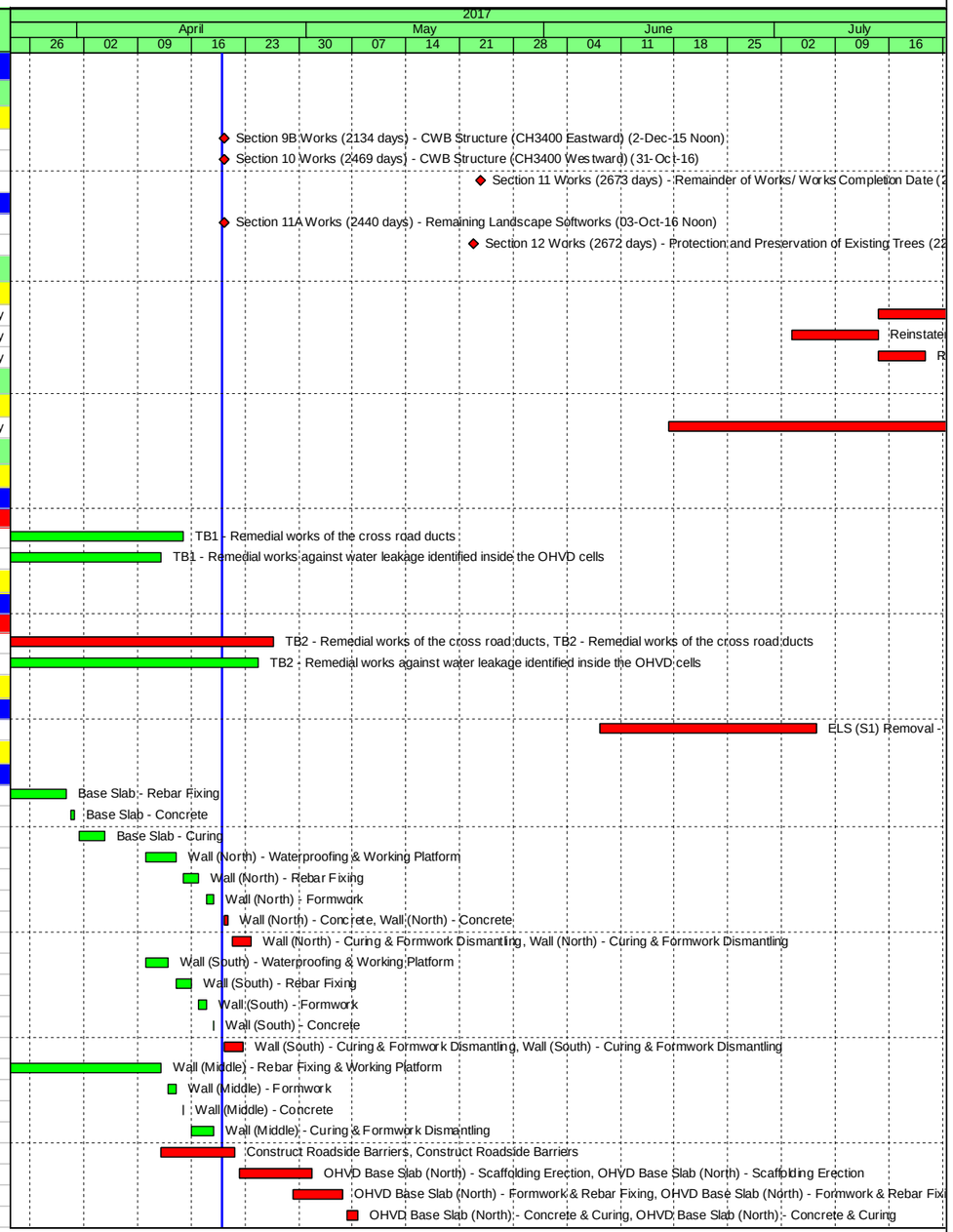


Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	Activity % Complete
SVIII10040	Sec VIII - Trees Planting	118	31-Mar-17	24-Aug-17	0	0%
Section X - Protection & Preservation of Trees						
Soft Landscaping Works						
SX10020	Sec X - Protection & Preservation of Trees	234	31-Jan-13 A	19-Nov-17	0	85.66%



CEDD CONTRACT HK/2009/02

Activity ID	Activity Name	Ori Dur	Rem Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar
Three Months Rolling Programme 2017-04-20 (dd 20-Apr-17)							
Programme Milestones (Revised up to EOTO No.21)							
Contractual Completion Dates							
KDC0170	Section 9B Works (2134 days) - CWB Structure (CH3400 Eastward) (2-Dec-15 Noon)	0	0		20-Apr-17*	-504	Calendar Day
KDC0180	Section 10 Works (2469 days) - CWB Structure (CH3400 Westward) (31-Oct-16)	0	0		20-Apr-17*	-170	Calendar Day
KDC0190	Section 11 Works (2673 days) - Remainder of Works/ Works Completion Date (23-May-17)	0	0		23-May-17*	0	Calendar Day
Soft Landscaping & Establishment Key Dates							
KDC0200	Section 11A Works (2440 days) - Remaining Landscape Softworks (03-Oct-16 Noon)	0	0		20-Apr-17*	-198	Calendar Day
KDC0220	Section 12 Works (2672 days) - Protection and Preservation of Existing Trees (22-May-17 Noon)	0	0		22-May-17*	0	Calendar Day
Section 8A of the Works - Reprovisioning of Wan Chai Ferry Pier in Area 8							
Outstanding Works							
S8A-OUT-1040	Relocation of fire hydrant near Ferry Pier	10	10	14-Jul-17	25-Jul-17	-58	HK Working Day
S8A-OUT-1060	Reinstatement works of the flooring inside the rooms under staircase ST-01 of the Ferry Pier	12	12	03-Jul-17	14-Jul-17	-58	HK Working Day
S8A-OUT-1070	Reinstatement works of the flooring under the temporary covered walkway	6	6	14-Jul-17	20-Jul-17	-54	HK Working Day
Section 8B of the Works - Temporary Covered Walkway & Works in Area 8							
Temporary Covered Walkway							
S8B-TCW-02300	Temp Covered Walkway - Construct the remaining Type 4 Covered Walkway at west wing	36	36	17-Jun-17	27-Jul-17	-60	HK Working Day
Section 9B of the Works - CWB Tunnel Structure (CH3400 - CH3796)							
Tunnel Portion 1 (CH3500-CH3630)							
CWB Structural Works							
Outstanding Works							
S9B-T1-OUT-1010	TB1 - Remedial works of the cross road ducts	25	0	12-Oct-16 A	15-Apr-17 A		Calendar Day
S9B-T1-OUT-1030	TB1 - Remedial works against water leakage identified inside the OHVD cells	30	0	14-Mar-17 A	12-Apr-17 A		Calendar Day
Tunnel Portion 2 (CH3425-CH3500)							
CWB Structural Works							
Outstanding Works							
S9B-T2-OUT-1010	TB2 - Remedial works of the cross road ducts	25	7	12-Oct-16 A	26-Apr-17	-511	Calendar Day
S9B-T2-OUT-1020	TB2 - Remedial works against water leakage identified inside the OHVD cells	25	5	12-Oct-16 A	24-Apr-17	29	Calendar Day
Tunnel Portion 3 & Tunnel Portion 4 (CH3630-CH3790)							
CWB Structural Works							
S9B-T34-7400	ELS (S1) Removal - Bay 1 to Bay 8	28	28	08-Jun-17	06-Jul-17	-503	Calendar Day
Tunnel Portion 5 (CH3400-CH3425)							
Bay 13 (Eastern End Bay)							
S9B-T5-B13-1020	Base Slab - Rebar Fixing	10	0	11-Feb-17 A	30-Mar-17 A		Calendar Day
S9B-T5-B13-1030	Base Slab - Concrete	1	0	31-Mar-17 A	31-Mar-17 A		Calendar Day
S9B-T5-B13-1040	Base Slab - Curing	4	0	01-Apr-17 A	04-Apr-17 A		Calendar Day
S9B-T5-B13-1050	Wall (North) - Waterproofing & Working Platform	4	0	10-Apr-17 A	14-Apr-17 A		Calendar Day
S9B-T5-B13-1060	Wall (North) - Rebar Fixing	3	0	15-Apr-17 A	17-Apr-17 A		Calendar Day
S9B-T5-B13-1070	Wall (North) - Formwork	2	0	18-Apr-17 A	19-Apr-17 A		Calendar Day
S9B-T5-B13-1080	Wall (North) - Concrete	1	1	20-Apr-17	20-Apr-17	-546	Calendar Day
S9B-T5-B13-1090	Wall (North) - Curing & Formwork Dismantling	3	3	21-Apr-17	23-Apr-17	-546	Calendar Day
S9B-T5-B13-1100	Wall (South) - Waterproofing & Working Platform	4	0	10-Apr-17 A	13-Apr-17 A		Calendar Day
S9B-T5-B13-1110	Wall (South) - Rebar Fixing	3	0	14-Apr-17 A	16-Apr-17 A		Calendar Day
S9B-T5-B13-1120	Wall (South) - Formwork	2	0	17-Apr-17 A	18-Apr-17 A		Calendar Day
S9B-T5-B13-1130	Wall (South) - Concrete	1	0	19-Apr-17 A	19-Apr-17 A		Calendar Day
S9B-T5-B13-1140	Wall (South) - Curing & Formwork Dismantling	3	3	20-Apr-17	22-Apr-17	-549	Calendar Day
S9B-T5-B13-1150	Wall (Middle) - Rebar Fixing & Working Platform	4	0	12-Mar-17 A	12-Apr-17 A		Calendar Day
S9B-T5-B13-1160	Wall (Middle) - Formwork	2	0	13-Apr-17 A	14-Apr-17 A		Calendar Day
S9B-T5-B13-1170	Wall (Middle) - Concrete	1	0	15-Apr-17 A	15-Apr-17 A		Calendar Day
S9B-T5-B13-1180	Wall (Middle) - Curing & Formwork Dismantling	3	0	16-Apr-17 A	19-Apr-17 A		Calendar Day
S9B-T5-B13-1185	Construct Roadside Barriers	6	2	12-Apr-17 A	21-Apr-17	-549	Calendar Day
S9B-T5-B13-1230	OHVD Base Slab (North) - Scaffolding Erection	10	10	22-Apr-17	01-May-17	-549	Calendar Day
S9B-T5-B13-1240	OHVD Base Slab (North) - Formwork & Rebar Fixing	7	7	29-Apr-17	05-May-17	-546	Calendar Day
S9B-T5-B13-1250	OHVD Base Slab (North) - Concrete & Curing	2	2	06-May-17	07-May-17	-546	Calendar Day



◆ Milestone
◆ Critical Milestones
Current Works
Critical Works
Remaining Level of Effort

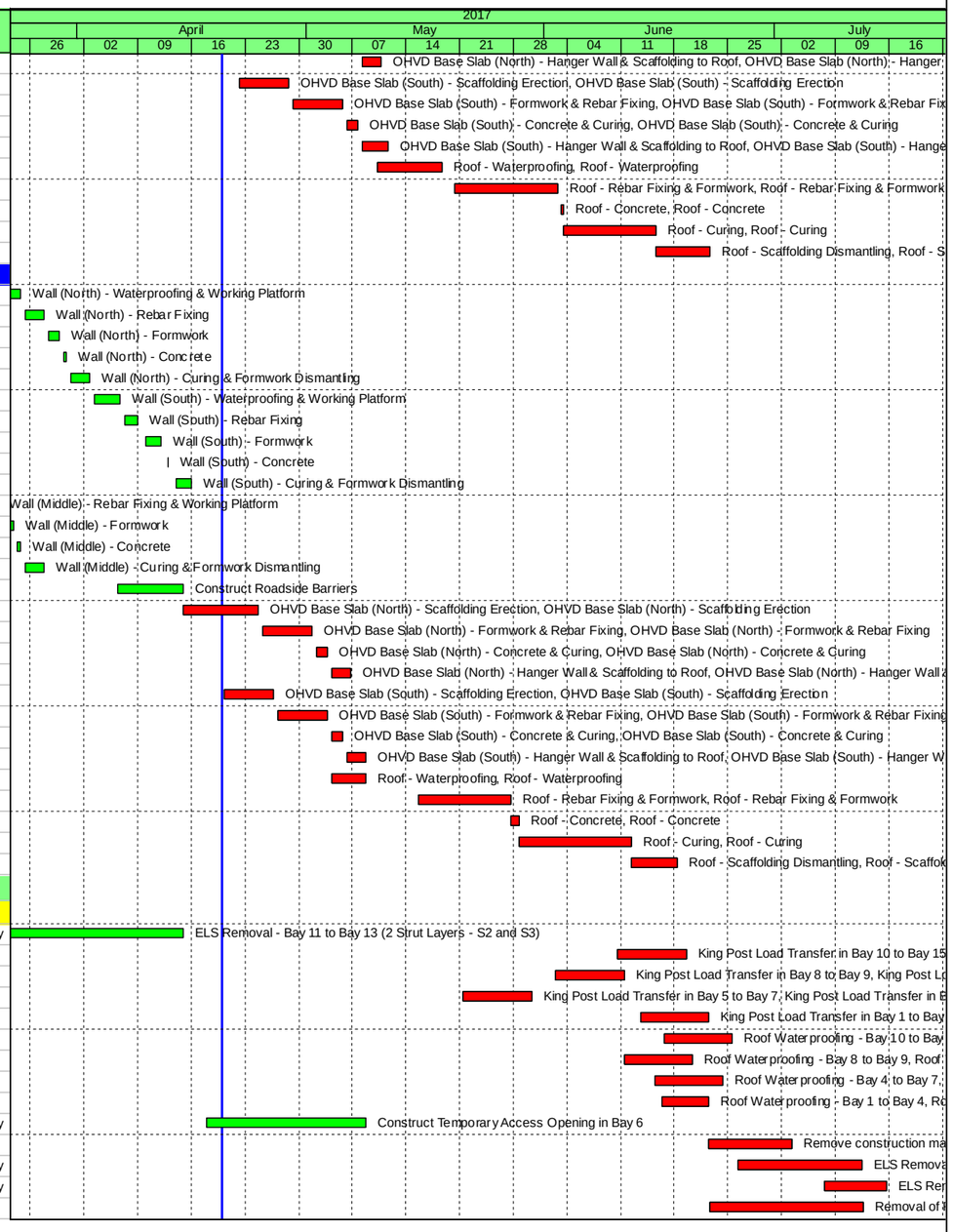
CHUN WO - CRGL JOINT VENTURE

CEDD CONTRACT NO. HK/2009/02
WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)
3-MONTH ROLLING PROGRAMME (dd 20-Apr-17)

Date	Revision	Checked	Approved
	Rev. Programme (08-Apr-...		

CEDD CONTRACT HK/2009/02

Activity ID	Activity Name	Ori Dur	Rem Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar
S9B-T5-B13-1260	OHVD Base Slab (North) - Hanger Wall & Scaffolding to Roof	3	3	08-May-17	10-May-17	-540	Calendar Day
S9B-T5-B13-1270	OHVD Base Slab (South) - Scaffolding Erection	7	7	22-Apr-17	28-Apr-17	-549	Calendar Day
S9B-T5-B13-1280	OHVD Base Slab (South) - Formwork & Rebar Fixing	7	7	29-Apr-17	05-May-17	-549	Calendar Day
S9B-T5-B13-1290	OHVD Base Slab (South) - Concrete & Curing	2	2	06-May-17	07-May-17	-549	Calendar Day
S9B-T5-B13-1300	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	4	4	08-May-17	11-May-17	-549	Calendar Day
S9B-T5-B13-1350	Roof - Waterproofing	9	9	10-May-17	18-May-17	-548	Calendar Day
S9B-T5-B13-1360	Roof - Rebar Fixing & Formwork	14	14	20-May-17	02-Jun-17	-549	Calendar Day
S9B-T5-B13-1370	Roof - Concrete	1	1	03-Jun-17	03-Jun-17	-549	Calendar Day
S9B-T5-B13-1380	Roof - Curing	12	12	03-Jun-17	15-Jun-17	-76	Calendar Day
S9B-T5-B13-1390	Roof - Scaffolding Dismantling	7	7	15-Jun-17	22-Jun-17	-50	Calendar Day
Bay 12							
S9B-T5-B12-1050	Wall (North) - Waterproofing & Working Platform	4	0	21-Mar-17 A	24-Mar-17 A		Calendar Day
S9B-T5-B12-1060	Wall (North) - Rebar Fixing	3	0	25-Mar-17 A	27-Mar-17 A		Calendar Day
S9B-T5-B12-1070	Wall (North) - Formwork	2	0	28-Mar-17 A	29-Mar-17 A		Calendar Day
S9B-T5-B12-1080	Wall (North) - Concrete	1	0	30-Mar-17 A	30-Mar-17 A		Calendar Day
S9B-T5-B12-1090	Wall (North) - Curing & Formwork Dismantling	3	0	31-Mar-17 A	02-Apr-17 A		Calendar Day
S9B-T5-B12-1100	Wall (South) - Waterproofing & Working Platform	4	0	03-Apr-17 A	06-Apr-17 A		Calendar Day
S9B-T5-B12-1110	Wall (South) - Rebar Fixing	3	0	07-Apr-17 A	09-Apr-17 A		Calendar Day
S9B-T5-B12-1120	Wall (South) - Formwork	2	0	10-Apr-17 A	12-Apr-17 A		Calendar Day
S9B-T5-B12-1130	Wall (South) - Concrete	1	0	13-Apr-17 A	13-Apr-17 A		Calendar Day
S9B-T5-B12-1140	Wall (South) - Curing & Formwork Dismantling	3	0	14-Apr-17 A	16-Apr-17 A		Calendar Day
S9B-T5-B12-1150	Wall (Middle) - Rebar Fixing & Working Platform	4	0	18-Mar-17 A	21-Mar-17 A		Calendar Day
S9B-T5-B12-1160	Wall (Middle) - Formwork	2	0	22-Mar-17 A	23-Mar-17 A		Calendar Day
S9B-T5-B12-1170	Wall (Middle) - Concrete	1	0	24-Mar-17 A	24-Mar-17 A		Calendar Day
S9B-T5-B12-1180	Wall (Middle) - Curing & Formwork Dismantling	3	0	25-Mar-17 A	27-Mar-17 A		Calendar Day
S9B-T5-B12-1185	Construct Roadside Barriers	7	0	06-Apr-17 A	15-Apr-17 A		Calendar Day
S9B-T5-B12-1230	OHVD Base Slab (North) - Scaffolding Erection	10	5	15-Apr-17 A	24-Apr-17	-536	Calendar Day
S9B-T5-B12-1240	OHVD Base Slab (North) - Formwork & Rebar Fixing	7	7	25-Apr-17	01-May-17	-536	Calendar Day
S9B-T5-B12-1250	OHVD Base Slab (North) - Concrete & Curing	2	2	02-May-17	03-May-17	-536	Calendar Day
S9B-T5-B12-1260	OHVD Base Slab (North) - Hanger Wall & Scaffolding to Roof	3	3	04-May-17	06-May-17	-534	Calendar Day
S9B-T5-B12-1270	OHVD Base Slab (South) - Scaffolding Erection	7	7	20-Apr-17	26-Apr-17	-536	Calendar Day
S9B-T5-B12-1280	OHVD Base Slab (South) - Formwork & Rebar Fixing	7	7	27-Apr-17	03-May-17	-536	Calendar Day
S9B-T5-B12-1290	OHVD Base Slab (South) - Concrete & Curing	2	2	04-May-17	05-May-17	-536	Calendar Day
S9B-T5-B12-1300	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	3	3	06-May-17	08-May-17	-536	Calendar Day
S9B-T5-B12-1350	Roof - Waterproofing	5	5	04-May-17	08-May-17	-536	Calendar Day
S9B-T5-B12-1360	Roof - Rebar Fixing & Formwork	12	12	15-May-17	27-May-17	-543	Calendar Day
S9B-T5-B12-1370	Roof - Concrete	1	1	27-May-17	28-May-17	-543	Calendar Day
S9B-T5-B12-1380	Roof - Curing	14	14	28-May-17	12-Jun-17	-73	Calendar Day
S9B-T5-B12-1390	Roof - Scaffolding Dismantling	6	6	12-Jun-17	18-Jun-17	-45	Calendar Day
Section 10 Works - CWB Tunnel Structure (CH3246 - CH3400)							
Tunnel Portion 5 (CH3276-CH3400)							
S10-T5-4000	ELS Removal - Bay 11 to Bay 13 (2 Strut Layers - S2 and S3)	12	0	15-Mar-17 A	15-Apr-17 A		HK Working Day
S10-T5-5100	King Post Load Transfer in Bay 10 to Bay 15	9	9	10-Jun-17	19-Jun-17	-76	Calendar Day
S10-T5-5200	King Post Load Transfer in Bay 8 to Bay 9	9	9	02-Jun-17	11-Jun-17	-31	Calendar Day
S10-T5-5300	King Post Load Transfer in Bay 5 to Bay 7	9	9	21-May-17	30-May-17	-15	Calendar Day
S10-T5-5400	King Post Load Transfer in Bay 1 to Bay 4	9	9	13-Jun-17	22-Jun-17	-485	Calendar Day
S10-T5-6000	Roof Waterproofing - Bay 10 to Bay 15	9	9	16-Jun-17	25-Jun-17	-76	Calendar Day
S10-T5-6100	Roof Waterproofing - Bay 8 to Bay 9	9	9	11-Jun-17	20-Jun-17	-31	Calendar Day
S10-T5-6200	Roof Waterproofing - Bay 4 to Bay 7	9	9	15-Jun-17	24-Jun-17	-31	Calendar Day
S10-T5-6300	Roof Waterproofing - Bay 1 to Bay 4	6	6	16-Jun-17	22-Jun-17	-485	Calendar Day
S10-T5-6410	Construct Temporary Access Opening in Bay 6	14	12	18-Apr-17 A	08-May-17	0	HK Working Day
S10-T5-6420	Remove construction materials through temporary access opening in Bay 6	11	11	22-Jun-17	03-Jul-17	-52	Calendar Day
S10-T5-7000	ELS Removal - Bay 1 to Bay 13 (Strut Layer S1)	14	14	26-Jun-17	12-Jul-17	-50	HK Working Day
S10-T5-7100	ELS Removal - Bay 1 to Bay 4 (Strut Layers S1A)	8	8	07-Jul-17	15-Jul-17	-50	HK Working Day
S10-T5-7105	Removal of Formwork and Falsework after dismantling within Bay 1 to Bay 13 in the access shaft of TP2	20	20	22-Jun-17	12-Jul-17	-50	Calendar Day



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WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)
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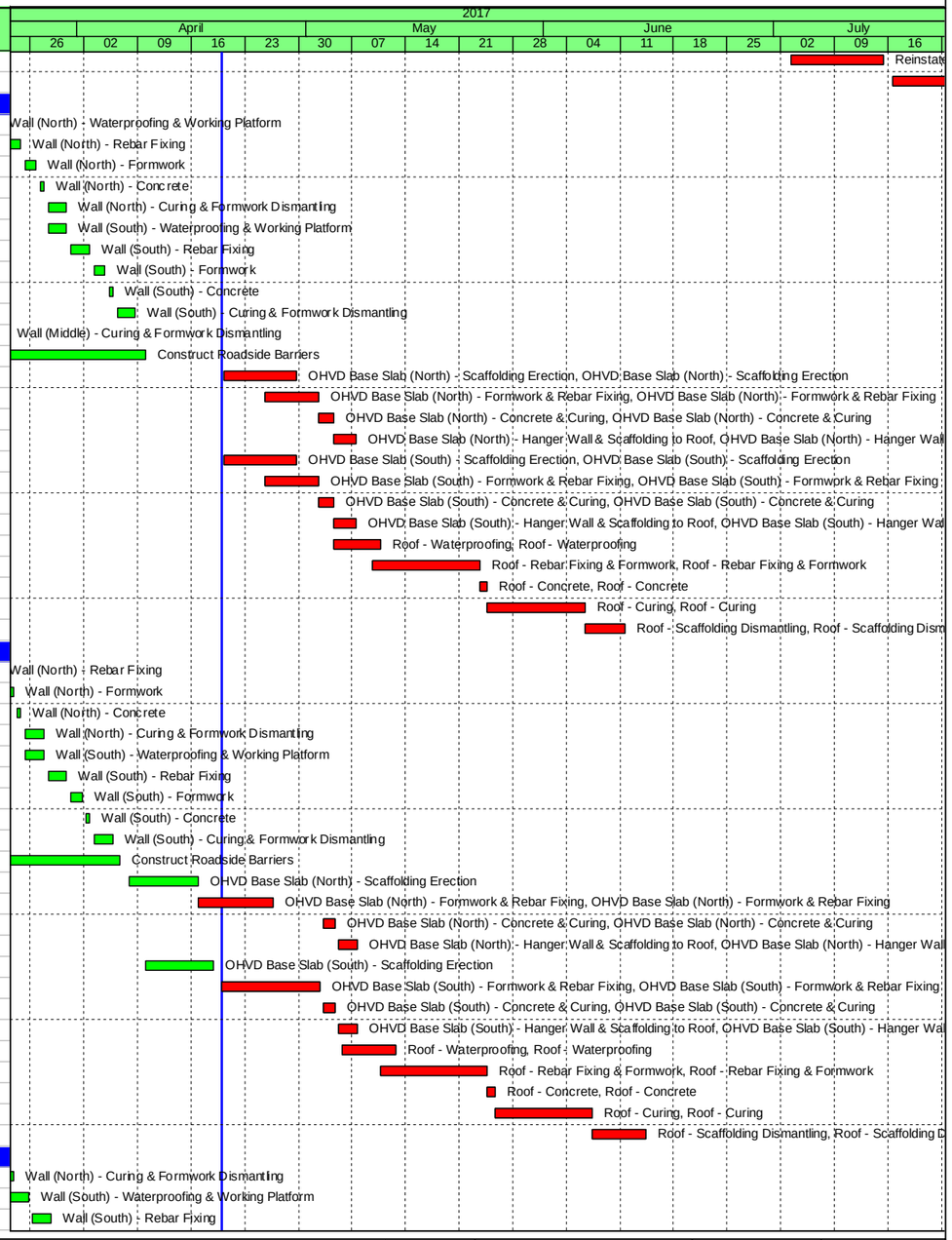
Activity ID	Activity Name	Ori Dur	Rem Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar
S10-T5-7110	Reinstate Temporary Access Opening in Bay 6	12	12	03-Jul-17	15-Jul-17	-52	Calendar Day
S10-T5-8000	Tunnel Portion 5 Tunnel Structure - Cut down D-wall to +1.50mPD	10	10	16-Jul-17	26-Jul-17	-224	Calendar Day
Bay 11							
S10-T5-B11-1050	Wall (North) - Waterproofing & Working Platform	4	0	18-Mar-17 A	21-Mar-17 A		Calendar Day
S10-T5-B11-1060	Wall (North) - Rebar Fixing	3	0	22-Mar-17 A	24-Mar-17 A		Calendar Day
S10-T5-B11-1070	Wall (North) - Formwork	2	0	25-Mar-17 A	26-Mar-17 A		Calendar Day
S10-T5-B11-1080	Wall (North) - Concrete	1	0	27-Mar-17 A	27-Mar-17 A		Calendar Day
S10-T5-B11-1090	Wall (North) - Curing & Formwork Dismantling	3	0	28-Mar-17 A	30-Mar-17 A		Calendar Day
S10-T5-B11-1100	Wall (South) - Waterproofing & Working Platform	3	0	28-Mar-17 A	30-Mar-17 A		Calendar Day
S10-T5-B11-1110	Wall (South) - Rebar Fixing	3	0	31-Mar-17 A	02-Apr-17 A		Calendar Day
S10-T5-B11-1120	Wall (South) - Formwork	2	0	03-Apr-17 A	04-Apr-17 A		Calendar Day
S10-T5-B11-1130	Wall (South) - Concrete	1	0	05-Apr-17 A	05-Apr-17 A		Calendar Day
S10-T5-B11-1140	Wall (South) - Curing & Formwork Dismantling	3	0	06-Apr-17 A	08-Apr-17 A		Calendar Day
S10-T5-B11-1180	Wall (Middle) - Curing & Formwork Dismantling	3	0	20-Mar-17 A	22-Mar-17 A		Calendar Day
S10-T5-B11-1185	Construct Roadside Barriers	5	0	21-Mar-17 A	10-Apr-17 A		Calendar Day
S10-T5-B11-1230	OHVD Base Slab (North) - Scaffolding Erection	10	10	20-Apr-17	29-Apr-17	-543	Calendar Day
S10-T5-B11-1240	OHVD Base Slab (North) - Formwork & Rebar Fixing	7	7	25-Apr-17	02-May-17	-543	Calendar Day
S10-T5-B11-1250	OHVD Base Slab (North) - Concrete & Curing	2	2	02-May-17	04-May-17	-543	Calendar Day
S10-T5-B11-1260	OHVD Base Slab (North) - Hanger Wall & Scaffolding to Roof	3	3	04-May-17	07-May-17	-541	Calendar Day
S10-T5-B11-1270	OHVD Base Slab (South) - Scaffolding Erection	10	10	20-Apr-17	29-Apr-17	-542	Calendar Day
S10-T5-B11-1280	OHVD Base Slab (South) - Formwork & Rebar Fixing	7	7	25-Apr-17	02-May-17	-543	Calendar Day
S10-T5-B11-1290	OHVD Base Slab (South) - Concrete & Curing	2	2	02-May-17	04-May-17	-543	Calendar Day
S10-T5-B11-1300	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	3	3	04-May-17	07-May-17	-541	Calendar Day
S10-T5-B11-1350	Roof - Waterproofing	6	6	04-May-17	10-May-17	-543	Calendar Day
S10-T5-B11-1360	Roof - Rebar Fixing & Formwork	14	14	09-May-17	23-May-17	-543	Calendar Day
S10-T5-B11-1370	Roof - Concrete	1	1	23-May-17	24-May-17	-72	Calendar Day
S10-T5-B11-1380	Roof - Curing	12	12	24-May-17	06-Jun-17	-72	Calendar Day
S10-T5-B11-1390	Roof - Scaffolding Dismantling	5	5	06-Jun-17	11-Jun-17	-39	Calendar Day
Bay 10							
S10-T5-B10-1060	Wall (North) - Rebar Fixing	3	0	19-Mar-17 A	21-Mar-17 A		Calendar Day
S10-T5-B10-1070	Wall (North) - Formwork	2	0	22-Mar-17 A	23-Mar-17 A		Calendar Day
S10-T5-B10-1080	Wall (North) - Concrete	1	0	24-Mar-17 A	24-Mar-17 A		Calendar Day
S10-T5-B10-1090	Wall (North) - Curing & Formwork Dismantling	3	0	25-Mar-17 A	27-Mar-17 A		Calendar Day
S10-T5-B10-1100	Wall (South) - Waterproofing & Working Platform	3	0	25-Mar-17 A	27-Mar-17 A		Calendar Day
S10-T5-B10-1110	Wall (South) - Rebar Fixing	3	0	28-Mar-17 A	30-Mar-17 A		Calendar Day
S10-T5-B10-1120	Wall (South) - Formwork	2	0	31-Mar-17 A	01-Apr-17 A		Calendar Day
S10-T5-B10-1130	Wall (South) - Concrete	1	0	02-Apr-17 A	02-Apr-17 A		Calendar Day
S10-T5-B10-1140	Wall (South) - Curing & Formwork Dismantling	3	0	03-Apr-17 A	05-Apr-17 A		Calendar Day
S10-T5-B10-1185	Construct Roadside Barriers	6	0	20-Mar-17 A	06-Apr-17 A		Calendar Day
S10-T5-B10-1230	OHVD Base Slab (North) - Scaffolding Erection	10	0	08-Apr-17 A	17-Apr-17 A		Calendar Day
S10-T5-B10-1240	OHVD Base Slab (North) - Formwork & Rebar Fixing	7	7	17-Apr-17 A	26-Apr-17	-73	Calendar Day
S10-T5-B10-1250	OHVD Base Slab (North) - Concrete & Curing	2	2	03-May-17	04-May-17	-72	Calendar Day
S10-T5-B10-1260	OHVD Base Slab (North) - Hanger Wall & Scaffolding to Roof	3	3	05-May-17	07-May-17	-70	Calendar Day
S10-T5-B10-1270	OHVD Base Slab (South) - Scaffolding Erection	10	0	10-Apr-17 A	19-Apr-17 A		Calendar Day
S10-T5-B10-1280	OHVD Base Slab (South) - Formwork & Rebar Fixing	7	8	20-Apr-17 A	02-May-17	-73	Calendar Day
S10-T5-B10-1290	OHVD Base Slab (South) - Concrete & Curing	2	2	03-May-17	04-May-17	-73	Calendar Day
S10-T5-B10-1300	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	3	3	05-May-17	07-May-17	-70	Calendar Day
S10-T5-B10-1350	Roof - Waterproofing	7	7	05-May-17	12-May-17	-73	Calendar Day
S10-T5-B10-1360	Roof - Rebar Fixing & Formwork	14	14	10-May-17	24-May-17	-73	Calendar Day
S10-T5-B10-1370	Roof - Concrete	1	1	24-May-17	25-May-17	-73	Calendar Day
S10-T5-B10-1380	Roof - Curing	12	12	25-May-17	07-Jun-17	-73	Calendar Day
S10-T5-B10-1390	Roof - Scaffolding Dismantling	7	7	07-Jun-17	14-Jun-17	-41	Calendar Day
Bay 9							
S10-T5-B9-1090	Wall (North) - Curing & Formwork Dismantling	3	0	21-Mar-17 A	23-Mar-17 A		Calendar Day
S10-T5-B9-1100	Wall (South) - Waterproofing & Working Platform	4	0	22-Mar-17 A	25-Mar-17 A		Calendar Day
S10-T5-B9-1110	Wall (South) - Rebar Fixing	3	0	26-Mar-17 A	28-Mar-17 A		Calendar Day



◆ Milestone
◆ Critical Milestones
Current Works
Critical Works
Remaining Level of Effort

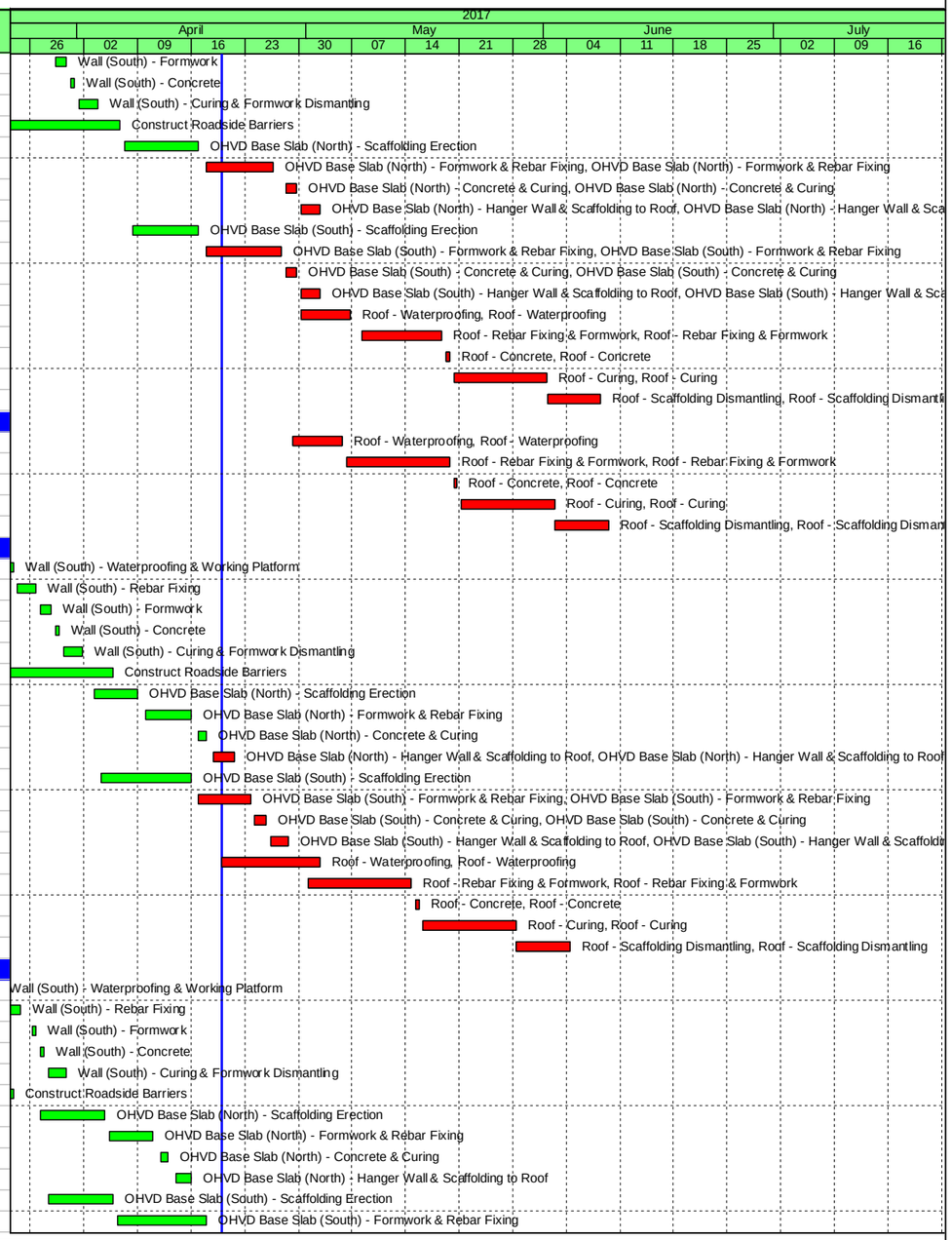
CHUN WO - CRGL JOINT VENTURE

CEDD CONTRACT NO. HK/2009/02
WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)
3-MONTH ROLLING PROGRAMME (dd 20-Apr-17)

Date	Revision	Checked	Approved
	Rev. Programme (08-Apr-...		

CEDD CONTRACT HK/2009/02

Activity ID	Activity Name	Ori Dur	Rem Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar
S10-T5-B9-1120	Wall (South) - Formwork	2	0	29-Mar-17 A	30-Mar-17 A		Calendar Day
S10-T5-B9-1130	Wall (South) - Concrete	1	0	31-Mar-17 A	31-Mar-17 A		Calendar Day
S10-T5-B9-1140	Wall (South) - Curing & Formwork Dismantling	3	0	01-Apr-17 A	03-Apr-17 A		Calendar Day
S10-T5-B9-1185	Construct Roadside Barriers	7	0	20-Mar-17 A	06-Apr-17 A		Calendar Day
S10-T5-B9-1230	OHVD Base Slab (North) - Scaffolding Erection	10	0	07-Apr-17 A	17-Apr-17 A		Calendar Day
S10-T5-B9-1240	OHVD Base Slab (North) - Formwork & Rebar Fixing	7	7	18-Apr-17 A	26-Apr-17	-26	Calendar Day
S10-T5-B9-1250	OHVD Base Slab (North) - Concrete & Curing	2	2	28-Apr-17	29-Apr-17	-26	Calendar Day
S10-T5-B9-1260	OHVD Base Slab (North) - Hanger Wall & Scaffolding to Roof	3	3	30-Apr-17	02-May-17	-26	Calendar Day
S10-T5-B9-1270	OHVD Base Slab (South) - Scaffolding Erection	10	0	08-Apr-17 A	17-Apr-17 A		Calendar Day
S10-T5-B9-1280	OHVD Base Slab (South) - Formwork & Rebar Fixing	7	7	18-Apr-17 A	27-Apr-17	-26	Calendar Day
S10-T5-B9-1290	OHVD Base Slab (South) - Concrete & Curing	2	2	28-Apr-17	29-Apr-17	-26	Calendar Day
S10-T5-B9-1300	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	3	3	30-Apr-17	02-May-17	-26	Calendar Day
S10-T5-B9-1350	Roof - Waterproofing	7	7	30-Apr-17	06-May-17	-25	Calendar Day
S10-T5-B9-1360	Roof - Rebar Fixing & Formwork	11	11	08-May-17	18-May-17	-31	Calendar Day
S10-T5-B9-1370	Roof - Concrete	1	1	19-May-17	19-May-17	-31	Calendar Day
S10-T5-B9-1380	Roof - Curing	12	12	20-May-17	01-Jun-17	-31	Calendar Day
S10-T5-B9-1390	Roof - Scaffolding Dismantling	7	7	01-Jun-17	08-Jun-17	-31	Calendar Day
Bay 8A - Roof only							
S10-T5-B8A-1350	Roof - Waterproofing	7	7	29-Apr-17	05-May-17	-36	Calendar Day
S10-T5-B8A-1360	Roof - Rebar Fixing & Formwork	14	14	06-May-17	19-May-17	-36	Calendar Day
S10-T5-B8A-1370	Roof - Concrete	1	1	20-May-17	20-May-17	-36	Calendar Day
S10-T5-B8A-1380	Roof - Curing	12	12	21-May-17	02-Jun-17	-36	Calendar Day
S10-T5-B8A-1390	Roof - Scaffolding Dismantling	7	7	02-Jun-17	09-Jun-17	-36	Calendar Day
Bay 8							
S10-T5-B8-1100	Wall (South) - Waterproofing & Working Platform	4	0	20-Mar-17 A	23-Mar-17 A		Calendar Day
S10-T5-B8-1110	Wall (South) - Rebar Fixing	3	0	24-Mar-17 A	26-Mar-17 A		Calendar Day
S10-T5-B8-1120	Wall (South) - Formwork	2	0	27-Mar-17 A	28-Mar-17 A		Calendar Day
S10-T5-B8-1130	Wall (South) - Concrete	1	0	29-Mar-17 A	29-Mar-17 A		Calendar Day
S10-T5-B8-1140	Wall (South) - Curing & Formwork Dismantling	3	0	30-Mar-17 A	01-Apr-17 A		Calendar Day
S10-T5-B8-1185	Construct Roadside Barriers	7	0	20-Mar-17 A	05-Apr-17 A		Calendar Day
S10-T5-B8-1230	OHVD Base Slab (North) - Scaffolding Erection	10	0	03-Apr-17 A	09-Apr-17 A		Calendar Day
S10-T5-B8-1240	OHVD Base Slab (North) - Formwork & Rebar Fixing	7	0	10-Apr-17 A	16-Apr-17 A		Calendar Day
S10-T5-B8-1250	OHVD Base Slab (North) - Concrete & Curing	2	0	17-Apr-17 A	18-Apr-17 A		Calendar Day
S10-T5-B8-1260	OHVD Base Slab (North) - Hanger Wall & Scaffolding to Roof	3	2	19-Apr-17 A	21-Apr-17	-22	Calendar Day
S10-T5-B8-1270	OHVD Base Slab (South) - Scaffolding Erection	10	0	04-Apr-17 A	16-Apr-17 A		Calendar Day
S10-T5-B8-1280	OHVD Base Slab (South) - Formwork & Rebar Fixing	7	4	17-Apr-17 A	23-Apr-17	-36	Calendar Day
S10-T5-B8-1290	OHVD Base Slab (South) - Concrete & Curing	2	2	24-Apr-17	25-Apr-17	-36	Calendar Day
S10-T5-B8-1300	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	3	3	26-Apr-17	28-Apr-17	-27	Calendar Day
S10-T5-B8-1350	Roof - Waterproofing	7	7	20-Apr-17 A	02-May-17	-36	Calendar Day
S10-T5-B8-1360	Roof - Rebar Fixing & Formwork	14	14	01-May-17	14-May-17	-31	Calendar Day
S10-T5-B8-1370	Roof - Concrete	1	1	15-May-17	15-May-17	-31	Calendar Day
S10-T5-B8-1380	Roof - Curing	12	12	16-May-17	28-May-17	-31	Calendar Day
S10-T5-B8-1390	Roof - Scaffolding Dismantling	7	7	28-May-17	04-Jun-17	-31	Calendar Day
Bay 7							
S10-T5-B7-1100	Wall (South) - Waterproofing & Working Platform	4	0	18-Mar-17 A	21-Mar-17 A		Calendar Day
S10-T5-B7-1110	Wall (South) - Rebar Fixing	3	0	22-Mar-17 A	24-Mar-17 A		Calendar Day
S10-T5-B7-1120	Wall (South) - Formwork	2	0	26-Mar-17 A	26-Mar-17 A		Calendar Day
S10-T5-B7-1130	Wall (South) - Concrete	1	0	27-Mar-17 A	27-Mar-17 A		Calendar Day
S10-T5-B7-1140	Wall (South) - Curing & Formwork Dismantling	3	0	28-Mar-17 A	30-Mar-17 A		Calendar Day
S10-T5-B7-1185	Construct Roadside Barriers	7	0	03-Mar-17 A	23-Mar-17 A		Calendar Day
S10-T5-B7-1230	OHVD Base Slab (North) - Scaffolding Erection	10	0	27-Mar-17 A	04-Apr-17 A		Calendar Day
S10-T5-B7-1240	OHVD Base Slab (North) - Formwork & Rebar Fixing	7	0	05-Apr-17 A	11-Apr-17 A		Calendar Day
S10-T5-B7-1250	OHVD Base Slab (North) - Concrete & Curing	2	0	12-Apr-17 A	13-Apr-17 A		Calendar Day
S10-T5-B7-1260	OHVD Base Slab (North) - Hanger Wall & Scaffolding to Roof	3	0	14-Apr-17 A	16-Apr-17 A		Calendar Day
S10-T5-B7-1310	OHVD Base Slab (South) - Scaffolding Erection	10	0	28-Mar-17 A	05-Apr-17 A		Calendar Day
S10-T5-B7-1320	OHVD Base Slab (South) - Formwork & Rebar Fixing	7	0	06-Apr-17 A	18-Apr-17 A		Calendar Day



- Milestone
- Critical Milestones
- Current Works
- Critical Works
- Remaining Level of Effort

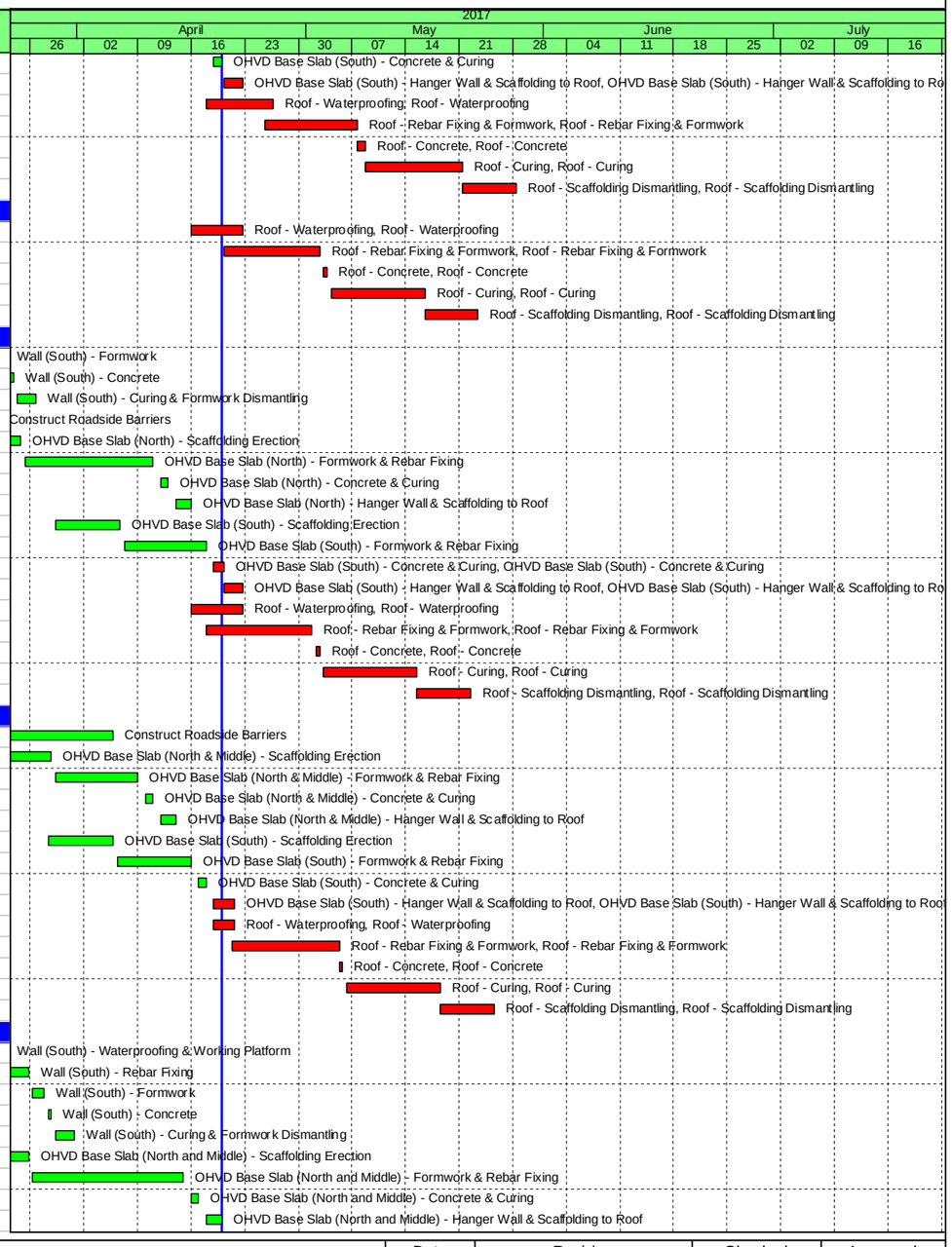
CHUN WO - CRGL JOINT VENTURE

CEDD CONTRACT NO. HK/2009/02
WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)
3-MONTH ROLLING PROGRAMME (dd 20-Apr-17)

Date	Revision	Checked	Approved
	Rev. Programme (08-Apr-...		

CEDD CONTRACT HK/2009/02

Activity ID	Activity Name	Ori Dur	Rem Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar
S10-T5-B7-1330	OHVD Base Slab (South) - Concrete & Curing	2	0	19-Apr-17 A	20-Apr-17 A		Calendar Day
S10-T5-B7-1340	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	3	3	20-Apr-17	22-Apr-17	-31	Calendar Day
S10-T5-B7-1350	Roof - Waterproofing	7	6	18-Apr-17 A	26-Apr-17	-34	Calendar Day
S10-T5-B7-1360	Roof - Rebar Fixing & Formwork	12	12	25-Apr-17	07-May-17	-34	Calendar Day
S10-T5-B7-1370	Roof - Concrete	1	1	07-May-17	08-May-17	-34	Calendar Day
S10-T5-B7-1380	Roof - Curing	12	12	08-May-17	21-May-17	-34	Calendar Day
S10-T5-B7-1390	Roof - Scaffolding Dismantling	7	7	21-May-17	28-May-17	-34	Calendar Day
Bay 6A - Roof only							
S10-T5-B6A-1410	Roof - Waterproofing	7	3	16-Apr-17 A	22-Apr-17	-10	Calendar Day
S10-T5-B6A-1411	Roof - Rebar Fixing & Formwork	13	13	20-Apr-17	02-May-17	-10	Calendar Day
S10-T5-B6A-1412	Roof - Concrete	1	1	03-May-17	03-May-17	-10	Calendar Day
S10-T5-B6A-1413	Roof - Curing	12	12	04-May-17	16-May-17	-10	Calendar Day
S10-T5-B6A-1414	Roof - Scaffolding Dismantling	7	7	16-May-17	23-May-17	-1	Calendar Day
Bay 6							
S10-T5-B6-1120	Wall (South) - Formwork	2	0	21-Mar-17 A	22-Mar-17 A		Calendar Day
S10-T5-B6-1130	Wall (South) - Concrete	1	0	23-Mar-17 A	23-Mar-17 A		Calendar Day
S10-T5-B6-1140	Wall (South) - Curing & Formwork Dismantling	3	0	24-Mar-17 A	26-Mar-17 A		Calendar Day
S10-T5-B6-1225	Construct Roadside Barriers	7	0	12-Feb-17 A	21-Mar-17 A		Calendar Day
S10-T5-B6-1230	OHVD Base Slab (North) - Scaffolding Erection	10	0	15-Mar-17 A	24-Mar-17 A		Calendar Day
S10-T5-B6-1240	OHVD Base Slab (North) - Formwork & Rebar Fixing	7	0	25-Mar-17 A	11-Apr-17 A		Calendar Day
S10-T5-B6-1250	OHVD Base Slab (North) - Concrete & Curing	2	0	12-Apr-17 A	13-Apr-17 A		Calendar Day
S10-T5-B6-1260	OHVD Base Slab (North) - Hanger Wall & Scaffolding to Roof	3	0	14-Apr-17 A	16-Apr-17 A		Calendar Day
S10-T5-B6-1315	OHVD Base Slab (South) - Scaffolding Erection	10	0	29-Mar-17 A	06-Apr-17 A		Calendar Day
S10-T5-B6-1320	OHVD Base Slab (South) - Formwork & Rebar Fixing	7	0	07-Apr-17 A	18-Apr-17 A		Calendar Day
S10-T5-B6-1325	OHVD Base Slab (South) - Concrete & Curing	2	0	19-Apr-17 A	20-Apr-17	-28	Calendar Day
S10-T5-B6-1330	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	3	3	20-Apr-17	22-Apr-17	-29	Calendar Day
S10-T5-B6-1350	Roof - Waterproofing	7	3	16-Apr-17 A	22-Apr-17	-26	Calendar Day
S10-T5-B6-1360	Roof - Rebar Fixing & Formwork	11	9	18-Apr-17 A	01-May-17	-29	Calendar Day
S10-T5-B6-1370	Roof - Concrete	1	1	02-May-17	02-May-17	-29	Calendar Day
S10-T5-B6-1380	Roof - Curing	12	12	03-May-17	15-May-17	-9	Calendar Day
S10-T5-B6-1390	Roof - Scaffolding Dismantling	7	7	15-May-17	22-May-17	-1	Calendar Day
Bay 5 (3 Cells)							
S10-T5-B5-1225	Construct Roadside Barriers	7	0	13-Feb-17 A	05-Apr-17 A		Calendar Day
S10-T5-B5-1230	OHVD Base Slab (North & Middle) - Scaffolding Erection	14	0	15-Mar-17 A	28-Mar-17 A		Calendar Day
S10-T5-B5-1240	OHVD Base Slab (North & Middle) - Formwork & Rebar Fixing	13	0	29-Mar-17 A	09-Apr-17 A		Calendar Day
S10-T5-B5-1250	OHVD Base Slab (North & Middle) - Concrete & Curing	2	0	10-Apr-17 A	11-Apr-17 A		Calendar Day
S10-T5-B5-1260	OHVD Base Slab (North & Middle) - Hanger Wall & Scaffolding to Roof	3	0	12-Apr-17 A	14-Apr-17 A		Calendar Day
S10-T5-B5-1310	OHVD Base Slab (South) - Scaffolding Erection	10	0	28-Mar-17 A	05-Apr-17 A		Calendar Day
S10-T5-B5-1320	OHVD Base Slab (South) - Formwork & Rebar Fixing	7	0	06-Apr-17 A	16-Apr-17 A		Calendar Day
S10-T5-B5-1330	OHVD Base Slab (South) - Concrete & Curing	2	0	17-Apr-17 A	18-Apr-17 A		Calendar Day
S10-T5-B5-1340	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	3	2	19-Apr-17 A	21-Apr-17	-12	Calendar Day
S10-T5-B5-1350	Roof - Waterproofing	7	2	19-Apr-17 A	21-Apr-17	-12	Calendar Day
S10-T5-B5-1360	Roof - Rebar Fixing & Formwork	14	14	21-Apr-17	05-May-17	-12	Calendar Day
S10-T5-B5-1370	Roof - Concrete	1	1	05-May-17	05-May-17	-12	Calendar Day
S10-T5-B5-1380	Roof - Curing	12	12	06-May-17	18-May-17	-12	Calendar Day
S10-T5-B5-1390	Roof - Scaffolding Dismantling	7	7	18-May-17	25-May-17	-4	Calendar Day
Bay 4 (3 Cells)							
S10-T5-B4-1100	Wall (South) - Waterproofing & Working Platform	4	0	19-Mar-17 A	22-Mar-17 A		Calendar Day
S10-T5-B4-1110	Wall (South) - Rebar Fixing	3	0	23-Mar-17 A	25-Mar-17 A		Calendar Day
S10-T5-B4-1120	Wall (South) - Formwork	2	0	26-Mar-17 A	27-Mar-17 A		Calendar Day
S10-T5-B4-1130	Wall (South) - Concrete	1	0	28-Mar-17 A	28-Mar-17 A		Calendar Day
S10-T5-B4-1140	Wall (South) - Curing & Formwork Dismantling	3	0	29-Mar-17 A	31-Mar-17 A		Calendar Day
S10-T5-B4-1230	OHVD Base Slab (North and Middle) - Scaffolding Erection	14	0	11-Mar-17 A	25-Mar-17 A		Calendar Day
S10-T5-B4-1240	OHVD Base Slab (North and Middle) - Formwork & Rebar Fixing	13	0	26-Mar-17 A	15-Apr-17 A		Calendar Day
S10-T5-B4-1250	OHVD Base Slab (North and Middle) - Concrete & Curing	2	0	16-Apr-17 A	17-Apr-17 A		Calendar Day
S10-T5-B4-1260	OHVD Base Slab (North and Middle) - Hanger Wall & Scaffolding to Roof	3	0	18-Apr-17 A	20-Apr-17 A		Calendar Day



◆ Milestone
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CHUN WO - CRGL JOINT VENTURE

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WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)
3-MONTH ROLLING PROGRAMME (dd 20-Apr-17)

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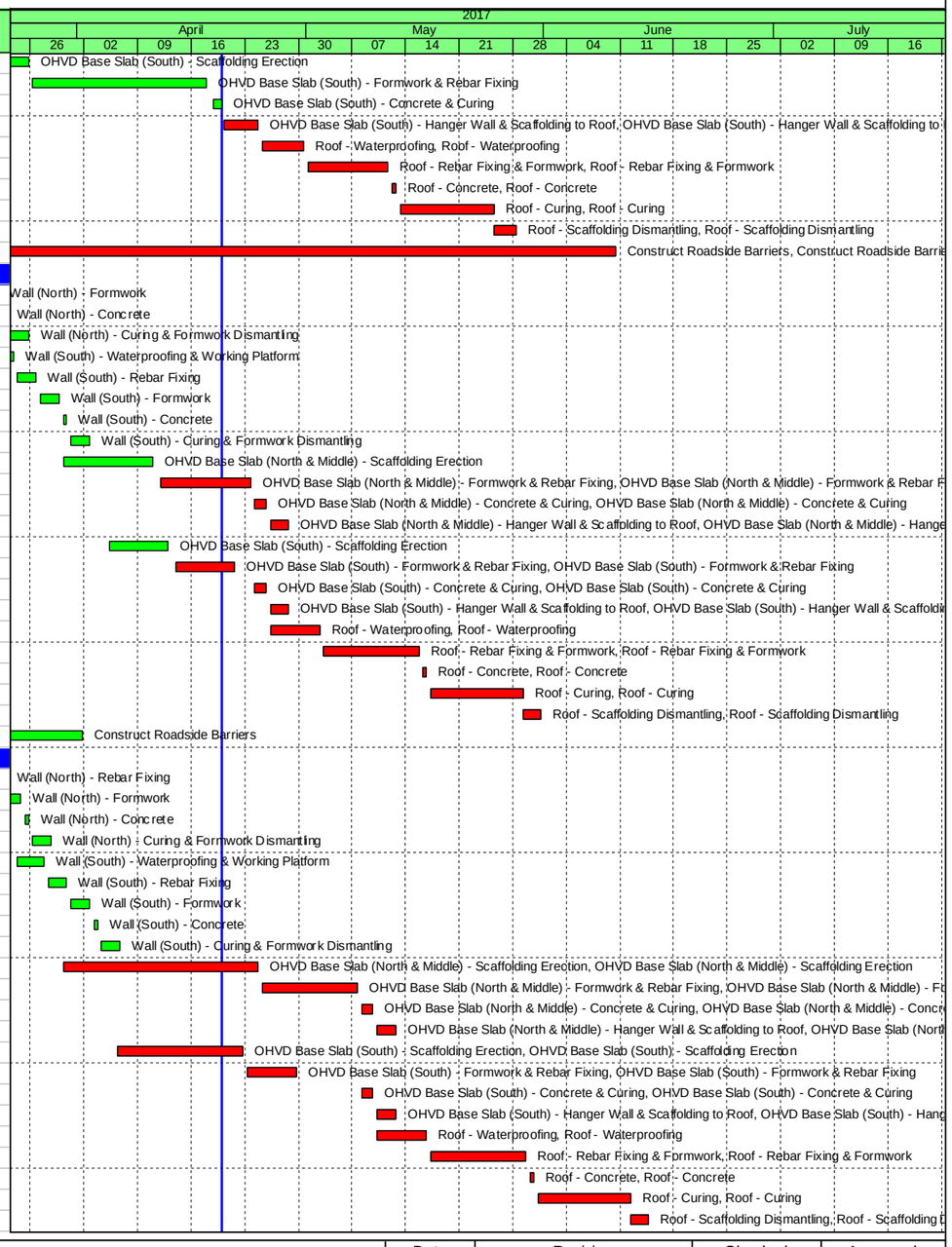
CEDD CONTRACT HK/2009/02

Activity ID	Activity Name	Ori Dur	Rem Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar
S10-T5-B4-1310	OHVD Base Slab (South) - Scaffolding Erection	8	0	18-Mar-17 A	25-Mar-17 A		Calendar Day
S10-T5-B4-1320	OHVD Base Slab (South) - Formwork & Rebar Fixing	7	0	26-Mar-17 A	18-Apr-17 A		Calendar Day
S10-T5-B4-1330	OHVD Base Slab (South) - Concrete & Curing	2	0	19-Apr-17 A	20-Apr-17 A		Calendar Day
S10-T5-B4-1340	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	3	5	20-Apr-17 A	24-Apr-17	-466	Calendar Day
S10-T5-B4-1350	Roof - Waterproofing	6	6	25-Apr-17	30-Apr-17	-466	Calendar Day
S10-T5-B4-1360	Roof - Rebar Fixing & Formwork	11	11	01-May-17	11-May-17	-466	Calendar Day
S10-T5-B4-1370	Roof - Concrete	1	1	12-May-17	12-May-17	-466	Calendar Day
S10-T5-B4-1380	Roof - Curing	12	12	13-May-17	25-May-17	-466	Calendar Day
S10-T5-B4-1390	Roof - Scaffolding Dismantling	3	3	25-May-17	28-May-17	-221	Calendar Day
S10-T5-B4-1400	Construct Roadside Barriers	5	13	10-Feb-17 A	10-Jun-17	-221	Calendar Day
Bay 3 (3 Cells)							
S10-T5-B3-1070	Wall (North) - Formwork	3	0	20-Mar-17 A	21-Mar-17 A		Calendar Day
S10-T5-B3-1080	Wall (North) - Concrete	1	0	22-Mar-17 A	22-Mar-17 A		Calendar Day
S10-T5-B3-1090	Wall (North) - Curing & Formwork Dismantling	3	0	23-Mar-17 A	25-Mar-17 A		Calendar Day
S10-T5-B3-1100	Wall (South) - Waterproofing & Working Platform	4	0	20-Mar-17 A	23-Mar-17 A		Calendar Day
S10-T5-B3-1110	Wall (South) - Rebar Fixing	3	0	24-Mar-17 A	26-Mar-17 A		Calendar Day
S10-T5-B3-1120	Wall (South) - Formwork	3	0	27-Mar-17 A	29-Mar-17 A		Calendar Day
S10-T5-B3-1130	Wall (South) - Concrete	1	0	30-Mar-17 A	30-Mar-17 A		Calendar Day
S10-T5-B3-1140	Wall (South) - Curing & Formwork Dismantling	3	0	31-Mar-17 A	02-Apr-17 A		Calendar Day
S10-T5-B3-1230	OHVD Base Slab (North & Middle) - Scaffolding Erection	14	0	30-Mar-17 A	11-Apr-17 A		Calendar Day
S10-T5-B3-1240	OHVD Base Slab (North & Middle) - Formwork & Rebar Fixing	13	2	12-Apr-17 A	23-Apr-17	-469	Calendar Day
S10-T5-B3-1250	OHVD Base Slab (North & Middle) - Concrete & Curing	2	2	24-Apr-17	25-Apr-17	-469	Calendar Day
S10-T5-B3-1260	OHVD Base Slab (North & Middle) - Hanger Wall & Scaffolding to Roof	3	3	26-Apr-17	28-Apr-17	-465	Calendar Day
S10-T5-B3-1310	OHVD Base Slab (South) - Scaffolding Erection	8	0	05-Apr-17 A	13-Apr-17 A		Calendar Day
S10-T5-B3-1320	OHVD Base Slab (South) - Formwork & Rebar Fixing	7	2	14-Apr-17 A	21-Apr-17	-467	Calendar Day
S10-T5-B3-1330	OHVD Base Slab (South) - Concrete & Curing	2	2	24-Apr-17	25-Apr-17	-469	Calendar Day
S10-T5-B3-1340	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	3	3	26-Apr-17	28-Apr-17	-465	Calendar Day
S10-T5-B3-1350	Roof - Waterproofing	7	7	26-Apr-17	02-May-17	-469	Calendar Day
S10-T5-B3-1360	Roof - Rebar Fixing & Formwork	13	13	03-May-17	15-May-17	-469	Calendar Day
S10-T5-B3-1370	Roof - Concrete	1	1	16-May-17	16-May-17	-469	Calendar Day
S10-T5-B3-1380	Roof - Curing	12	12	17-May-17	29-May-17	-469	Calendar Day
S10-T5-B3-1390	Roof - Scaffolding Dismantling	3	3	29-May-17	31-May-17	-212	Calendar Day
S10-T5-B3-1400	Construct Roadside Barriers	5	0	21-Feb-17 A	01-Apr-17 A		Calendar Day
Bay 2 (3 Cells)							
S10-T5-B2-1070	Wall (North) - Rebar Fixing	3	0	20-Mar-17 A	22-Mar-17 A		Calendar Day
S10-T5-B2-1080	Wall (North) - Formwork	3	0	23-Mar-17 A	24-Mar-17 A		Calendar Day
S10-T5-B2-1090	Wall (North) - Concrete	1	0	25-Mar-17 A	25-Mar-17 A		Calendar Day
S10-T5-B2-1100	Wall (North) - Curing & Formwork Dismantling	3	0	26-Mar-17 A	28-Mar-17 A		Calendar Day
S10-T5-B2-1110	Wall (South) - Waterproofing & Working Platform	4	0	24-Mar-17 A	27-Mar-17 A		Calendar Day
S10-T5-B2-1120	Wall (South) - Rebar Fixing	3	0	28-Mar-17 A	30-Mar-17 A		Calendar Day
S10-T5-B2-1130	Wall (South) - Formwork	3	0	31-Mar-17 A	02-Apr-17 A		Calendar Day
S10-T5-B2-1140	Wall (South) - Concrete	1	0	03-Apr-17 A	03-Apr-17 A		Calendar Day
S10-T5-B2-1150	Wall (South) - Curing & Formwork Dismantling	3	0	04-Apr-17 A	06-Apr-17 A		Calendar Day
S10-T5-B2-1240	OHVD Base Slab (North & Middle) - Scaffolding Erection	14	3	30-Mar-17 A	24-Apr-17	-481	Calendar Day
S10-T5-B2-1250	OHVD Base Slab (North & Middle) - Formwork & Rebar Fixing	13	13	25-Apr-17	07-May-17	-481	Calendar Day
S10-T5-B2-1260	OHVD Base Slab (North & Middle) - Concrete & Curing	2	2	08-May-17	09-May-17	-481	Calendar Day
S10-T5-B2-1270	OHVD Base Slab (North & Middle) - Hanger Wall & Scaffolding to Roof	3	3	10-May-17	12-May-17	-477	Calendar Day
S10-T5-B2-1280	OHVD Base Slab (South) - Scaffolding Erection	8	3	06-Apr-17 A	22-Apr-17	-473	Calendar Day
S10-T5-B2-1290	OHVD Base Slab (South) - Formwork & Rebar Fixing	7	7	23-Apr-17	29-Apr-17	-473	Calendar Day
S10-T5-B2-1300	OHVD Base Slab (South) - Concrete & Curing	2	2	08-May-17	09-May-17	-481	Calendar Day
S10-T5-B2-1310	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	3	3	10-May-17	12-May-17	-477	Calendar Day
S10-T5-B2-1320	Roof - Waterproofing	7	7	10-May-17	16-May-17	-481	Calendar Day
S10-T5-B2-1330	Roof - Rebar Fixing & Formwork	13	13	17-May-17	29-May-17	-481	Calendar Day
S10-T5-B2-1340	Roof - Concrete	1	1	30-May-17	30-May-17	-481	Calendar Day
S10-T5-B2-1350	Roof - Curing	12	12	31-May-17	12-Jun-17	-481	Calendar Day
S10-T5-B2-1360	Roof - Scaffolding Dismantling	3	3	12-Jun-17	14-Jun-17	-22	Calendar Day



◆ Milestone
◆ Critical Milestones
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CHUN WO - CRGL JOINT VENTURE

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WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)
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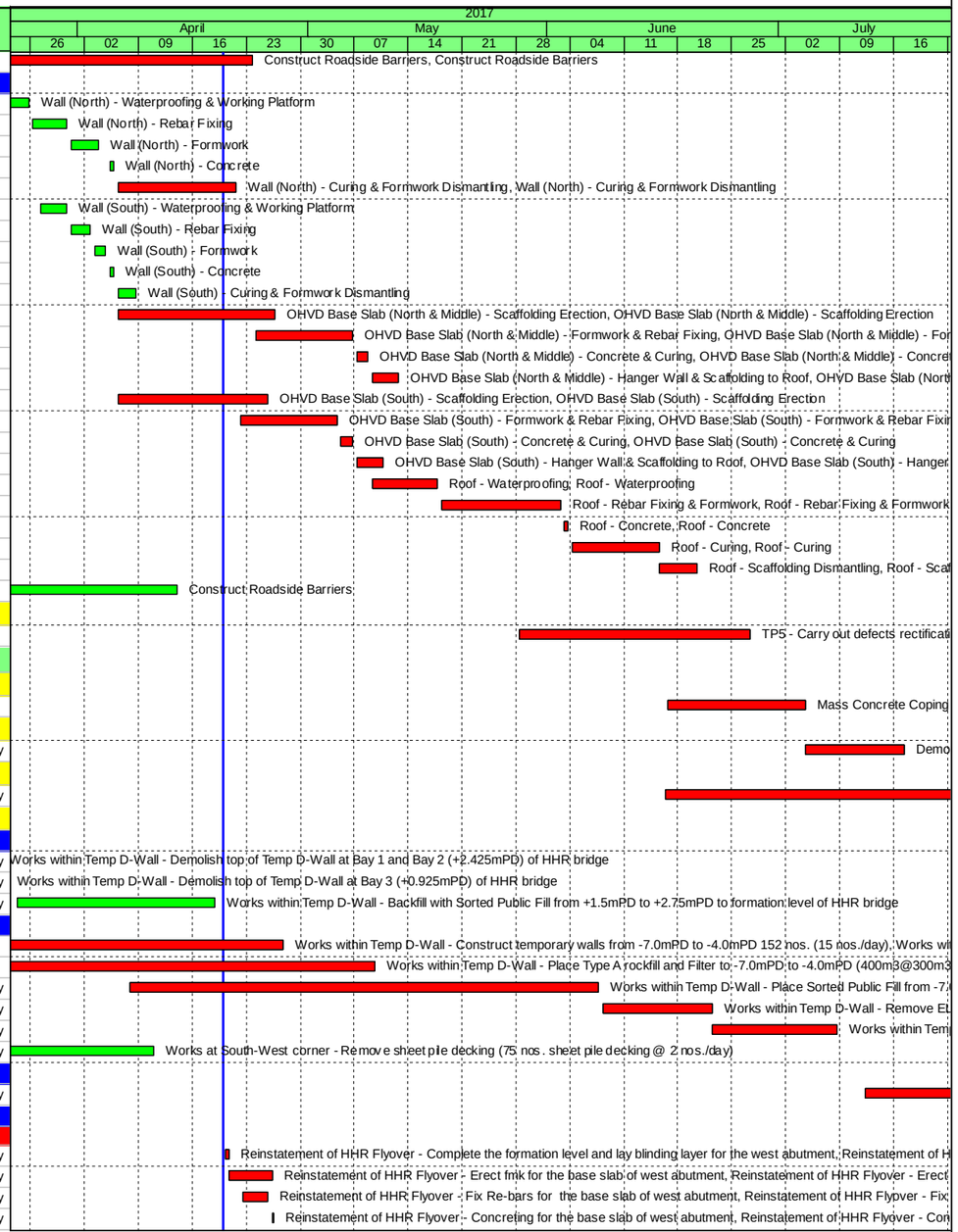
CEDD CONTRACT HK/2009/02

Activity ID	Activity Name	Ori Dur	Rem Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar
S10-T5-B2-1400	Construct Roadside Barriers	5	4	20-Feb-17 A	23-Apr-17	-174	Calendar Day
Bay 1 (3 Cells) (Western End Bay)							
S10-T5-B1-1050	Wall (North) - Waterproofing & Working Platform	4	0	22-Mar-17 A	25-Mar-17 A		Calendar Day
S10-T5-B1-1060	Wall (North) - Rebar Fixing	3	0	26-Mar-17 A	30-Mar-17 A		Calendar Day
S10-T5-B1-1070	Wall (North) - Formwork	3	0	31-Mar-17 A	03-Apr-17 A		Calendar Day
S10-T5-B1-1080	Wall (North) - Concrete	1	0	05-Apr-17 A	05-Apr-17 A		Calendar Day
S10-T5-B1-1090	Wall (North) - Curing & Formwork Dismantling	3	2	06-Apr-17 A	21-Apr-17	-485	Calendar Day
S10-T5-B1-1100	Wall (South) - Waterproofing & Working Platform	4	0	27-Mar-17 A	30-Mar-17 A		Calendar Day
S10-T5-B1-1110	Wall (South) - Rebar Fixing	3	0	31-Mar-17 A	02-Apr-17 A		Calendar Day
S10-T5-B1-1120	Wall (South) - Formwork	2	0	03-Apr-17 A	04-Apr-17 A		Calendar Day
S10-T5-B1-1130	Wall (South) - Concrete	1	0	05-Apr-17 A	05-Apr-17 A		Calendar Day
S10-T5-B1-1140	Wall (South) - Curing & Formwork Dismantling	3	0	06-Apr-17 A	08-Apr-17 A		Calendar Day
S10-T5-B1-1230	OHVD Base Slab (North & Middle) - Scaffolding Erection	13	5	06-Apr-17 A	26-Apr-17	-485	Calendar Day
S10-T5-B1-1240	OHVD Base Slab (North & Middle) - Formwork & Rebar Fixing	13	13	24-Apr-17	06-May-17	-485	Calendar Day
S10-T5-B1-1250	OHVD Base Slab (North & Middle) - Concrete & Curing	2	2	07-May-17	08-May-17	-485	Calendar Day
S10-T5-B1-1260	OHVD Base Slab (North & Middle) - Hanger Wall & Scaffolding to Roof	4	4	09-May-17	12-May-17	-480	Calendar Day
S10-T5-B1-1310	OHVD Base Slab (South) - Scaffolding Erection	12	6	06-Apr-17 A	25-Apr-17	-483	Calendar Day
S10-T5-B1-1320	OHVD Base Slab (South) - Formwork & Rebar Fixing	13	13	22-Apr-17	04-May-17	-483	Calendar Day
S10-T5-B1-1330	OHVD Base Slab (South) - Concrete & Curing	2	2	05-May-17	06-May-17	-483	Calendar Day
S10-T5-B1-1340	OHVD Base Slab (South) - Hanger Wall & Scaffolding to Roof	4	4	07-May-17	10-May-17	-478	Calendar Day
S10-T5-B1-1350	Roof - Waterproofing	9	9	09-May-17	17-May-17	-485	Calendar Day
S10-T5-B1-1360	Roof - Rebar Fixing & Formwork	16	16	18-May-17	02-Jun-17	-485	Calendar Day
S10-T5-B1-1370	Roof - Concrete	1	1	03-Jun-17	03-Jun-17	-485	Calendar Day
S10-T5-B1-1380	Roof - Curing	12	12	04-Jun-17	15-Jun-17	-485	Calendar Day
S10-T5-B1-1390	Roof - Scaffolding Dismantling	5	5	15-Jun-17	20-Jun-17	-34	Calendar Day
S10-T5-B1-1400	Construct Roadside Barriers	7	0	22-Mar-17 A	14-Apr-17 A		Calendar Day
Outstanding Works							
S10-T5-OUT-1020	TP5 - Carry out defects rectification works	30	30	28-May-17	27-Jun-17	-34	Calendar Day
Section 11 of the Works - Remainder of Works							
Marine Works at WCR3							
S11-R3-2100	Mass Concrete Coping for Blockwork Seawall next to Type 2X caisson unit	18	18	16-Jun-17	04-Jul-17	-76	Calendar Day
Demolition Works							
S11-DEMO-1310	Demolition of abandoned seawall down to +1.5mPD - at the south of Tunnel Portion 5	12	12	04-Jul-17	17-Jul-17	-50	HK Working Day
Formation and Hard Landscaping Works							
S11-FM-5000A	Tunnel Portion 5 Backfilling (Sorted Public Fill or alternative filling material 45,000m3; 1100m3/d)	41	41	16-Jun-17	31-Jul-17	-438	HK Working Day
Misc. Works							
Removal of Temporary Reclamation CH 3710 to CH 3790 (East)							
S11-RTC-3068	Works within Temp D-Wall - Demolish top of Temp D-Wall at Bay 1 and Bay 2 (+2.425mPD) of HHR bridge	6	0	16-Mar-17 A	21-Mar-17 A		HK Working Day
S11-RTC-3069	Works within Temp D-Wall - Demolish top of Temp D-Wall at Bay 3 (+0.925mPD) of HHR bridge	7	0	18-Mar-17 A	22-Mar-17 A		HK Working Day
S11-RTC-3070	Works within Temp D-Wall - Backfill with Sorted Public Fill from +1.5mPD to +2.75mPD to formation level of HHR bridge	2	0	24-Mar-17 A	19-Apr-17 A		HK Working Day
Removal of Temporary Reclamation CH 3630 to CH 3710 (West)							
S11-RTC-3250	Works within Temp D-Wall - Construct temporary walls from -7.0mPD to -4.0mPD 152 nos. (15 nos./day)	28	8	06-Jan-17 A	27-Apr-17	-585	Calendar Day
S11-RTC-3252	Works within Temp D-Wall - Place Type A rockfill and Filter to -7.0mPD to -4.0mPD (400m3@300m3/d)	15	12	06-Mar-17 A	09-May-17	-560	Calendar Day
S11-RTC-3256	Works within Temp D-Wall - Place Sorted Public Fill from -7.0mPD to -3.0mPD with 35 deg fill slope (4,150m3@200m3/d)	53	45	08-Apr-17 A	07-Jun-17	-524	HK Working Day
S11-RTC-3257	Works within Temp D-Wall - Remove ELS S1 Grid 0 - Grid 7	14	14	08-Jun-17	22-Jun-17	-524	HK Working Day
S11-RTC-3258	Works within Temp D-Wall - Place Sorted Public Fill from -3.0mPD to +1.5mPD with 35 deg fill slope (2,800m3@200m3/d	14	14	22-Jun-17	08-Jul-17	-524	HK Working Day
S11-RTC-3435	Works at South-West corner - Remove sheet pile decking (75 nos. sheet pile decking @ 2 nos./day)	30	0	01-Mar-17 A	11-Apr-17 A		HK Working Day
Removal of Temporary D-Wall CH 3630 to CH 3710							
S11-RTC-3340	Preparation for D-Wall Cutting - Advance Coring inside D Wall (73 nos. for cutting , 2 machines @ 1no./machine/day)	50	50	12-Jul-17*	01-Sep-17	-634	HK Working Day
Hung Hing Road Flyover Reinstatement							
Hung Hing Road Flyover - Bay 1 (West Side) CH 3709-3732							
S11-HH-4009	Reinstatement of HHR Flyover - Complete the formation level and lay blinding layer for the west abutment	1	1	20-Apr-17	20-Apr-17	-606	HK Working Day
S11-HH-4010	Reinstatement of HHR Flyover - Erect fmk for the base slab of west abutment	5	5	20-Apr-17	26-Apr-17	-605	HK Working Day
S11-HH-4011	Reinstatement of HHR Flyover - Fix Re-bars for the base slab of west abutment	3	3	22-Apr-17	25-Apr-17	-605	HK Working Day
S11-HH-4012	Reinstatement of HHR Flyover - Concreting for the base slab of west abutment	1	1	26-Apr-17	26-Apr-17	-605	HK Working Day



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S11-HH-4016	Reinstatement of HHR Flyover - Erect falsework and formwork for the walls of west abutment	4	4	26-Apr-17	02-May-17	-605	HK Working Day
S11-HH-4017	Reinstatement of HHR Flyover - Fix Re-bars for the walls of west abutment	3	3	27-Apr-17	02-May-17	-587	HK Working Day
S11-HH-4018	Reinstatement of HHR Flyover - Concreting for the walls of west abutment	1	1	02-May-17	04-May-17	-587	HK Working Day
S11-HH-4019	Reinstatement of HHR Flyover - Formwork stripping for the walls of west abutment	1	1	04-May-17	04-May-17	-587	HK Working Day
Hung Hing Road Flyover - Bay 2 (Middle) CH 3732-3747							
S11-HH-5039	Reinstatement of HHR Flyover - Lay blinding layer for the bay 2 of HHR	1	1	20-Apr-17	20-Apr-17	-606	HK Working Day
S11-HH-5048	Reinstatement of HHR Flyover - Erect fmk for the base slab of bay 2 of HHR	5	5	29-Apr-17	06-May-17	-605	HK Working Day
S11-HH-5049	Reinstatement of HHR Flyover - Fix Re-bars for the base slab of bay 2 of HHR	3	3	04-May-17	06-May-17	-605	HK Working Day
S11-HH-5050	Reinstatement of HHR Flyover - Concreting for the base slab of bay 2 of HHR	1	1	06-May-17	08-May-17	-605	HK Working Day
S11-HH-5071	Reinstatement of HHR Flyover - Erect falsework and formwork for bay 2 of HHR	4	4	08-May-17	11-May-17	-605	HK Working Day
S11-HH-5072	Reinstatement of HHR Flyover - Fix Re-bars for the walls of bay 2 of HHR	3	3	09-May-17	11-May-17	-605	HK Working Day
S11-HH-5073	Reinstatement of HHR Flyover - Concreting for the walls of bay 2 of HHR	1	1	11-May-17	12-May-17	-605	HK Working Day
S11-HH-5075	Reinstatement of HHR Flyover - Formwork stripping for the walls of bay 2 of HHR	2	2	13-May-17	16-May-17	-605	HK Working Day
S11-HH-5077	Reinstatement of HHR Flyover - Filling inside structure and install sub-soil drain	5	5	16-May-17	20-May-17	-605	HK Working Day
S11-HH-5080	Reinstatement of HHR Flyover - Lay blinding layer for the transition slab	1	1	20-May-17	20-May-17	-605	HK Working Day
S11-HH-5085	Reinstatement of HHR Flyover - Erect formwork for the transition slab	2	2	20-May-17	23-May-17	-605	HK Working Day
S11-HH-5086	Reinstatement of HHR Flyover - Fix Re-bars for the transition slab	2	2	22-May-17	24-May-17	-605	HK Working Day
S11-HH-5087	Reinstatement of HHR Flyover - Concreting for the transition slab	1	1	24-May-17	25-May-17	-605	HK Working Day
Hung Hing Road Flyover - Bay 3 (East Side) CH 3747-3770							
S11-HH-5140	Reinstatement of HHR Flyover - Lay blinding layer for the east abutment	1	1	20-Apr-17	20-Apr-17	-606	HK Working Day
S11-HH-5159	Reinstatement of HHR Flyover - Erect fmk for the base slab of east abutment	7	7	20-Apr-17	28-Apr-17	-606	HK Working Day
S11-HH-5160	Reinstatement of HHR Flyover - Fix Re-bars for the base slab of east abutment	5	5	22-Apr-17	28-Apr-17	-606	HK Working Day
S11-HH-5161	Reinstatement of HHR Flyover - Concreting for the base slab of east abutment	1	1	28-Apr-17	28-Apr-17	-606	HK Working Day
S11-HH-5172	Reinstatement of HHR Flyover - Erect falsework and formwork for the walls of east abutment	8	8	28-Apr-17	09-May-17	-606	HK Working Day
S11-HH-5173	Reinstatement of HHR Flyover - Fix Re-bars for the walls of east abutment	6	6	02-May-17	09-May-17	-606	HK Working Day
S11-HH-5174	Reinstatement of HHR Flyover - Concreting for the walls of east abutment	1	1	09-May-17	10-May-17	-606	HK Working Day
S11-HH-5176	Reinstatement of HHR Flyover - Formwork stripping for the walls of east abutment	2	2	10-May-17	12-May-17	-606	HK Working Day
Hung Hing Road Flyover - Deck Construction							
S11-HH-4027	Reinstatement of HHR Flyover - Erect falsework and fmk for the bridge decking	10	10	12-May-17	23-May-17	-606	HK Working Day
S11-HH-4032	Reinstatement of HHR Flyover - Fix Re-bars for the bridge decking	8	8	17-May-17	25-May-17	-606	HK Working Day
S11-HH-4037	Reinstatement of HHR Flyover - Concreting for the bridge decking	1	1	25-May-17	26-May-17	-606	HK Working Day
S11-HH-4038	Reinstatement of HHR Flyover - Curing for the bridge decking	3	3	26-May-17	29-May-17	-672	Calendar Day
S11-HH-4047	Reinstatement of HHR Flyover - Dismantle falsework and fmk for the bridge decking	3	3	26-May-17	29-May-17	-606	HK Working Day
Hung Hing Road Flyover - Traffic Diversion and Road Furniture							
S11-HH-4052	Reinstatement of HHR Flyover - Cover up all utilities	4	4	29-May-17	02-Jun-17	-672	Calendar Day
S11-HH-4055	Reinstatement of HHR Flyover - Lay drainage works and corss road ducts for the bridge	4	4	05-May-17	08-May-17	-653	Calendar Day
S11-HH-4056	Reinstatement of HHR Flyover - Place sub-base for the bridge	3	3	08-May-17	10-May-17	-653	Calendar Day
S11-HH-4057	Reinstatement of HHR Flyover - Lay asphalt and road markings	3	3	09-May-17	11-May-17	-653	Calendar Day
S11-HH-4059	Reinstatement of HHR Flyover - Install Road Furnitures for the bridge	4	4	27-May-17	30-May-17	-671	Calendar Day
S11-HH-4063	Reinstatement of HHR Flyover - Final Inspection of bridge and carry out traffic diversion	2	2	31-May-17	02-Jun-17	-672	Calendar Day
S11-HH-4064	Reinstatement of HHR Flyover - Traffic Diversion to reinstated bridge	0	0	02-Jun-17		-672	Calendar Day
S11-HH-4066	Reinstatement of HHR Flyover - Reinstate a drainage pipe along Temp Steel Bridges	25	25	05-Jun-17	03-Jul-17	-253	HK Working Day
S11-HH-4068	Reinstatement of HHR Flyover - Remove Temp Steel Bridge No. 1	43	43	05-Jun-17	21-Jul-17	-605	HK Working Day
S11-HH-4070	Reinstatement of HHR Flyover - Remove Temp Steel Bridge No. 2	32	32	08-Jul-17	10-Aug-17	-258	HK Working Day
S11-HH-4072	Reinstatement of HHR Flyover - Remove Temp Steel Bridge No. 3	31	31	05-Jun-17	08-Jul-17	-258	HK Working Day
Reinstatement of Box Culvert O							
Box Culvert O Construction (Tunnel Section) - Bay 15A and Bay 16A							
S11-BCO-2065	Box Culvert O Reinstatement - Construct 2m thk G200 rockfill bedding and blinding	6	0	01-Mar-17 A	06-Mar-17 A		HK Working Day
Box Culvert O Construction (South Portion) - Bay 12 to Bay 14							
S11-BCO-2200	Box Culvert O Reinstatement - Fabricate Precast Units about 60 nos. (Construction Details liaising with AECOM)	90	90	03-Aug-17	01-Nov-17	-269	Calendar Day
Wan Shing Street Sewerage Works							
S11-SW-1030	TTA Scheme at Wan Shing Street - Endorsement by ER	12	5	16-Mar-17 A	24-Apr-17	-231	HK Working Day
S11-SW-1032	TTA Preparation Works - Removal of Hoarding and paving temporary road at Hung Hing Street with road marking and sig	20	12	12-Apr-17 A	04-May-17	-233	HK Working Day
S11-SW-1040	Apply TTA for open trench excavation at Wan Shiing Street	1	1	04-May-17	04-May-17	-233	HK Working Day
S11-SW-1060	Implement TTA Stage 1	2	2	04-May-17	05-May-17	-233	HK Working Day
S11-SW-1062	UU detection and excavate trial pit TH-HHR-04 at Wan Shiing Street	4	4	12-May-17	17-May-17	-239	HK Working Day

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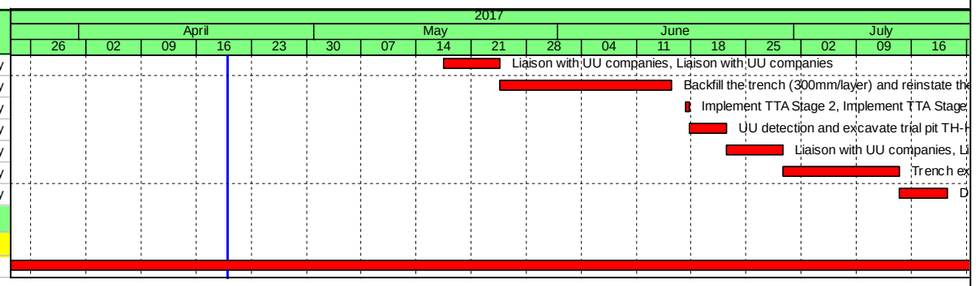
S11-SW-1064	Liaison with UU companies	7	7	17-May-17	24-May-17	-239	HK Working Day
S11-SW-1066	Backfill the trench (300mm/layer) and reinstate the pavement at Wan Shing Street	21	21	24-May-17	15-Jun-17	-239	HK Working Day
S11-SW-1080	Implement TTA Stage 2	1	1	17-Jun-17	17-Jun-17	-239	HK Working Day
S11-SW-1081	UU detection and excavate trial pit TH-HHR-04 at Wan Shing Street	4	4	17-Jun-17	22-Jun-17	-239	HK Working Day
S11-SW-1082	Liaison with UU companies	7	7	22-Jun-17	29-Jun-17	-239	HK Working Day
S11-SW-1083	Trench excavation and shoring installation at Wan Shing Street	12	12	29-Jun-17	14-Jul-17	-239	HK Working Day
S11-SW-1084	Divert existing DN500 from MH 17 to MH 19 and removal of D300 pvc pipe at Wan Shing Street	6	6	14-Jul-17	20-Jul-17	-239	HK Working Day
Soft Landscaping & Establishment Works							
Section 12 of the Works - Protection and Preservation of Existing Trees							
S12-0010	Protection and preservation of existing trees	2111	476	24-Feb-10 A	08-Aug-18	-443	Calendar Day



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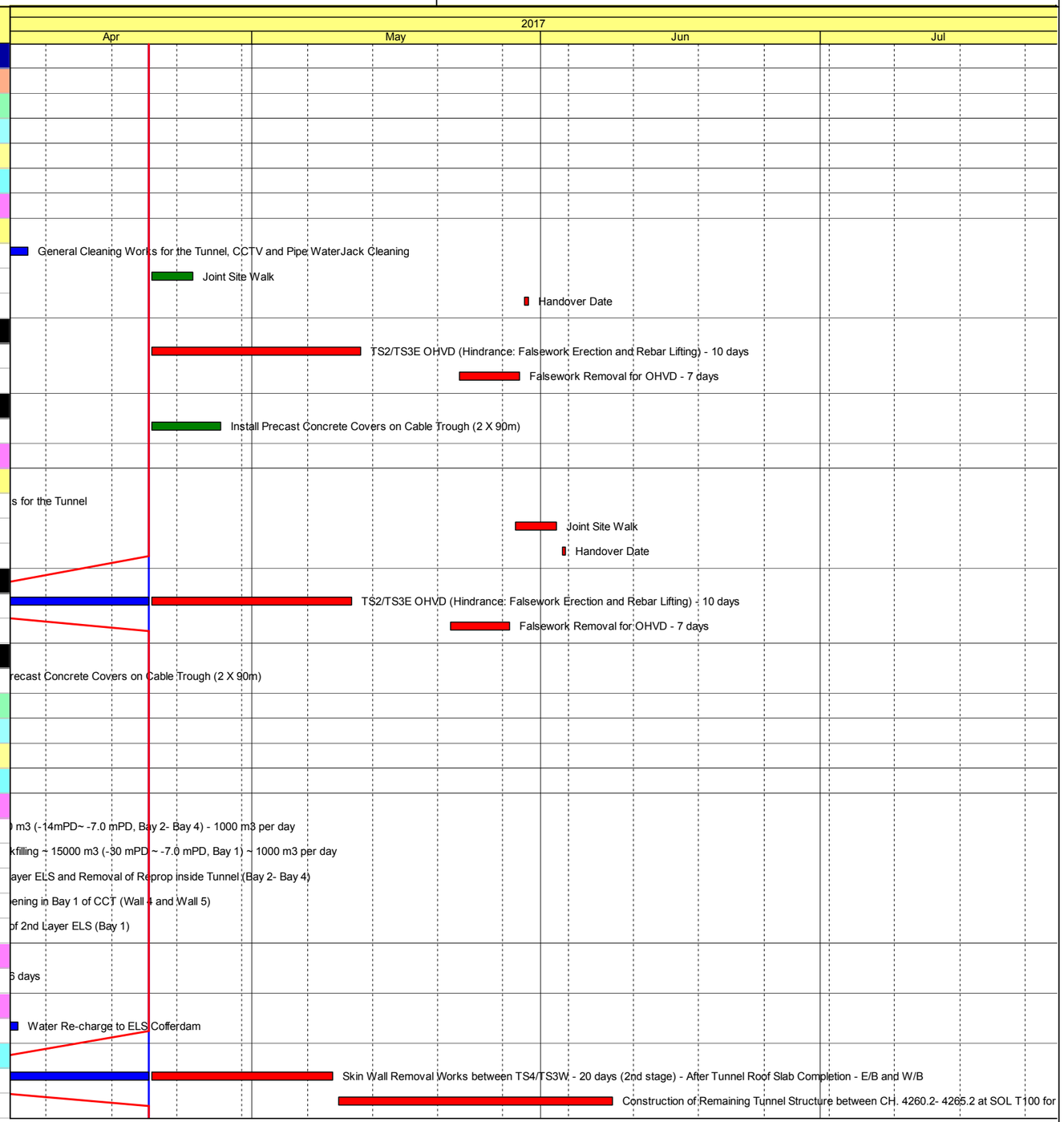
Total		1791d	21-Mar-13 A	09-Feb-18
DWP-07 - (6) - Update Progress As of 20 Apr 17		1791d	21-Mar-13 A	09-Feb-18
Works in KD2		95d	01-Mar-17 A	03-Jun-17
Works in TS3-East		95d	01-Mar-17 A	03-Jun-17
Removal of Temporary Reclamation at TS3(E)		95d	01-Mar-17 A	03-Jun-17
TS3E Remaining Works & TS3E/TS3W, TS3E/TS2 Stitching Works		95d	01-Mar-17 A	03-Jun-17
West Bound Tunnel (W/B)		91d	01-Mar-17 A	30-May-17
Outstanding Reinforced Concrete Works		91d	01-Mar-17 A	30-May-17
A6570	General Cleaning Works for the Tunnel, CCTV and Pipe WaterJack Cleaning	10d	01-Mar-17 A	07-Apr-17 A
A6580	Joint Site Walk	5d	20-Apr-17	24-Apr-17
A6590	Handover Date	1d	30-May-17	30-May-17
Stitching of TS2 & TS3E (5.0 m Tunnel Length for Base Slab, Roof Slab, Approx. 15 m length for OH		40d	20-Apr-17	29-May-17
A6650	TS2/TS3E OHVD (Hindrance: Falsework Erection and Rebar Lifting) - 10 days	23d	20-Apr-17	12-May-17
A6660	Falsework Removal for OHVD - 7 days	7d	23-May-17	29-May-17
Profile Barrier and Maintenance Walkway		8d	20-Apr-17	27-Apr-17
A6700	Install Precast Concrete Covers on Cable Trough (2 X 90m)	8d	20-Apr-17	27-Apr-17
East Bound Tunnel (E/B)		62d	06-Mar-17 A	03-Jun-17
Outstanding Reinforced Concrete Works		62d	06-Mar-17 A	03-Jun-17
A6950	General Cleaning Works for the Tunnel	25d	11-Mar-17 A	23-Mar-17 A
A6960	Joint Site Walk	5d	29-May-17	02-Jun-17
A6970	Handover Date	1d	03-Jun-17	03-Jun-17
Stitching of TS2 & TS3E (5.0 m Length for Base Slab, Roof Slab, Approx. 15 m length for OHVD)		56d	06-Mar-17 A	28-May-17
A6860	TS2/TS3E OHVD (Hindrance: Falsework Erection and Rebar Lifting) - 10 days	10d	06-Mar-17 A	11-May-17
A6870	Falsework Removal for OHVD - 7 days	7d	22-May-17	28-May-17
Profile Barrier and Maintenance Walkway		8d	24-Mar-17 A	31-Mar-17 A
A6910	Install Precast Concrete Covers on Cable Trough (2 X 90m)	8d	24-Mar-17 A	31-Mar-17 A
Works in KD7		81d	04-Mar-17 A	08-Jun-17
Works in TS3-West		81d	04-Mar-17 A	08-Jun-17
Tunnel Structure		81d	04-Mar-17 A	08-Jun-17
Earthwork Backfilling, ELS Removal and Water Recharging		38d	04-Mar-17 A	06-Apr-17 A
East Portion		38d	04-Mar-17 A	30-Mar-17 A
A2490	Stage 4 Backfilling- 25000 m3 (-14mPD~ -7.0 mPD, Bay 2- Bay 4) - 1000 m3 per day	19d	04-Mar-17 A	22-Mar-17 A
A2520	Stage 5 Backfilling ~ 15000 m3 (-30 mPD ~ -7.0 mPD, Bay 1) ~ 1000 m3 per day	10d	22-Mar-17 A	28-Mar-17 A
A2500	Removal of 2nd Layer ELS and Removal of Reprop inside Tunnel (Bay 2- Bay 4)	7d	23-Mar-17 A	26-Mar-17 A
A2510	Closure of wall opening in Bay 1 of CCT (Wall 4 and Wall 5)	14d	23-Mar-17 A	26-Mar-17 A
A2530	Removal of 2nd Layer ELS (Bay 1)	5d	29-Mar-17 A	30-Mar-17 A
West Portion		6d	10-Mar-17 A	20-Mar-17 A
A2550	Removal of 2nd Layer ELS - 6 days	6d	10-Mar-17 A	20-Mar-17 A
Water Recharge (CNY- 27/1~ 2/2)		1d	31-Mar-17 A	06-Apr-17 A
A2560	Water Re-charge to ELS Cofferdam	1d	31-Mar-17 A	06-Apr-17 A
Skin Wall Removal Works between TS4/TS3W and Shaft D Closure		81d	23-Mar-17 A	08-Jun-17
A2590	Skin Wall Removal Works between TS4/TS3W - 20 days (2nd stage) - After Tunnel Roof Slab Completion - E/B and W/B	20d	23-Mar-17 A	09-May-17
A2600	Construction of Remaining Tunnel Structure between CH. 4260.2- 4265.2 at SOL T100 for Mainline E/B, W/B, SR8	30d	10-May-17	08-Jun-17



Actual Work
Remaining Work
Critical Remaining Work
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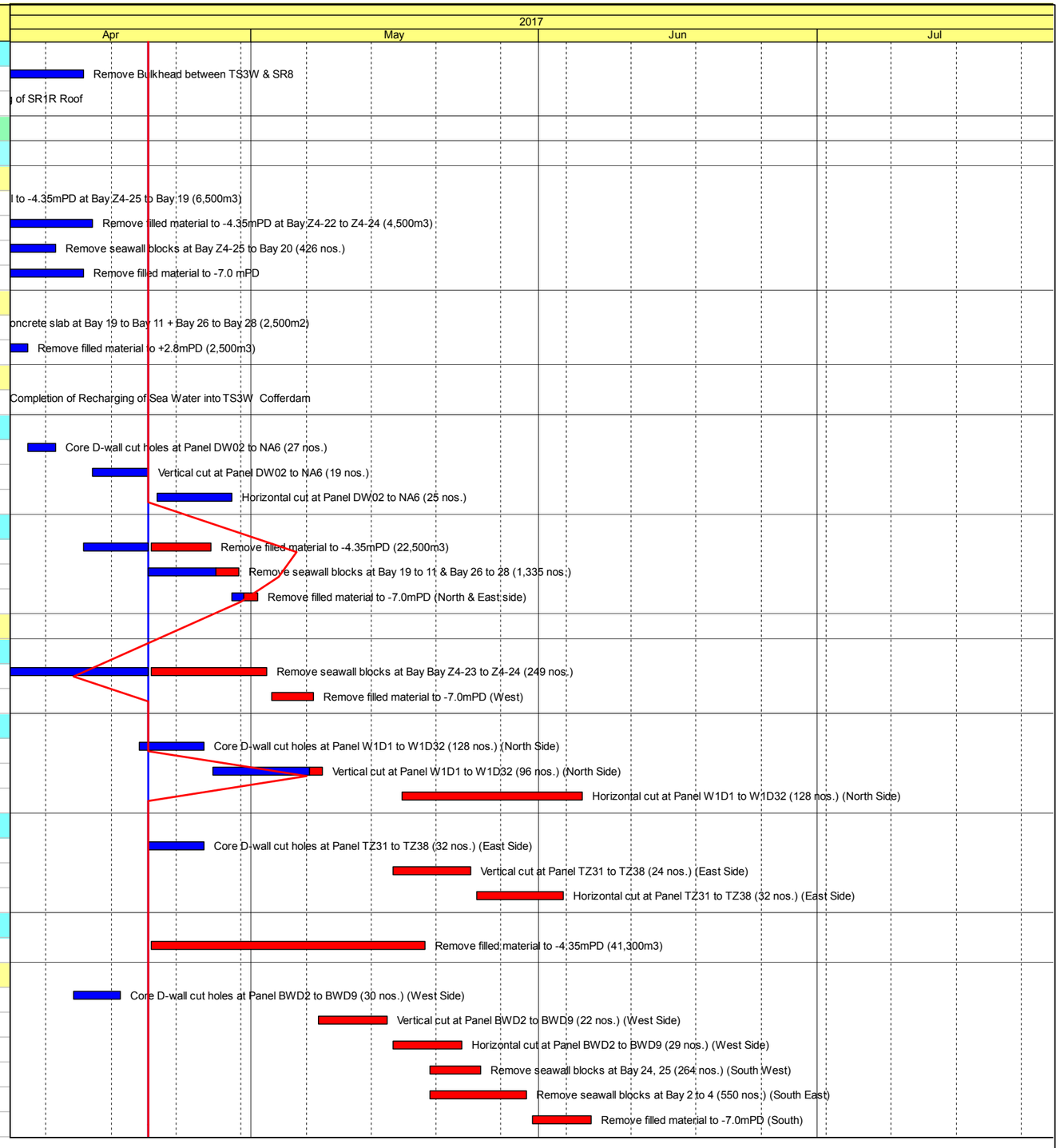
Contract No. HY/2010/08: Central - Wanchai Bypass Tunnel +(Slip Road 8 Section) - 3 Months Rolling Progamme

Date	Revision	Checked	Approved
20-Apr-17	DWP-07 (6) - 3 Months Rolling	FS	TL

Activity ID	Activity Name	Original Duration	Start	Finish
Removal Bulkhead at CH525 (TS3W / SR8 Junction)		41d	06-Mar-17 A	13-Apr-17 A
A6080	Remove Bulkhead between TS3W & SR8	37d	06-Mar-17 A	13-Apr-17 A
A5180	Remove Scaffolding of SR1R Roof	4d	22-Mar-17 A	25-Mar-17 A
Works in KD8		129d	09-Mar-17 A	28-Jul-17
TS3W - Remove Temporary Reclamation		129d	09-Mar-17 A	28-Jul-17
Stage 1 - North West Corner (Bay Z4-25 to Bay 20)		56d	09-Mar-17 A	14-Apr-17 A
A2660	Remove filled material to -4.35mPD at Bay Z4-25 to Bay 19 (6,500m3)	8d	09-Mar-17 A	24-Mar-17 A
A2670	Remove filled material to -4.35mPD at Bay Z4-22 to Z4-24 (4,500m3)	5d	25-Mar-17 A	14-Apr-17 A
A2680	Remove seawall blocks at Bay Z4-25 to Bay 20 (426 nos.)	8d	27-Mar-17 A	10-Apr-17 A
A6260	Remove filled material to -7.0 mPD	4d	05-Apr-17 A	13-Apr-17 A
Stage 2 - North to East Side (Bay 19 to Bay 11 + Bay 26 to Bay 28)		14d	24-Mar-17 A	07-Apr-17 A
A2690	Break concrete slab at Bay 19 to Bay 11 + Bay 26 to Bay 28 (2,500m2)	7d	24-Mar-17 A	31-Mar-17 A
A2700	Remove filled material to +2.8mPD (2,500m3)	7d	01-Apr-17 A	07-Apr-17 A
Stage 3 - North to East Side (Bay 19 to bay 26)		49d	31-Mar-17 A	01-May-17
A2710	Completion of Recharging of Sea Water into TS3W Cofferdam	2d	31-Mar-17 A	04-Apr-17 A
North West D-wall Opening		22d	07-Apr-17 A	29-Apr-17 A
A2720	Core D-wall cut holes at Panel DW02 to NA6 (27 nos.)	6d	07-Apr-17 A	10-Apr-17 A
A2730	Vertical cut at Panel DW02 to NA6 (19 nos.)	8d	14-Apr-17 A	20-Apr-17 A
A2740	Horizontal cut at Panel DW02 to NA6 (25 nos.)	8d	21-Apr-17 A	29-Apr-17 A
North East & East		13d	13-Apr-17 A	01-May-17
A2750	Remove filled material to -4.35mPD (22,500m3)	9d	13-Apr-17 A	26-Apr-17
A2760	Remove seawall blocks at Bay 19 to 11 & Bay 26 to 28 (1,335 nos.)	13d	20-Apr-17 A	29-Apr-17
A2770	Remove filled material to -7.0mPD (North & East side)	10d	29-Apr-17 A	01-May-17
Stage 4 - West & South Side (Remove Seawall Block Bay Z4-23 & 24, Excavate to -4.35mPD)		47d	31-Mar-17 A	05-Jun-17
West Side		18d	31-Mar-17 A	07-May-17
A2790	Remove seawall blocks at Bay Bay Z4-23 to Z4-24 (249 nos.)	5d	31-Mar-17 A	02-May-17
A2800	Remove filled material to -7.0mPD (West)	5d	03-May-17	07-May-17
North East Side		32d	19-Apr-17 A	05-Jun-17
A2810	Core D-wall cut holes at Panel W1D1 to W1D32 (128 nos.) (North Side)	14d	19-Apr-17 A	26-Apr-17 A
A2820	Vertical cut at Panel W1D1 to W1D32 (96 nos.) (North Side)	16d	27-Apr-17 A	08-May-17
A2830	Horizontal cut at Panel W1D1 to W1D32 (128 nos.) (North Side)	20d	17-May-17	05-Jun-17
East Side		33d	20-Apr-17 A	03-Jun-17
A2840	Core D-wall cut holes at Panel TZ31 to TZ38 (32 nos.) (East Side)	10d	20-Apr-17 A	26-Apr-17 A
A2850	Vertical cut at Panel TZ31 to TZ38 (24 nos.) (East Side)	9d	16-May-17	24-May-17
A2860	Horizontal cut at Panel TZ31 to TZ38 (32 nos.) (East Side)	10d	25-May-17	03-Jun-17
South Side		30d	20-Apr-17	19-May-17
A2870	Remove filled material to -4.35mPD (41,300m3)	30d	20-Apr-17	19-May-17
Stage 5 - West & South side (Reove Seawwall Block Bay 24 7 25, Excvavate to -7.0mPD)		30d	12-Apr-17 A	06-Jun-17
A2910	Core D-wall cut holes at Panel BWD2 to BWD9 (30 nos.) (West Side)	5d	12-Apr-17 A	17-Apr-17 A
A2920	Vertical cut at Panel BWD2 to BWD9 (22 nos.) (West Side)	8d	08-May-17	15-May-17
A2930	Horizontal cut at Panel BWD2 to BWD9 (29 nos.) (West Side)	8d	16-May-17	23-May-17
A2880	Remove seawall blocks at Bay 24, 25 (264 nos.) (South West)	6d	20-May-17	25-May-17
A2890	Remove seawall blocks at Bay 2 to 4 (550 nos.) (South East)	11d	20-May-17	30-May-17
A2900	Remove filled material to -7.0mPD (South)	7d	31-May-17	06-Jun-17



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Date	Revision	Checked	Approved
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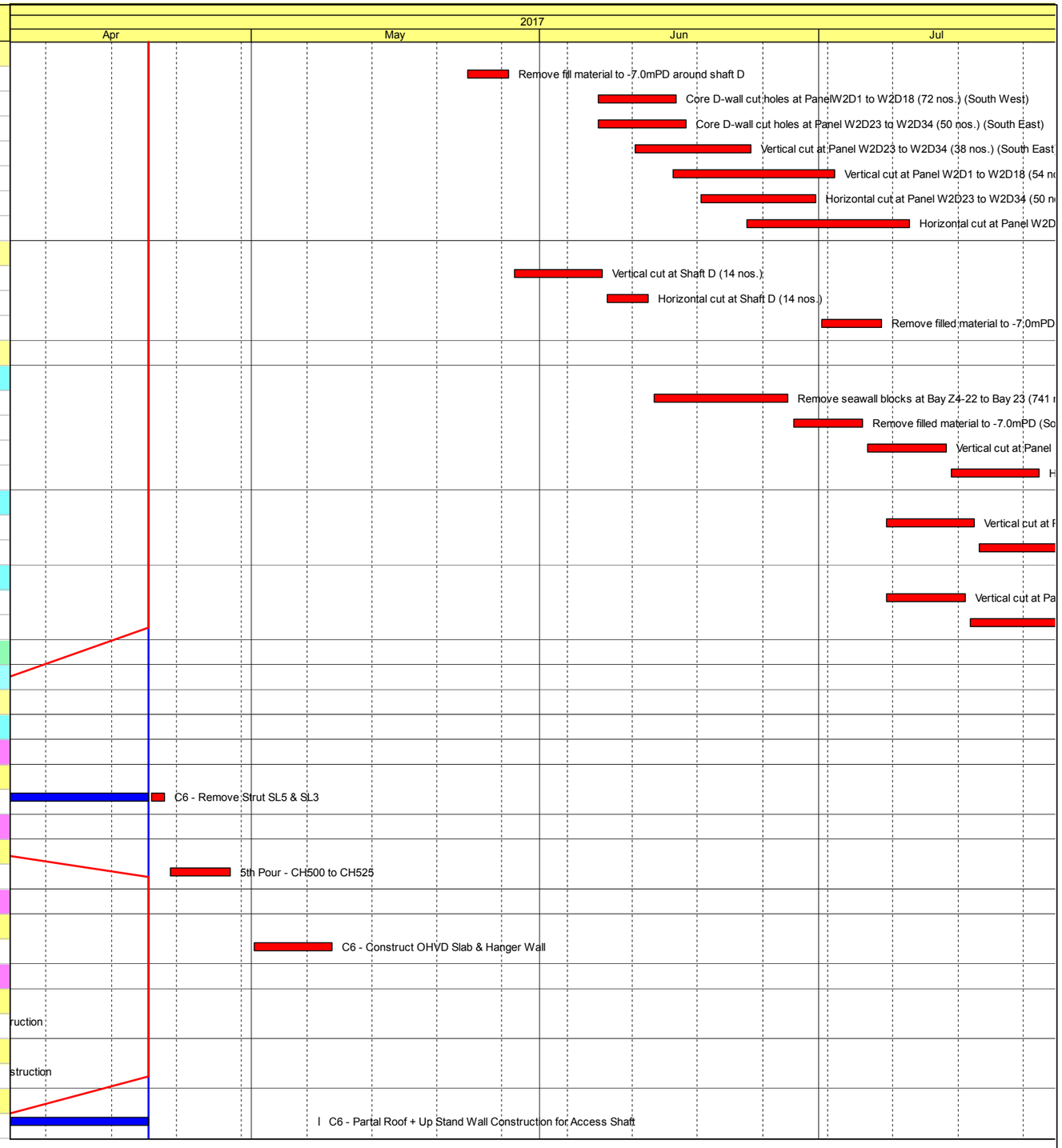
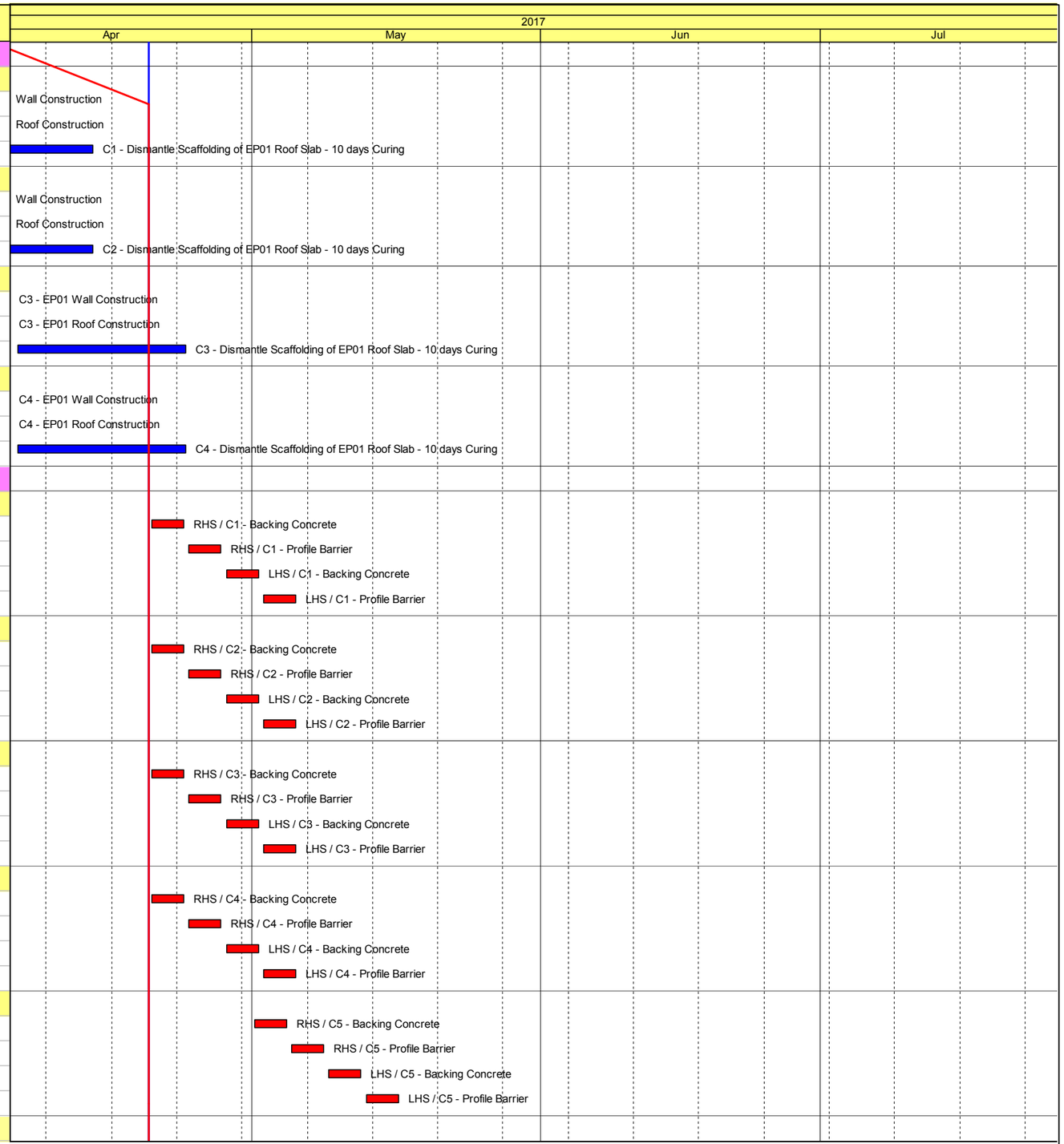
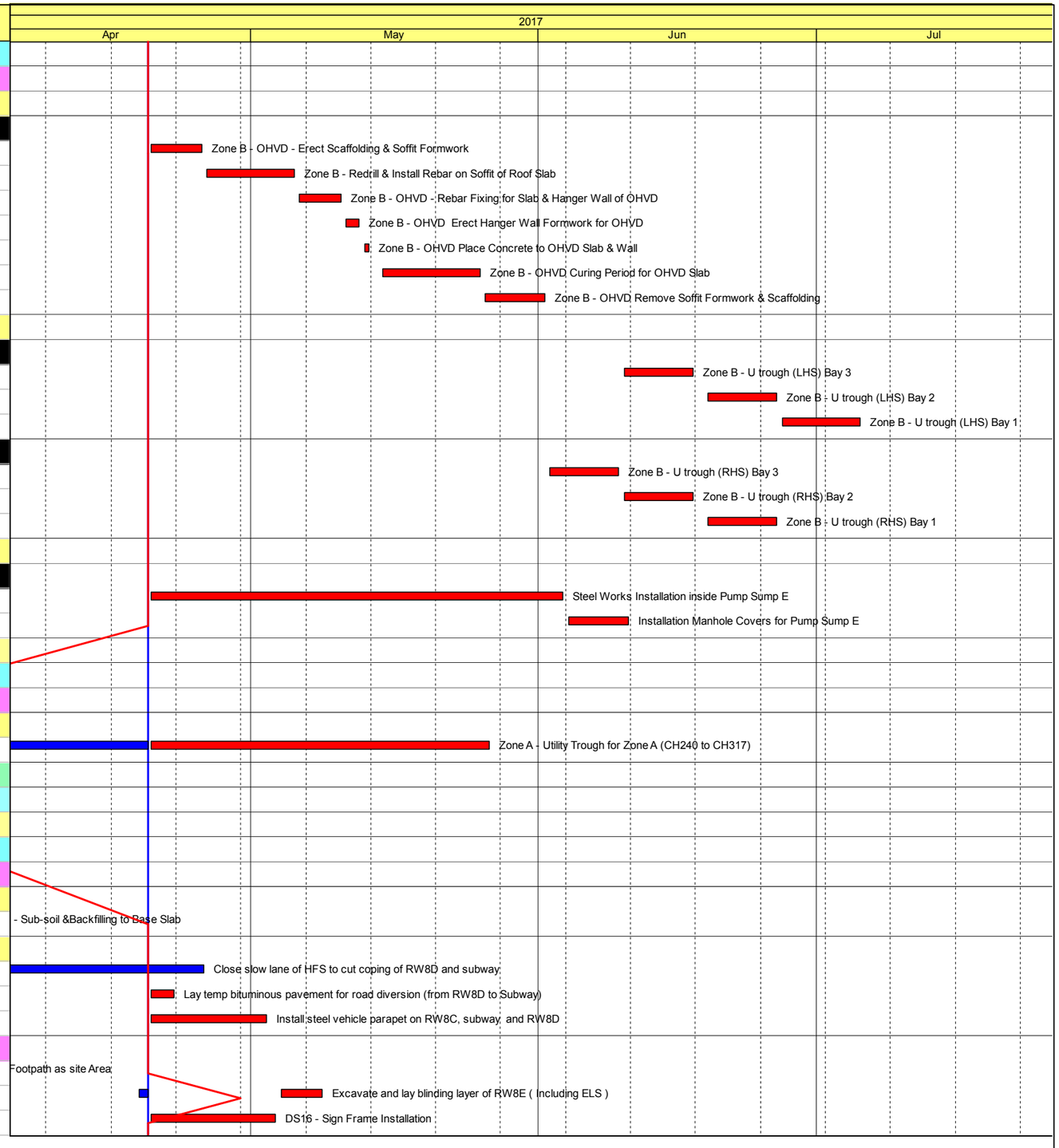
Activity ID	Activity Name	Original Duration	Start	Finish
Stage 6 - West & South Side (Saw Cut D-wall + Shaft D)		48d	24-May-17	10-Jul-17
A2940	Remove fill material to -7.0mPD around shaft D	5d	24-May-17	28-May-17
A2950	Core D-wall cut holes at PanelW2D1 to W2D18 (72 nos.) (South West)	9d	07-Jun-17	15-Jun-17
A2980	Core D-wall cut holes at Panel W2D23 to W2D34 (50 nos.) (South East)	10d	07-Jun-17	16-Jun-17
A2990	Vertical cut at Panel W2D23 to W2D34 (38 nos.) (South East)	13d	11-Jun-17	23-Jun-17
A2960	Vertical cut at Panel W2D1 to W2D18 (54 nos.) (South West)	18d	15-Jun-17	02-Jul-17
A3000	Horizontal cut at Panel W2D23 to W2D34 (50 nos.) (South East)	13d	18-Jun-17	30-Jun-17
A2970	Horizontal cut at Panel W2D1 to W2D18 (72 nos.) (South West)	18d	23-Jun-17	10-Jul-17
Stage 7 - West & South Side (Saw Cut Shaft D, Excavate to -7.0mPD at SR8)		40d	29-May-17	07-Jul-17
A3010	Vertical cut at Shaft D (14 nos.)	10d	29-May-17	07-Jun-17
A3020	Horizontal cut at Shaft D (14 nos.)	5d	08-Jun-17	12-Jun-17
A3030	Remove filled material to -7.0mPD at SR8	7d	01-Jul-17	07-Jul-17
Stage 8 - South East & West Side (Remove Seawall Block Bay Z4-22 to Bay 23, Saw Cut D-wall at SR8)		46d	13-Jun-17	28-Jul-17
South West Side		42d	13-Jun-17	24-Jul-17
A3040	Remove seawall blocks at Bay Z4-22 to Bay 23 (741 nos.)	15d	13-Jun-17	27-Jun-17
A3050	Remove filled material to -7.0mPD (South West)	8d	28-Jun-17	05-Jul-17
A3060	Vertical cut at Panel BWD10 to SA7 (26 nos.) (South West)	9d	06-Jul-17	14-Jul-17
A3070	Horizontal cut at Panel BWD10 to SA7 (37 nos.) (South West)	10d	15-Jul-17	24-Jul-17
SR08 - West Wall		21d	08-Jul-17	28-Jul-17
A3080	Vertical cut at Panel W4D1 to W4D11 (28 nos.) (SR8)	10d	08-Jul-17	17-Jul-17
A3090	Horizontal cut at Panel W4D1 to W4D11 (39 nos.) (SR8)	11d	18-Jul-17	28-Jul-17
SR08 - East Wall		19d	08-Jul-17	26-Jul-17
A7010	Vertical cut at Panel W4D1 to W4D11 (26 nos.)	9d	08-Jul-17	16-Jul-17
A7020	Horizontal cut at Panel W3D1 to W3D7 (36 nos.)	10d	17-Jul-17	26-Jul-17
Works in KD6		136d	22-Jan-17 A	05-Jul-17
Works in SR8 (Open Cut Method)		136d	22-Jan-17 A	05-Jul-17
SR8 (Zone C) - Ch. 528 to Ch. 368		88d	14-Feb-17 A	16-May-17
Zone C - Tunnel Structure		88d	14-Feb-17 A	16-May-17
1.2m Thick Base Slab		2d	26-Feb-17 A	21-Apr-17
Bay C6		2d	26-Feb-17 A	21-Apr-17
A7540	C6 - Remove Strut SL5 & SL3	2d	26-Feb-17 A	21-Apr-17
1.0m Thick Wall at Both Side		7d	22-Apr-17	28-Apr-17
LHS Wall		7d	22-Apr-17	28-Apr-17
A7340	5th Pour - CH500 to CH525	7d	22-Apr-17	28-Apr-17
200mm Thick OHVD Slab & 400mm Thick Hanger Wall		9d	01-May-17	09-May-17
Bay C6		9d	01-May-17	09-May-17
A7570	C6 - Construct OHVD Slab & Hanger Wall	9d	01-May-17	09-May-17
1.2m Thick Roof Slab		55d	14-Feb-17 A	08-May-17
Bay C4		13d	14-Feb-17 A	24-Mar-17 A
A7610	C4 - Roof Slab Construction	13d	14-Feb-17 A	24-Mar-17 A
Bay C5		8d	16-Mar-17 A	25-Mar-17 A
A7620	C5 - Roof Slab Construction	8d	16-Mar-17 A	25-Mar-17 A
Bay C6		9d	23-Mar-17 A	08-May-17
A7630	C6 - Partal Roof + Up Stand Wall Construction for Access Shaft	9d	23-Mar-17 A	08-May-17



Activity ID	Activity Name	Original Duration	Start	Finish
Egress Passage - EP01		31d	13-Mar-17 A	24-Apr-17 A
Bay C1		31d	13-Mar-17 A	14-Apr-17 A
A7690	C1 - EP01 Wall Construction	9d	13-Mar-17 A	30-Mar-17 A
A7700	C1 - EP01 Roof Construction	8d	13-Mar-17 A	30-Mar-17 A
A8010	C1 - Dismantle Scaffolding of EP01 Roof Slab - 10 days Curing	14d	31-Mar-17 A	14-Apr-17 A
Bay C2		31d	13-Mar-17 A	14-Apr-17 A
A7710	C2 - EP01 Wall Construction	9d	13-Mar-17 A	30-Mar-17 A
A7720	C2 - EP01 Roof Construction	8d	13-Mar-17 A	30-Mar-17 A
A8020	C2 - Dismantle Scaffolding of EP01 Roof Slab - 10 days Curing	14d	31-Mar-17 A	14-Apr-17 A
Bay C3		31d	20-Mar-17 A	24-Apr-17 A
A7730	C3 - EP01 Wall Construction	9d	20-Mar-17 A	05-Apr-17 A
A7740	C3 - EP01 Roof Construction	8d	20-Mar-17 A	05-Apr-17 A
A8030	C3 - Dismantle Scaffolding of EP01 Roof Slab - 10 days Curing	14d	06-Apr-17 A	24-Apr-17 A
Bay C4		31d	20-Mar-17 A	24-Apr-17 A
A7750	C4 - EP01 Wall Construction	9d	20-Mar-17 A	05-Apr-17 A
A7760	C4 - EP01 Roof Construction	8d	20-Mar-17 A	05-Apr-17 A
A8040	C4 - Dismantle Scaffolding of EP01 Roof Slab - 10 days Curing	14d	06-Apr-17 A	24-Apr-17 A
Utility Trough		27d	20-Apr-17	16-May-17
Bay C1		16d	20-Apr-17	05-May-17
A7790	RHS / C1 - Backing Concrete	4d	20-Apr-17	23-Apr-17
A7800	RHS / C1 - Profile Barrier	4d	24-Apr-17	27-Apr-17
A7770	LHS / C1 - Backing Concrete	4d	28-Apr-17	01-May-17
A7780	LHS / C1 - Profile Barrier	4d	02-May-17	05-May-17
Bay C2		16d	20-Apr-17	05-May-17
A7830	RHS / C2 - Backing Concrete	4d	20-Apr-17	23-Apr-17
A7840	RHS / C2 - Profile Barrier	4d	24-Apr-17	27-Apr-17
A7810	LHS / C2 - Backing Concrete	4d	28-Apr-17	01-May-17
A7820	LHS / C2 - Profile Barrier	4d	02-May-17	05-May-17
Bay C3		16d	20-Apr-17	05-May-17
A7870	RHS / C3 - Backing Concrete	4d	20-Apr-17	23-Apr-17
A7880	RHS / C3 - Profile Barrier	4d	24-Apr-17	27-Apr-17
A7850	LHS / C3 - Backing Concrete	4d	28-Apr-17	01-May-17
A7860	LHS / C3 - Profile Barrier	4d	02-May-17	05-May-17
Bay C4		16d	20-Apr-17	05-May-17
A7910	RHS / C4 - Backing Concrete	4d	20-Apr-17	23-Apr-17
A7920	RHS / C4 - Profile Barrier	4d	24-Apr-17	27-Apr-17
A7890	LHS / C4 - Backing Concrete	4d	28-Apr-17	01-May-17
A7900	LHS / C4 - Profile Barrier	4d	02-May-17	05-May-17
Bay C5		16d	01-May-17	16-May-17
A7950	RHS / C5 - Backing Concrete	4d	01-May-17	04-May-17
A7960	RHS / C5 - Profile Barrier	4d	05-May-17	08-May-17
A7930	LHS / C5 - Backing Concrete	4d	09-May-17	12-May-17
A7940	LHS / C5 - Profile Barrier	4d	13-May-17	16-May-17
SR8 (Zone B) - Ch.385.000 to Ch.317.500 - (Inside Victoria Park to Tunnel Portal)		77d	20-Apr-17	05-Jul-17



Activity ID	Activity Name	Original Duration	Start	Finish
SR8 (Zone B) Tunnel - ELS / CCT / BF Works (7 Bays Ch. 385.000 to Ch.317.500)		77d	20-Apr-17	05-Jul-17
Portal Structure		77d	20-Apr-17	05-Jul-17
OHVD		43d	20-Apr-17	01-Jun-17
Bay B1 + B2 (CH338.625 to CH368)		43d	20-Apr-17	01-Jun-17
SR8_ZB_1390	Zone B - OHVD - Erect Scaffolding & Soffit Formwork	6d	20-Apr-17	25-Apr-17
SR8_ZB_1400	Zone B - Redrill & Install Rebar on Soffit of Roof Slab	10d	26-Apr-17	05-May-17
SR8_ZB_1420	Zone B - OHVD - Rebar Fixing for Slab & Hanger Wall of OHVD	4d	06-May-17	10-May-17
SR8_ZB_1430	Zone B - OHVD Erect Hanger Wall Formwork for OHVD	2d	11-May-17	12-May-17
SR8_ZB_1440	Zone B - OHVD Place Concrete to OHVD Slab & Wall	1d	13-May-17	13-May-17
SR8_ZB_1450	Zone B - OHVD Curing Period for OHVD Slab	10d	15-May-17	25-May-17
SR8_ZB_1460	Zone B - OHVD Remove Soffit Formwork & Scaffolding	5d	26-May-17	01-Jun-17
Utility Trough		28d	02-Jun-17	05-Jul-17
Left Hand Side		21d	10-Jun-17	05-Jul-17
SR8_ZB_1570	Zone B - U trough (LHS) Bay 3	7d	10-Jun-17	17-Jun-17
SR8_ZB_1560	Zone B - U trough (LHS) Bay 2	7d	19-Jun-17	26-Jun-17
SR8_ZB_1550	Zone B - U trough (LHS) Bay 1	7d	27-Jun-17	05-Jul-17
Right Hand Side		21d	02-Jun-17	26-Jun-17
SR8_ZB_1600	Zone B - U trough (RHS) Bay 3	7d	02-Jun-17	09-Jun-17
SR8_ZB_1590	Zone B - U trough (RHS) Bay 2	7d	10-Jun-17	17-Jun-17
SR8_ZB_1580	Zone B - U trough (RHS) Bay 1	7d	19-Jun-17	26-Jun-17
Pump House		52d	20-Apr-17	10-Jun-17
Remining Works inside Pump Sump E		52d	20-Apr-17	10-Jun-17
SR8_ZB_1890	Steel Works Installation inside Pump Sump E	45d	20-Apr-17	03-Jun-17
SR8_ZB_1900	Installation Manhole Covers for Pump Sump E	7d	04-Jun-17	10-Jun-17
SR8 (Zone A) - Ch 317.500 to Ch 210.000 - U-Structure & Slab (Victoria Park)		28d	22-Jan-17 A	26-May-17
RC CCT & Backfill Ch317.5000 to Ch240.000		28d	22-Jan-17 A	26-May-17
Structure		28d	22-Jan-17 A	26-May-17
Utility Through		28d	22-Jan-17 A	26-May-17
SR8_ZA_1260	Zone A - Utility Trough for Zone A (CH240 to CH317)	28d	22-Jan-17 A	26-May-17
Works in KD9 (Include Re-provisioning Works of KD4,KD5)		299d	12-Dec-16 A	11-Sep-17
External Works Under KD9		299d	12-Dec-16 A	11-Sep-17
Tsing Fung St - RW & Subway Extension & Toe Wall at Hing Fat St		191d	23-Jan-17 A	01-Aug-17
Retaining Wall + Toe Wall at Hing Fat Street		191d	23-Jan-17 A	01-Aug-17
Retaining Wall RW8D		100d	23-Jan-17 A	02-May-17
Bay 3(10m) to Bay 4(10m)		6d	23-Jan-17 A	23-Mar-17 A
RW8D_1220	RW8D (Bay 3 to Bay 4) - Sub-soil &Backfilling to Base Slab	6d	23-Jan-17 A	23-Mar-17 A
Works along RW8D During Reopen Hing Fat Street Footpath to Public		33d	01-Mar-17 A	02-May-17
A4910	Close slow lane of HFS to cut coping of RW8D and subway	20d	01-Mar-17 A	26-Apr-17 A
A4920	Lay temp bituminous pavement for road diversion (from RW8D to Subway)	3d	20-Apr-17	22-Apr-17
A4940	Install steel vehicle parapet on RW8C, subway and RW8D	10d	20-Apr-17	02-May-17
Retaining Walls RW8E, Sign Footings & Sewer Pipe (SK266G, SK539C, SK375B)		135d	20-Mar-17 A	01-Aug-17
A4615	Re-ocuupy Hing Fat Street Footpath as site Area	1d	20-Mar-17 A	20-Mar-17 A
A4620	Excavate and lay blinding layer of RW8E (Including ELS)	14d	19-Apr-17 A	08-May-17
A4880	DS16 - Sign Frame Installation	14d	20-Apr-17	03-May-17



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Date	Revision	Checked	Approved
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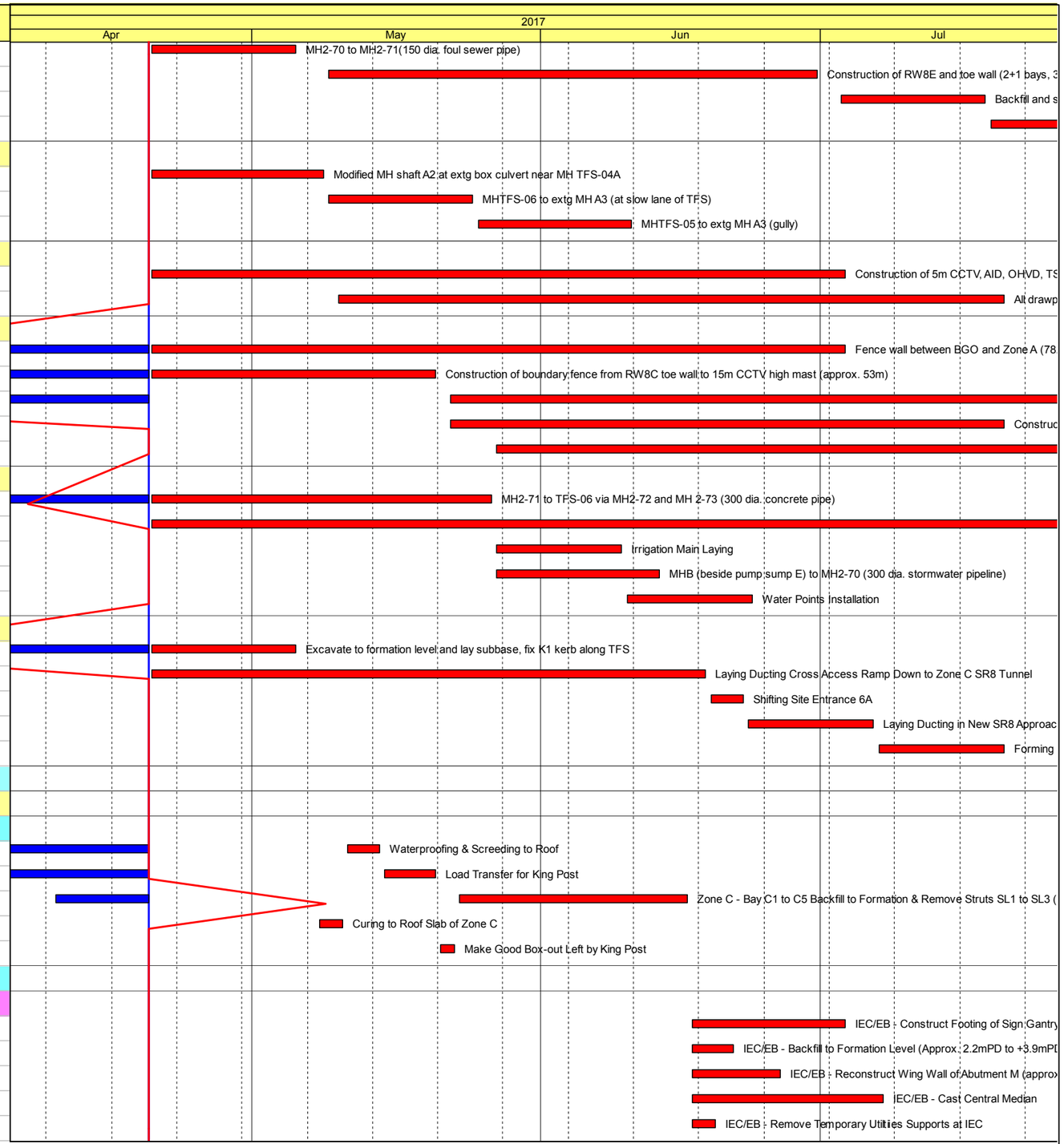
Activity ID	Activity Name	Original Duration	Start	Finish
A4650	MH2-70 to MH2-71(150 dia. foul sewer pipe)	12d	20-Apr-17	05-May-17
A4630	Construction of RW8E and toe wall (2+1 bays, 32m long)	45d	09-May-17	30-Jun-17
A4640	Backfill and subsoil drainage system behind RW8E	14d	03-Jul-17	18-Jul-17
A4670	MH2-72 to MH2-73	12d	19-Jul-17	01-Aug-17
Storm Drain Pipe behind RW8C along Tsing Fung Street (SK547A)		42d	20-Apr-17	10-Jun-17
A4540	Modified MH shaft A2 at extg box culvert near MH TFS-04A	14d	20-Apr-17*	08-May-17
A6410	MHTFS-06 to extg MH A3 (at slow lane of TFS)	14d	09-May-17	24-May-17
A8050	MHTFS-05 to extg MH A3 (gully)	14d	25-May-17	10-Jun-17
Sign Footings at Victoria Park		75d	20-Apr-17	20-Jul-17
A4570	Construction of 5m CCTV, AID, OHVD, TSG, luminance meter at verge inside VP	60d	20-Apr-17*	03-Jul-17
A4580	All drawpits (ATC, E&M and lighting) and ductings at verge inside VP (SK375B)	60d	10-May-17	20-Jul-17
Boundary Fence, Type 2 Railing Footings & Fence Wall From RW8C to Zone B		242d	12-Dec-16 A	11-Sep-17
A8070	Fence wall between BGO and Zone A (78.2m)	90d	12-Dec-16 A	03-Jul-17
A4700	Construction of boundary fence from RW8C toe wall to 15m CCTV high mast (approx. 53m)	50d	19-Dec-16 A	20-May-17
A4710	Modification/ Re-construction of extg type 2 railing footing in front of RW8C (approx. 40m)	60d	10-Feb-17 A	01-Aug-17
A4720	Construction of boundary fence from 15m CCTV high mast to Zone A at CH210 (approx. 50m)	50d	22-May-17	20-Jul-17
A4730	Construction of boundary fence near nursery compound (approx. 167m, after completion of MH 2-73)	90d	27-May-17	11-Sep-17
Other Storm, Sewerage Pipe & Irrigation System in VP (SK336E, SK539D)		141d	21-Feb-17 A	07-Aug-17
A4770	MH2-71 to TFS-06 via MH2-72 and MH 2-73 (300 dia. concrete pipe)	40d	21-Feb-17 A	26-May-17
A4740	FMH-B01 to Extg 1-40 (5 MHs and 7 foul sewer PE pipeline)	90d	20-Apr-17	07-Aug-17
A4970	Irrigation Main Laying	14d	27-May-17	09-Jun-17
A4760	MHB (beside pump sump E) to MH2-70 (300 dia. stormwater pipeline)	14d	27-May-17	13-Jun-17
A4980	Water Points Installation	14d	10-Jun-17	23-Jun-17
Preparation Works before Implementation TTA at Central Median		141d	02-Feb-17 A	20-Jul-17
A4795	Excavate to formation level and lay subbase, fix K1 kerb along TFS	14d	02-Feb-17 A	05-May-17
A4890	Laying Ducting Cross Access Ramp Down to Zone C SR8 Tunnel	60d	20-Apr-17	18-Jun-17
A4930	Shifting Site Entrance 6A	4d	19-Jun-17	22-Jun-17
A4950	Laying Ducting in New SR8 Approaching Island	14d	23-Jun-17	06-Jul-17
A5020	Forming Isalnd Including Sub-base & Kerbing	14d	07-Jul-17	20-Jul-17
Reverting Traffic for IEC,VP Rd & TF St & Seawall Reinstatement (KD9)		98d	27-Mar-17 A	13-Aug-17
TTA Revert Traffic Back to Original Alignment		98d	27-Mar-17 A	13-Aug-17
Preparation Works - Backfill of Zone C to Top of Tunnel Structure		59d	27-Mar-17 A	16-Jun-17
A5790	Waterproofing & Screeding to Roof	4d	27-Mar-17 A	14-May-17
A5800	Load Transfer for King Post	6d	05-Apr-17 A	20-May-17
A5820	Zone C - Bay C1 to C5 Backfill to Formation & Remove Struts SL1 to SL3 (Up to +2.5mPD)	44d	10-Apr-17 A	16-Jun-17
A5780	Curing to Roof Slab of Zone C	3d	08-May-17	10-May-17
A5810	Make Good Box-out Left by King Post	2d	21-May-17	22-May-17
East Bound TTA - IEC East Bound, Victoria Park Road & Footpath along Sea Side		30d	17-Jun-17	16-Jul-17
Stage 1 - IEC (East Bound)		30d	17-Jun-17	16-Jul-17
A5240	IEC/EB - Construct Footing of Sign Gantry & Wing Wall	17d	17-Jun-17	03-Jul-17
A5260	IEC/EB - Backfill to Formation Level (Approx. 2.2mPD to +3.9mPD)	5d	17-Jun-17	21-Jun-17
A5270	IEC/EB - Reconstruct Wing Wall of Abutment M (approx. 6m)	10d	17-Jun-17	26-Jun-17
A5280	IEC/EB - Cast Central Median	21d	17-Jun-17	07-Jul-17
A5310	IEC/EB - Remove Temporary Utilities Supports at IEC	3d	17-Jun-17	19-Jun-17



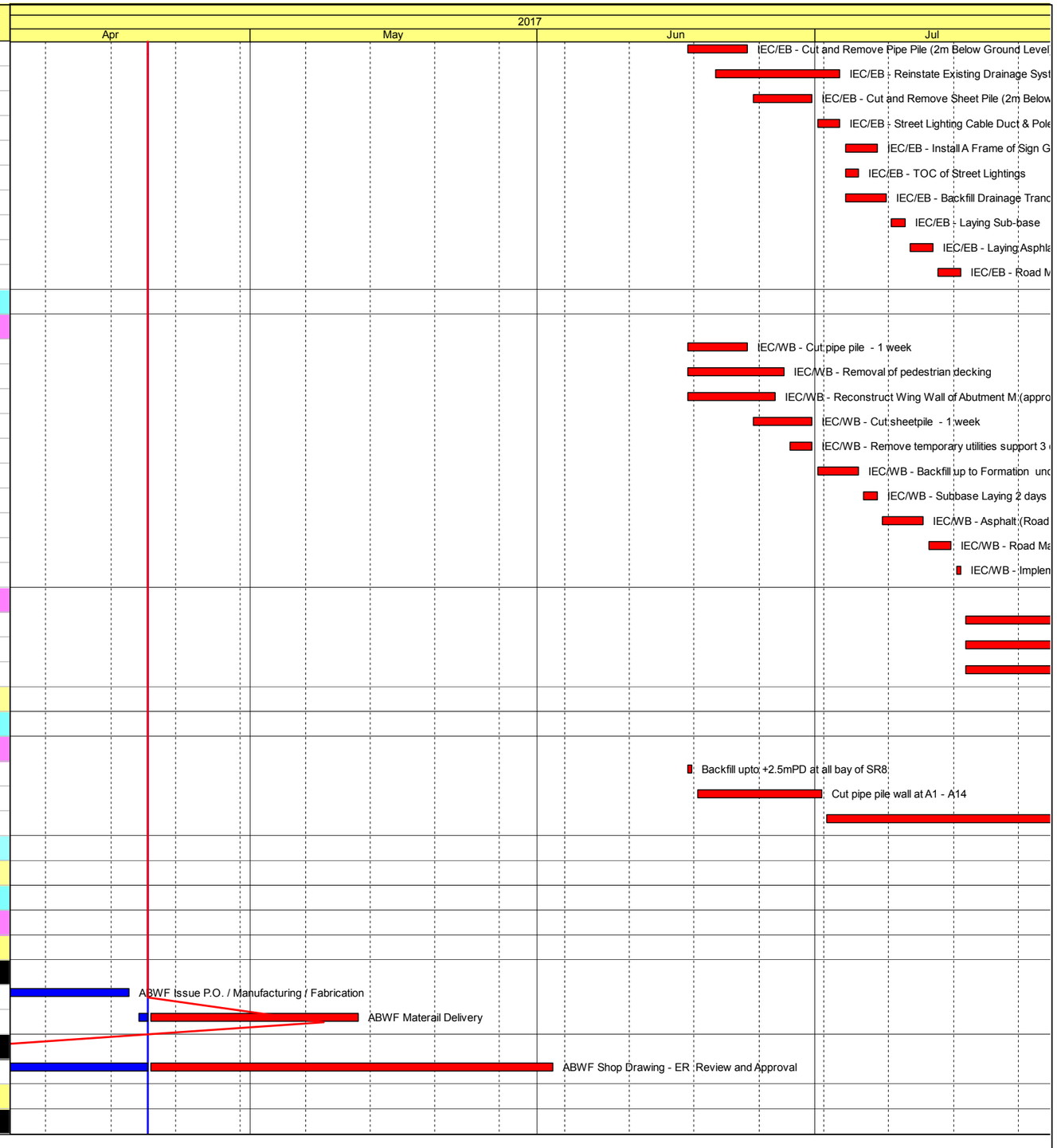
中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGRG. (HONG KONG) LTD.

Actual Work
Remaining Work
Critical Remaining Work
Milestone

Contract No. HY/2010/08: Central - Wanchai Bypass Tunnel +(Slip Road 8 Section) - 3 Months Rolling Progamme

Date	Revision	Checked	Approved
20-Apr-17	DWP-07 (6) - 3 Months Rolling	FS	TL

Activity ID	Activity Name	Original Duration	Start	Finish
A3285	IEC/EB - Cut and Remove Pipe Pile (2m Below Ground Level)	7d	17-Jun-17	23-Jun-17
A5320	IEC/EB - Reinstate Existing Drainage System	14d	20-Jun-17	03-Jul-17
A3286	IEC/EB - Cut and Remove Sheet Pile (2m Below Ground Level)	7d	24-Jun-17	30-Jun-17
A5290	IEC/EB - Street Lighting Cable Duct & Poles	3d	01-Jul-17	03-Jul-17
A5250	IEC/EB - Install A Frame of Sign Gantry	4d	04-Jul-17	07-Jul-17
A5300	IEC/EB - TOC of Street Lightings	2d	04-Jul-17	05-Jul-17
A5330	IEC/EB - Backfill Drainage Tranch Up to Formnation (+2.5mPd to +3.9mPD)	5d	04-Jul-17	08-Jul-17
A5340	IEC/EB - Laying Sub-base	2d	09-Jul-17	10-Jul-17
A5350	IEC/EB - Laying Asphlat Pavement	3d	11-Jul-17	13-Jul-17
A5360	IEC/EB - Road Mark & Traffic Signs	3d	14-Jul-17	16-Jul-17
West Bound - IEC West Bound & Tsing Fung Street		58d	17-Jun-17	13-Aug-17
Stage 1 - IEC (West Bound)		30d	17-Jun-17	16-Jul-17
A5690	IEC/WB - Cut pipe pile - 1 week	7d	17-Jun-17	23-Jun-17
A5710	IEC/WB - Removal of pedestrian decking	11d	17-Jun-17	27-Jun-17
A3785	IEC/WB - Reconstruct Wing Wall of Abutment M (approx. 6m)	10d	17-Jun-17	26-Jun-17
A5700	IEC/WB - Cut sheetpile - 1 week	7d	24-Jun-17	30-Jun-17
A5720	IEC/WB - Remove temporary utilities support 3 days	3d	28-Jun-17	30-Jun-17
A5730	IEC/WB - Backfill up to Formation under Asphalt (from +2.5mPD to +3.9mPD) 5 days	5d	01-Jul-17	05-Jul-17
A5740	IEC/WB - Subbase Laying 2 days	2d	06-Jul-17	07-Jul-17
A5750	IEC/WB - Asphalt (Road Base, Base Course, Wearing Course) 5 days	5d	08-Jul-17	12-Jul-17
A5760	IEC/WB - Road Marking/Traffic Sign 3 days	3d	13-Jul-17	15-Jul-17
A5840	IEC/WB - Implement TTM	1d	16-Jul-17	16-Jul-17
Stage 2 - Tsing Fung Street		28d	17-Jul-17	13-Aug-17
A5850	Decking /Footing Removal - 2 weeks	14d	17-Jul-17	30-Jul-17
A5880	Light Weight Conc. Ramp Rem. 4 weeks	28d	17-Jul-17	13-Aug-17
A5890	Trench Excavation for Towngas - 4 weeks	28d	17-Jul-17	13-Aug-17
Reinstatement Existing Slopping & Vertical Sea Wall		55d	17-Jun-17	10-Aug-17
Major Reinstatement Works for Seawall Reinstatement		55d	17-Jun-17	10-Aug-17
Stage 1 - Removal of Remaining Pipe Pile Wall, Sheet Pile Wall & D-wall		55d	17-Jun-17	10-Aug-17
A7030	Backfill upto +2.5mPD at all bay of SR8	1d	17-Jun-17	17-Jun-17
A7040	Cut pipe pile wall at A1 - A14	14d	18-Jun-17	01-Jul-17
A7050	Under water cut sheet pile wall (36 nos.)	40d	02-Jul-17	10-Aug-17
Works in Victoria Park (KD4, KD5, KD9)		184d	20-Jan-17 A	06-Sep-17
Re-Provisioning Works		184d	20-Jan-17 A	06-Sep-17
Nursery Compound		184d	20-Jan-17 A	06-Sep-17
Submission		124d	20-Jan-17 A	27-Jun-17
ABWF Submission		99d	01-Feb-17 A	02-Jun-17
Material		99d	01-Feb-17 A	12-May-17
VP_NC_1060	ABWF Issue P.O. / Manufacturing / Fabrication	14d	01-Feb-17 A	18-Apr-17 A
VP_NC_1070	ABWF Materail Delivery	21d	19-Apr-17 A	12-May-17
Shop Drawing		14d	03-Feb-17 A	02-Jun-17
VP_NC_1090	ABWF Shop Drawing - ER Review and Approval	14d	03-Feb-17 A	02-Jun-17
E&M Submission		124d	20-Jan-17 A	27-Jun-17
Material		124d	20-Jan-17 A	27-Jun-17



Activity ID	Activity Name	Original Duration	Start	Finish
VP_NC_1140	E&M Issue P.O. / Manufacturing / Fabrication	15d	20-Jan-17 A	22-May-17
VP_NC_1150	E&M Materail Delivery	30d	23-May-17	27-Jun-17
Shop Drawing		30d	20-Apr-17	26-May-17
VP_NC_1170	E&M Shop Drawing - ER Review and Approval	30d	20-Apr-17	26-May-17
Nursery compound		125d	09-Mar-17 A	06-Sep-17
A4410	Concreting of two concrete plinths, 150 thick curbs and 1450H parapet wall above roof slab	7d	09-Mar-17 A	30-Mar-17 A
A4420	ABWF, Plumbering Works, waterproofing and E&M works	60d	05-Apr-17 A	06-Sep-17
KD11, KD12, KD13, KD18 Establishment Works for Landscape Softworks		1087d	23-Feb-15 A	09-Feb-18
KD11 - Section 7A: Portion XIV & XV (Victoria Park Open Space)		885d	23-Feb-15 A	09-Feb-18
EW_1000	Establishment Works - for Landscape Softworks and transplanted trees in Portion XIV & XV	901d	23-Feb-15 A	09-Feb-18
KD12 - Section 7B: Portion VI & VII (Reprov. Bowling Green Area)		177d	03-Dec-15 A	20-Apr-17
EW_1010	Establishment Works - for Landscape Softworks and transplanted trees in Portion VI & VII	177d	03-Dec-15 A	20-Apr-17
KD10 - Preservation and Protection of Trees		1088d	21-Mar-13 A	20-Apr-17
PPT_0000	Preservation and Protection of Existing Trees	1088d	21-Mar-13 A	20-Apr-17
KD15 & KD8 - Mooring Components Upkeep (CBTS and ATS)		980d	15-May-14 A	20-Apr-17
MAR_3020	Mooring Upkeep at Portion X(10) & XVI(16) - CBTS	979d	15-May-14 A	20-Apr-17
Works for Public Works Regional Laboratory (North Lantau) - KD1,KD16,KD17)		1301d	19-Jul-13 A	21-Nov-17
KD17 - Maintenance and Upkeep of New PWRL (Portion XVII)		1301d	19-Jul-13 A	21-Nov-17
PWRL_1050	Maintenance/ Upkeep of New PWRL	1301d	19-Jul-13 A	21-Nov-17