CONTRACT NO: HK/2015/01

WANCHAI DEVELOPMENT PHASE II AND CENTRAL WANCHAI BYPASS SAMPLING, FIELD MEASUREMENT AND TESTING WORKS (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 AND FEP-07/356/2009

MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT

- FEBRUARY 2016 -

CLIENTS:

Civil Engineering and Development Department

and

Highways Department

PREPARED BY:

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CERTIFIED BY:

Raymond Dai
Environmental Team Leader

DATE:

11 March 2016

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Ref.: AACWBIECEM00_0_7855L.16.docx

11 March 2016

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

By Post and Fax (3912 3010)

Attention: Mr. Peter Poon

Dear Mr. Poon,

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

Monthly Environmental Monitoring and Audit Report (February 2016) for EP-356/2009, FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-06/356/2009 and FEP-07/356/2009

Reference is made to the Environmental Team's submission of the captioned Monthly Environmental Monitoring and Audit (EM&A) Report for February 2016 received by e-mail on 11 March 2016 for our review and comment.

Please be informed that we have no adverse comment on the captioned submission. We write to verify the captioned submission in accordance with Condition 3.4 in the captioned Environmental Permits.

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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c.c.

HyD	Attn: Mr. Eddy Wu	by fax: 2714 5289
CEDD	Attn: Mr. Stephen Lo	by fax: 2577 5040
AECOM	Attn: Mr. Frankie Fan	by fax: 2691 2649
AECOM	Attn: Mr. Conrad Ng	by fax: 2691 2649
Lam	Attn: Mr. Raymond Dai	by fax: 2882 3331

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EXECUTIVE SUMMARY

i. This is the Environmental Monitoring and Audit (EM&A) Monthly Report – February 2016 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 findings and information recorded during the period of 27th January 2016 to 26th February 2016. The cut-off date of reporting is at 26th of each reporting month.

Construction Activities for the Reported Period

ii. During this reporting period, the major work activities for Contract no. HK/2009/01 included:
- Nil

iii. During this reporting period, the major work activities for Contract no. HK/2009/02 included:
- Placing berm block in front of seawall
- Inspection / Trimming of rockfill profile in front of seawall

iv. During this reporting period, the major work activities for Contract no. HY/2009/15 included:
- Reinstatement of vertical seawall at TPCWAE

v. During this reporting period, the major work activities for Contract no. HY/2009/19 included:
- Nil

vi. During this reporting period, the major work activities for Contract no. HK/2012/08 included:
- Construction of culvert
- Construction of dry dock
- Trimming of rock bedding
- Installation of seawall blocks

vii. During this reporting period, the major work activities for Contract no. HY/2010/08.
- Diversion pipe maintenance

Noise Monitoring

viii. Two limit level exceedances were recorded at noise monitoring station M1a – Habour Road Sports Center on 16 and 23 February 2016. The exceedances were concluded as non-project related.

ix. Noise monitoring during daytime and restricted hour were conducted at the stations M1a, M2b, M3a, M4b, M5b and M6 on a weekly basis in the reporting month.

Air Quality Monitoring

x. Due to interruption of electricity, the 24hr TSP was rescheduled as follows:
24hr TSP at CMA6a was rescheduled from 27 January 2016 to 28 January 2016.
24hr TSP at CMA1b was rescheduled from 1 and 11 February 2016 to 2 and 12 February 2016 respectively.

xi. No action or limit level exceedance for TSP monitoring was recorded in the reporting month.

xii. 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring were conducted at CMA1b – Oil Street Site Office; CMA2a – Causeway Bay Community Center; CMA3a – CWB PRE Site Office Area; CMA4a – Society for the Prevention of Cruelty to Animals; CMA5b – Pedestrian Plaza; CMA6a – WDII PRE Site Office in the reporting month.

Water Quality Monitoring

xiii. Due to blockage of access to Water Quality Monitoring Station C7 by obstruction of electric circuit box, water quality monitoring at water quality monitoring station C7 was cancelled on 5 February 2016 during flood tide.

xiv. 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.

xv. 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.

xvi. 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.

Table I Summary of Water Quality Monitoring Exceedances in Reporting Month

Contract no.	Water quality monitoring Station	Mid-flood						Mid-ebb					
		DO		Turbidity		SS		DO		Turbidity		SS	
		AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
HK/2009/01 & HK/2009/02	C1	0	0	3	1	0	0	0	0	0	0	0	0
HK/2012/08	WSD19	0	0	7	1	0	0	0	0	2	2	0	0
	P1	0	0	3	1	0	0	0	0	0	0	0	0
	P3	0	0	1	0	0	0	0	0	0	0	0	0
	P4	0	0	0	2	0	0	0	0	0	0	0	0
	P5	0	0	0	2	0	0	0	0	0	0	0	0

Contract no.	Water quality monitoring Station	Mid-flood						Mid-ebb					
		DO		Turbidity		SS		DO		Turbidity		SS	
		AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
HK/2009/02	RW21-P789	0	0	5	2	0	0	0	0	2	0	0	0
HY/2009/15 & HY/2010/08	C7	0	0	0	0	0	0	0	0	1	0	0	0
Total		0	0	19	9	0	0	0	0	5	2	0	0

Remarks: -
- The cessation of seawater intake operation for C6 was confirmed on 17 May 2011 and the water quality 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 March 2014
- WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 September 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.

xvii. There were 24 action level and 11 limit level of turbidity exceedances recorded in the reporting month.

xviii. Investigation found that the turbidity exceedances recorded in this reporting month were not related to Project works. The details of the recorded exceedance can be referred to the ***Section 6.4***.

xix. Enhanced DO monitoring at 4 monitoring stations in Causeway Bay Typhoon Shelter and Ex-Public Cargo Works Area was conducted three days per week during the reporting period. The action and limit level exceedances of water quality monitoring are summarized in ***Table II***.

Table II Summary of Enhanced Dissolved Oxygen Monitoring Exceedances in Reporting Month

Contract no.	Water quality monitoring Station	Mid-flood		Mid-ebb	
		DO		DO	
		AL	LL	AL	LL
HY/2009/15 & HY/2010/08	C6	0	0	0	0
HY/2009/15	Ex-WPCWA SW	0	0	0	2
Total		0	0	0	2

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-PCWAE was temporarily suspended from 31 August 2015 with respect to seawall reinstatement works and formation of active works area, to be resumed upon completion of seawall reinstatement works

xx. There was no action level and 2 limit level exceedances recorded for enhanced dissolved oxygen monitoring in this reporting month. Investigation found that the exceedance was not related to Project works. The details of the recorded exceedances can be referred to the ***Section 6.4***.

Complaints, Notifications of Summons and Successful Prosecutions

xxi. There was no environmental complaint received in this reporting month.

Site Inspections and Audit

xxii. The Environmental Team (ET) conducted weekly site inspections for Contract nos. HK/2009/01, HK/2009/02, HY/2009/15, HY/2009/19, HK/2012/08 and HY/2010/08 under EP no. EP-356/2009 in the reporting month. Major observations and recommendations made during the audit sessions were rectified by the Contractors. No non-conformance was identified during the site inspections.

Future Key Issues

xxiii. In coming reporting month, the principal work activities of individual contracts are anticipated as follows:

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

- Nil

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

- Rock armor installation

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

- Reinstatement of vertical seawall at TPCWAE

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

- Nil

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

- Construction of culvert

- Construction of dry dock
- Trimming of rock bedding
- Installation of seawall blocks

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

- Diversion pipe maintenance

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 and FEP-07/356/2009 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 10.3 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 for Environmental Permit no. EP-356/2009, Further Environmental Permit no. FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-06/356/2009 and FEP-07/356/2009 during the period of 27th January 2016 to 26th February 2016. The cut-off date of reporting is at 26th of each reporting month.

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 ***Status of Regulatory Compliance*** – summarizes the status of valid Environmental Permits / Licenses during the reporting period.

Section 4 ***Monitoring Requirements*** – summarizes all monitoring parameters, monitoring methodology and equipment, monitoring locations, monitoring frequency, criteria and respective event and action plan and monitoring programmes.

Section 5 ***Monitoring Results*** – summarizes the monitoring results obtained in the reporting period.

Section 6 ***Compliance Audit*** – summarizes the auditing of monitoring results, all exceedances environmental parameters.

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 **Environmental Site Audit** – summarizes the findings of weekly site inspections undertaken within the reporting period, with a review of any relevant follow-up actions within the reporting period.

Section 9 ***Complaints, Notification of summons and Prosecution*** – summarizes the cumulative statistics on complaints, notification of summons and prosecution

Section 10 ***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, 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.

2.3.2. The details of individual contracts are summarized in ***Table 2.2***.

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	21 April 2011
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	10 March 2014
HY/2010/08	Central- Wanchai Bypass Tunnel – Tunnel (Slip Road 8)	DP1, DP2, DP3	21 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. Terry Wong	9757 9846	
		Construction Manager	Mr. Wyman Wong	9627 2467	
		Construction Manager	Mr. Terry Tsang	6683 9394	
		Environmental Officer	Ms. Wendy Ng	9803 0057	
		Assistant Environmental Engineer	Miss. Connie Chan	6157 7057	
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	Eric Fong	6191 9337	
		Environmental Manager / Environmental Officer	M.H. Isa	9884 0810	
		Construction Manager (Marine)	Andy Chan	9879 4325	
		Construction Manager (Land)	Bear Ding	6483 6198	
		Operation Manager (Land)	Yung Kwok Wah	9834 1010	
China State-Leader JV	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	

Party	Role	Post	Name	Contact No.	Contact Fax
		Environmental Officer	James Ma	9130 9549	
		Environmental Supervisor	Y. L. Ho	9856 5669	
China State	Contractor under Contract no. HY/2010/08	Project Director	Chris Leung	3467 4299	2566 8061
		Project Manager	Chan Ying Lun	3418 3001	
		Site Agent	Dave Chan	3467 4277	
		Environmental Officer	Gabriel Wong	35576466	
		Environmental Supervisor	Desmond Ho Tsz Ho	3557 6466	
Leighton Joint Venture	Contractor under Contract no. HY/2011/08	Project Manager	Paul Evans	2823 1111	21406799
		Site Agent	Colman Wong	9730 0806	
		Environmental Officer	David Hung	9765 6161	
		Environmental Supervisor	Penny Yiu	2214 7738	
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

2.4.3. For Contract no. HK/2009/01, the principal work activities in this reporting month included:

- Nil

2.4.4. For Contract no. HK/2009/02, the principal work activities in this reporting month included:

- Placing berm block in front of seawall
- Inspection / Trimming of rockfill profile in front of seawall

2.4.5. For Contract no. HY/2009/15, the principal work activities in this reporting month included:

- Reinstatement of vertical seawall at TPCWAE

2.4.6. For Contract no. HY/2009/19, the principal work activity in this reporting month included:

- Nil

2.4.7. For Contract no. HK/2012/08, the principal work activity in this reporting month included:

- Construction of culvert
- Construction of dry dock
- Trimming of rock bedding
- Installation of seawall blocks

2.4.8. For Contract no. HY/2010/08, no principal work activities this reporting month.

- Diversion pipe maintenance

2.4.9. In coming reporting month, the principal work activities of individual contracts are anticipated as follows:

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

- Nil

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

- Rock armor installation

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

- Reinstatement of vertical seawall at TPCWAE

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

- Nil

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

- Construction of culvert
- Construction of dry dock
- Trimming of rock bedding
- Installation of seawall blocks

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

- Diversion pipe maintenance

3 Status of Regulatory Compliance

3.1 Status of Environmental Licensing and Permitting under the Project

3.1.1. A summary of the current status on licences and/or permits on environmental protection pertinent to the Project is shown in ***Table 3.1***.

Table 3.1 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project

Permits and/or Licences	Reference No.	Issued Date	Status
Environmental Permit	EP-356/2009	30 Jul 2009	Valid
Environmental Permit	EP-364/2009	17 Aug 2009	Superseded
Environmental Permit	EP-364/2009/A	4 Aug 2010	Superseded
Environmental Permit	EP-364/2009/B	20 Sep 2012	Superseded
Environmental Permit	EP-364/2009/C	11 Jul 2014	Valid
Environmental Permit	EP-376/2009	13 Nov 2010	Valid
Further Environmental Permit	FEP-01/356/2009	18 Feb 2010	Surrendered
Further Environmental Permit	FEP-02/356/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-03/356/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-04/356/2009	22 Nov 2010	Valid
Further Environmental Permit	FEP-05/356/2009	24 Mar 2011	Surrendered
Further Environmental Permit	FEP-01/364/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-02/364/2009	21 Apr 2010	Valid
Further Environmental Permit	FEP-03/364/2009	12 Jul 2010	Surrendered
Further Environmental Permit	FEP-04/364/2009/A	14 Oct 2010	Surrendered
Further Environmental Permit	FEP-05/364/2009/A	15 Nov 2010	Valid
Further Environmental Permit	FEP-06/364/2009/A	22 Nov 2010	Valid
Further Environmental Permit	FEP-07/364/2009/B	20 Sep 2012	Valid
Further Environmental Permit	FEP-08/364/2009/A	15 Jun 2012	Surrendered
Further Environmental Permit	FEP-06/356/2009	5 Mar 2013	Valid
Further Environmental Permit	FEP-07/356/2009	26 July 2013	Valid
Further Environmental Permit	FEP-09/364/2009/B	5 March 2013	Valid
Further Environmental Permit	FEP-10/364/2009/B	26 July 2013	Valid

Permits and/or Licences	Reference No.	Issued Date	Status
Further Environmental Permit	FEP-11/364/2009/B	2 May 2014	Valid

3.1.2. 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

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

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

3.1.4. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2009/01 under FEP-02/356/2009 are shown in ***Table 3.2*** and ***Table 3.3***.

Table 3.2 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2009/01

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-02/356/2009	24 Mar 2010	N/A	Valid
	FEP-02/364/2009	21 Apr 2010	N/A	Valid
Notification of Works Under APCO	313088	06 Jan 2010	N/A	Valid
Construction Noise Permit (CNP) for non-piling equipment	GW-RS0803-15	28 Jul 2015	21 Aug 2015 to 20 Feb 2016	Superseded by GW-RS0089-16
	GW-RS0804-15	28 Jul 2015	22 Aug 2015 to 21 Feb 2016	Superseded by GW-RS0093-16
	GW-RS0868-15	13 Aug 2015	14 Aug 2015 to 13 Feb 2016	Expired
	GW-RS1025-15	22 Sep 2015	24 Sep 2015 to 23 Mar 2016	Valid
	GW-RS1134-15	23 Oct 2015	08 Nov 2015 to 07 May 2016	Valid
	GW-RS1135-15	23 Oct 2015	26 Nov 2015 to 25 May 2016	Valid
	GW-RS1228-15	13 Nov 2015	16 Nov 2015 to 13 May 2016	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
	GW-RS1309-15	27 Nov 2015	30 Nov 2015 to 26 May 2016	Valid
	GW-RS1338-15	11 Dec 2015	1 Jan 2016 to 30 June 2016	Valid
	GW-RS0041-16	22 Jan 2016	25 Jan 2016 to 23 Jul 2016	Valid
	GW-RS0089-16	05 Feb 2016	20 Feb 2016 to 19 July 2016	Valid
	GW-RS0093-16	05 Feb 2016	22 Feb 2016 to 21 July 2016	Valid
	GW-RS0152-16	18 Feb 2016	25 Feb 2016 to 24 Aug 2016	Valid
Discharge Licence	WT00021138-2015	13 Apr 2015	31 Mar 2020	Valid
	WT00009641-2011	24 Jul 2011	31 Jul 2016	Valid
Billing account under Waste Disposal Ordinance	7010069	21 Jan 2010	N/A	Valid
Registration as a Chemical Waste Producer	WPN5213-134-C3585-01	21 Jan 2010	N/A	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/16-094	08 Oct 2015	13 Oct 2015 to 12 Apr 2016	Valid
Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal)	-	-	-	-

Table 3.3 Summary of submission status under FEP-02/356/2009 Condition

EP Condition	Submission	Date of Submission
Condition 2.6	Management Organization of Main Construction Companies	13 Apr 2010
Condition 2.7	Works Schedule and Location Plan	8 Apr 2010
Condition 2.8	Silt Curtain Deployment Plan (Rev. 5)	24 Aug 2012

EP Condition	Submission	Date of Submission
	Silt Curtain Deployment Plan (Rev. 4)	12 July 2012
	Silt Curtain Deployment Plan (Rev. 3)	27 June 2012
	Silt Curtain Deployment Plan	19 Apr 2010
Condition 2.9	Silt Screen Deployment Plan (Rev. 9)	5 Nov 2015
	Silt Screen Deployment Plan (Rev. 8)	7 Sep 2015
	Silt Screen Deployment Plan (Rev. 7)	21 Nov 2014
	Silt Screen Deployment Plan (Rev. 6)	20 Aug 2014
	Silt Screen Deployment Plan (Rev.5)	24 Jul 2013
	Silt Screen Deployment Plan (Rev.4)	15 Nov 2012
	Silt Screen Deployment Plan	19 Apr 2010
Conditions 2.8 and 2.9	Supplementary Document on Silt Curtain and Silt Screen Deployment Plan	19 Jul 2010
	Report on Field Testing for Silt Curtain	26 Aug 2010
	Report on Field Testing for Silt Curtain (Rev. A)	15 Nov 2010
Condition 2.12(d)	Alternative Proposal on Concurrent Dredging for Sewage Pipeline and Cross Harbour Water Mains	15 Apr 2011
Condition 2.17	Noise Management Plan	23 Apr 2010
Condition 2.18	Landscape Plan (Erection of Decorative Screen Hoarding along Construction Site around Hong Kong Exhibition and Convention Centre)	15 May 2010
	Landscape Plan (Night-time Lighting)	22 Oct 2010
	Landscape Plan (Rev. B)	15 Nov 2010
Condition 1.12	Notification of Commencement Date	20 Jun 2011
Condition 2.6 to 2.8	Management Organization, Works Schedule and Location Plan	18 May 2011
Condition 2.9	Silt Screen Deployment Plan	10 Jun 2011
Condition 2.18	Landscape Plan	31 Oct 2013

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

3.1.5. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2009/02 under FEP-03/356/2009 are shown in ***Table 3.4*** and ***Table 3.5***.

Table 3.4 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2009/02

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-03/356/2009	24 Mar 2010	N/A	Valid
	FEP-01/364/2009	24 Mar 2010	N/A	Valid
Notification of Works Under APCO	313962	2 Feb 2010	N/A	Valid
Construction Noise Permit (CNP) for non-piling equipment	GW-RS1006-15	15 Sep 2015	18 Sep 2015 to 14 Mar2016	Valid
	GW-RS1150-15	26 Oct 2015	28 Oct 2015 to 27 Apr 2016	Valid
	GW-RS1187-15	28 Oct 2015	30 Oct 2015 to 27 Apr 2016	Valid
	GW-RS1413-15	24 Dec 2015	2 Jan 2016 to 1 Jul 2016	Replaced
	GW-RS1474-15	5 Jan 2016	8 Jan 2016 to 5 Apr 2016	Valid
	GW-RS0061-16	26 Jan 2016	29 Jan 2016 to 26 Apr 2016	Valid
	GW-RS0083-16	1 Feb 2016	3 Feb 2016 to 1 Aug 2016	Valid
Discharge Licence	WT00008982-2011	26 Apr 2011	30 April 2016	Valid
	WT00009691-2011	1 Aug 2011	31 July 2016	Valid
	WT00022295-2015	12 Aug 2015	31 July 2020	Valid
Billing Account under Waste Disposal Ordinance (Land)	7010255	10 Feb 2010	N/A	Valid
Billing Account under Waste Disposal Ordinance (Marine)	7011496	6 Oct 2010	N/A	Valid
Registration as Chemical Waste Producer (Wan Chai)	WPN5213-135-C3 593-01	10 Mar 2010	N/A	Valid
Registration as Chemical Waste Producer (TKO 137)	WPN5213-839-C3 593-02	22 Sep 2010	N/A	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/16-146	24 Dec 2015	1 Jan 2016 to 30 Jun 2016	Valid

Table 3.5 Summary of submission status under FEP-03/356/2009 Condition

EP Condition	Submission	Date of Submission
Condition 1.12	Commencement Date of Construction of Marine Works	8 April 2010
Condition 2.6	Management Organization of Main Construction Companies	10 April 2010
Condition 2.7	Works Schedule and Location Plans	8 April 2010
Condition 2.8	Silt Curtain Deployment Plan (Revision A)	20 April 2010
	Silt Curtain Deployment Plan (Revision B)	25 May 2010
	Silt Curtain Deployment Plan (Revision C)	14 Jun 2010
	Silt Curtain Deployment Plan (Revision H)	15 Feb 2011
	Silt Curtain Deployment Plan (Revision I)	17 Nov 2011
	Silt Curtain Deployment Plan (Revision J)	15 Feb 2012
	Silt Curtain Deployment Plan (Revision K)	3 May 2012
	Silt Curtain Deployment Plan (Revision L)	25 Oct 2012
	Silt Curtain Deployment Plan (Revision M)	30 Nov 2012
Condition 2.9	Silt Screen Deployment Plan	21 April 2010
	Supplementary Information for Existing WSD Salt Water Intakes at Quarry Bay and Sai Wan Ho	5 Oct 2010
	Silt Screen Deployment Plan (Revision B)	15 Feb 2012
	Silt Screen Deployment Plan (Revision C)	3 May 2012
	Silt Screen Deployment Plan (Revision D)	10 Dec 2012
Condition 2.17	Noise Management Plan	6 May 2010
Condition 2.18	Landscape Plan (Decorative Screen Hoarding)	11 May 2010
	Landscape Plan (Control of Night Time Lighting)	2 June 2010
	Landscape Plan (Combined Version)	20 July 2011
	Landscape Plan (Combined Version)	5 Aug 2011
-----	Acknowledge of Submission	22 Aug 2011

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

3.1.6. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HY/2009/15 under FEP-04/356/2009 are shown in ***Table 3.6*** and ***Table 3.7***.

Table 3.6 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/15

Permits and/or Licences	**Reference No.**	**Issued Date**	**Valid Period/ Expiry Date**	**Status**
Further Environmental Permit	FEP-04/356/2009	22 Nov 2010	N/A	Valid
Notification of Works Under APCO	321822	24 Sep 2010	N/A	Valid
Construction Noise Permit (CNP) for concreting works at Eastern Breakwater of CBTS	GW-RS0893-15	17 Aug 2015	17 Aug 2015 to 16 Feb 2016	Expired
Construction Noise Permit (CNP) for reclamation and d-wall works at Ex-PCWA	GW-RS1160-15	26 Oct 2015	28 Oct 2015 to 25 Apr 2016	Valid
Registration as a Chemical Waste Producer	WPN5213-147-C1169-35	15 Nov 2010	N/A	Valid
Billing Account under Waste Disposal Ordinance	7011553	30 Sep 2010	27 Sep 2010 to 27 Jan 2016	Valid
Billing Account under Waste Disposal Ordinance (Disposal by Vessel)	7011761	4 Jan 2016	17 Jan 2016 to 16 Apr 2016	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/16-051	3 Aug 2015	5 Aug 2015 to 30 Jan 2016	Valid

Table 3.7 Summary of submission status under FEP-04/356/2009 Condition

FEP Condition	Submission	Date of Submission
Condition 2.6	Management Organization of Main Construction Companies	30 Sep 2010
	Amendment for Management Organization of Main Construction Companies	16 May 2011
Condition 2.7	Works Schedule and Location Plans	27 Oct 2010
	Amendment for Works Schedule and Location Plans	12 Nov 2010
Condition 2.8	Silt Curtain Deployment Plan	30 Nov 2010
	Amendment for Silt Curtain Deployment Plan	24 Feb 2011
	Amendment for Silt Curtain Deployment Plan	11 May 2011
	Amendment for Silt Curtain Deployment Plan	11 Sep 2012
	Amendment for Silt Curtain Deployment Plan	30 Oct 2012

FEP Condition	Submission	Date of Submission
Condition 2.9	Silt Screen Deployment Plan	19 Oct 2010
	Amendment for Silt Screen Deployment Plan	18 Feb 2011
	Amendment for Silt Screen Deployment Plan	15 Jun 2011
Condition 2.18	Proposal for the Removal of Odorous Sediment and Slime	13 Jan 2011
	Amendment for Proposal for the Removal of Odorous Sediment and Slime	8 Mar 2011
	Amendment for Proposal for the Removal of Odorous Sediment and Slime	2 Aug 2011
Condition 2.21	Landscape Plan	18 Feb 2011
Condition 2.23	Noise Management Plan	20 Oct 2010
	Amendment for Noise Management Plan	27 Jan 2011

3.1.7. Implementation status of the recommended mitigation measures during this reporting period is presented in ***Appendix 3.1***.

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

3.1.8. Summary of the current status on licences and/or permits on environmental protection pertinent for contract no. HY/2009/19 is shown in ***Table 3.8***

Table 3.8 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/19

Permit / Licence / Notification / Approval	**Reference No.**	**Issued Date**	**Valid Period / Expiry date**	**Status**
Further Environmental Permit	FEP-07/364/2009/A	20 Sep 2012	Granted	Valid
Notification of Works Under APCO	326160	24 Jan 2011	Notified	Valid
Construction Noise Permit (CNP) (For Portion Vi Marine)	GW-RS0909-15	21 Aug 2015	21 Aug 2015 to 20 Feb 2016	Expired
Discharge License (Sea)	WT00010865-2011	03 Nov 2011	30-Nov-16	Valid
C&D Waste Disposal	7012306	10 Feb 2011	Registered	-
Vessel Disposal	7013285	21 July 2011	Registered	-
Registration as Chemical Waste Producer	5213-151-C3654-01	24 Mar 2011	Registered	-

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

3.1.9. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2012/08 under FEP-06/356/2009 are shown in ***Table 3.9*** and ***Table 3.10***.

Table 3.9 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2012/08

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-06/356/2009	5 Mar 2013	N/A	Valid
Notification of Works Under APCO	355439	4 Feb 2013	N/A	Valid
Registration as a Chemical Waste Producer	5213-134-C3790-01	8 Mar 2013	N/A	Valid
Billing Account under Waste Disposal Ordinance	7016883	18 Feb 2013	18 Jul 2017	Valid
Water Discharge Licence	WT00018223-2014	28 Jan 2014	31 Jan 2019	Superseded by WT00020594-2014
	WT00020594-2014	22 Dec 2014	31 Jan 2019	Valid
Construction Noise Permit	GW-RS0838-15	31 Jul 2015	3 Aug 2015 to 2 Feb 2016	Valid
	GW-RS0835-15	3 Aug 2015	5 Aug 2015 to 2 Feb 2016	Expired
	GW-RS1012-15	22 Sep 2015	27 Sep 2015 to 26 Mar 2016	Valid
	GW-RS0976-15	7 Sep 2015	23 Sep 2015 to 22 Mar 2016	Valid
	PP-RS0024-15	17 Sep 2015	22 Sep 2015 to 21 Mar 2016	Valid
	GW-RS0921-15	26 Aug 2015	9 Sep 2015 to 8 Mar 2016	Valid
	GW-RS0079-16	1 Feb 2016	3 Feb 2016 to 2 Aug 2016	Valid
	GW-RS0064-16	1 Feb 2016	2 Feb 2016 to 1 Aug 2016	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/16-037	30 Jun 2015	2 Jul 2015 to 1 Jan 2016	Valid
Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal)	EP/MD/16-135	27 Nov 2015	2 Dec 2015 to 1 Jan 2016	Expired
	EP/MD/16-156	25 Jan 2016	27 Jan 2016 to 26 Feb 2016	Valid

Table 3.10 Summary of submission status under EP-356/2009 and FEP-06/356/2009 Condition

FEP Condition	Submission	Date of Submission
Condition 2.8	Silt Curtain Deployment Plan (Rev. 3)	Submitted on 25 Nov 2013 was returned to CSLJV by EPD.
Condition 2.9	Silt Screen Deployment Plan (Rev. 2)	Generally in order as commented by EPD on 19 Sep 2013
Condition 2.23	Noise Management Plan (Rev. 2)	Generally in order as commented by EPD on 15 Aug 2013
Condition 2.24	Landscape Plan (Rev. 3)	Generally in order as commented by EPD on 31 Oct 2013

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

3.1.10. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HY/2010/08 under FEP-07/356/2009 are shown in Table ***3.11*** and ***Table 3.12***.

Table 3.11 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2010/08

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-07/356/2009	26 Jul 2013	NA	Valid
	FEP-10/364/2009/B	26 Jul 2013	NA	Valid
Notification of Works Under APCO	357176	2 Apr 2013	NIL	Valid
Registration as a Chemical Waste Producer	WPN5213-147-C11 69-44	27 Mar 2013	NIL	Valid
Billing Account under Waste Disposal Ordinance	7017170	27 Mar 2013	NIL	Valid
Billing Account under Waste Disposal Ordinance (Dumping by Vessel)	7020947	22 Dec 2014	NIL	Valid.
Water Discharge Licence	WT00020753-2015	3 Feb 2015	28 Feb 2017	Valid
Construction Noise Permit	GW-RS1039-15	23 Sep 2015	23 Sep 2015 to 21 Mar 2016	Valid
	GW-RS1137-15	22 Oct 2015	22 Oct 2015 to 20 Apr 2016	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/16-057	10 Aug 2015	12 Aug 2015 to 11 Feb 2016	Expired

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Dumping Permit (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal)	NIL	NIL	NIL	NIL

Table 3.12 Summary of submission status under EP-356/2009 and FEP-07/356/2009 Condition

FEP Condition	Submission	Date of Submission
Condition 2.8	Silt Curtain Deployment Plan (rev03)	24 Dec 2014
Condition 2.9	Silt Screen Deployment Plan (rev02)	18 Feb 2015
Condition 2.23	Noise Management Plan (rev02)	25 Mar 2014
Condition 2.24	Landscape Plant (rev04)	23 Sep 2014

Monitoring Requirements

4.1 Noise Monitoring

NOISE MONITORING STATIONS

4.1.1. The noise monitoring stations for the Project are listed and shown in ***Table 4.1*** and ***Figure 4.1***. ***Appendix 4.1*** shows the established Action/Limit Levels for the monitoring works.

Table 4.1 Noise Monitoring Station

Station	Description
M1a	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

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

4.1.2. 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.

4.1.3. 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.

4.1.4. 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.

MONITORING EQUIPMENT

4.1.5. 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.

4.1.6. 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.

4.2 Air Monitoring

AIR QUALITY MONITORING STATIONS

4.2.1. The air monitoring stations for the Project are listed and shown in ***Table 4.2*** and ***Figure 4.1***. ***Appendix 4.1*** shows the established Action/Limit Levels for the monitoring works.

Table 4.2 Air Monitoring Station

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 March 2011, the monitoring stations CMA3a – Future CWB site office at Wanchai Waterfront Promenade was 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

4.2.2. 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.

4.2.3. 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.

4.2.4. 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

4.2.5. 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.

4.2.6. 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

4.2.7. 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.

4.2.8. 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.

4.2.9. 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.

4.2.10. 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.

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

IMPACT MONITORING FOR ODOUR PATROL

4.2.12. 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

4.2.13. Odour patrol shall be conducted by independent trained personnel / competent persons patrolling and sniffing around the shore as shown in ***Figure 4.1*** to detect any odour at the concerned hours (afternoon is preferred for higher daily temperature).

4.2.14. 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.

4.2.15. 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.

4.2.16. 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 4.1***.

4.2.17. The qualified odour patrol member has individual n-butanol thresholds complied with the requirement of European Standard Method of Air Quality – Determination of Odour Concentration by Dynamic Olfactometry (EN13725) in the range of 20 to 80 ppb.

4.3 Water Quality Monitoring

4.3.1. 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.

4.3.2. 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

4.3.3. Water quality monitoring was undertaken at WSD salt water intakes and cooling water intakes along the seafront of the Victoria Harbour in the reporting month. The proposed water quality monitoring stations of the Project are shown in ***Table 4.3*** and ***Figure 4.1***. ***Appendix 4.1*** shows the established Action/Limit Levels for the monitoring works.

Table 4.3 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
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 / China Resources Building	836268.0	816020.0

Remarks: -
- The cessation of seawater intake operation for C6 was confirmed on 17 May 2011 and the water quality 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 March 2014
- WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 September 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.

WATER QUALITY PARAMETERS

4.3.4. 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.

4.3.5. 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.

SAMPLING PROCEDURES AND MONITORING EQUIPMENT

4.3.6. 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 4.4*** 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 4.4 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

4.3.7. 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

4.3.8. 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).

4.3.9. 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

4.3.10. 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

4.3.11. A 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

4.3.12. 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

4.3.13. 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

4.3.14. 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

4.3.15. 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

4.3.16. 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.

4.3.17. 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.

4.3.18. 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.

4.3.19. Current calibration certificates of equipments are presented in ***Appendix 4.2***.

LABORATORY MEASUREMENT / ANALYSIS

4.3.20. 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

4.3.21. 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.

4.3.22. 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 4.5*** and ***Figure 4.1***.

Table 4.5 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-PCWAE was temporarily suspended from 31 August 2015 with respect to seawall reinstatement works and formation of active works area, to be resumed upon completion of seawall reinstatement works

4.3.23. 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 equal to or less than 3m, only the mid-depth will be monitored).

DAILY SS MONITORING AND 24 HOURS TURBIDITY MONITORING SYSTEM

4.3.24. 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.

4.3.25. 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 sahll 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

4.3.26. 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.

4.3.27. 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

4.3.28. 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).

5. Monitoring Results

5.0.1. 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 4.1***. The monitoring results are presented in according to the Individual Contract(s).

5.0.2. In the reporting month, the concurrent contracts are as follows:

- Contract no. HK/2009/01 – Wan Chai Development Phase II – Central-Wan Chai Bypass at Hong Kong Convention and Exhibition Centre; and
- Contract no. HK/2009/02 Wan Chai Development Phase II – Central-Wan Chai Bypass at Wan Chai East
- Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)
- Contract no. HY/2009/19- Central- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link
- Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West
- Contract no. HY/2010/08 – Central- Wanchai Bypass Tunnel (Slip Road 8 Section)

5.0.3. The environment monitoring schedules for reporting month and coming month are presented in ***Appendix 5.1***.

5.1 Noise Monitoring Results

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

5.1.1. The proposed division of noise monitoring stations are summarized in ***Table 5.1*** below.

Table 5.1 Noise Monitoring Station for Contract nos. HK/2009/01 and HK/2009/02

Station	Description
M1a	Harbour Road Sports Centre

5.1.2. Two limit level exceedances were recorded at M1a- Harbour Road Sports Centre on 16 and 23 February 2016 in this reporting month.

5.1.3. Piling works and operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Habour Road Sports Centre directly opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring on 16 and 23 February 2016. As such, the exceedance was considered as non-Project related.

5.1.4. 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 5.2.***

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

5.1.5. The noise monitoring for HY/2009/15 was commenced on 10 November 2010. The proposed division of noise monitoring stations are summarized in ***Table 5.2*** below.

Table 5.2 Noise Monitoring Station for Contract no. HY/2009/15

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

5.1.6. No action or limit level exceedance was recorded in this reporting month.

5.1.7. 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 5.2.**

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

5.1.8. The proposed division of noise monitoring stations are summarized in ***Table 5.3*** below.

Table 5.3 Noise Monitoring Station for Contract no. HY/2009/19

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

5.1.9. No action of limit level exceedance was recorded in this reporting month.

5.1.10. 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 5.2.***

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

5.1.11. The proposed division of noise monitoring stations are summarized in **Table 5.4** below.

Table 5.4 Noise Monitoring Station for Contract no. HY/2010/08

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

5.1.12. No action or limit level exceedance was recorded in this reporting month.

5.1.13. 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 5.2.***

5.2 Air Monitoring Results

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

5.2.1 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 divisions of air monitoring stations are summarized in ***Table 5.5*** below.

Table 5.5 Air Monitoring Stations for Contract no. HK/2009/01

Station	Description
CMA5b	Pedestrian Plaza
CMA6a	WDII PRE Site Office

5.2.2 No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in ***Appendix 5.3***.

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

5.2.3 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 are summarized in ***Table 5.6*** below.

Table 5.6 Air Monitoring Station for Contract no. HK/2009/02

Station	Description
CMA4a	Society for the Prevention of Cruelty to Animals

5.2.4 No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in ***Appendix 5.3***.

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

5.2.5 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 5.7*** below.

Table 5.7 Air Monitoring Station for Contract no. HY/2009/15

Station	Description
CMA3a	CWB PRE Site Office

5.2.6 No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in ***Appendix 5.3***.

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

5.2.7 The proposed division of air monitoring stations are summarized in ***Table 5.8*** below.

Table 5.8 Air Monitoring Stations for Contract no. HY/2009/19

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

5.2.8 No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in ***Appendix 5.3***.

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

5.2.9 The proposed division of air monitoring stations are summarized in ***Table 5.9*** below.

Table 5.9 Air Monitoring Stations for Contract no. HK/2012/08

Station	Description
CMA5b	Pedestrian Plaza

5.2.10 No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in ***Appendix 5.3***.

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

The proposed division of air monitoring stations are summarized in ***Table 5.10*** below.

Table 5.10 Air Monitoring Stations for Contract no. HY/2010/08

Station	Description
CMA3a	CWB PRE Site Office

5.2.11 No exceedance was recorded in the reporting month. Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in ***Appendix 5.3***.

5.3 Water quality monitoring Results

5.3.1. 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.

5.3.2. 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.

5.3.3. 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.

Table 5.11 Water quality Monitoring Stations for contracts with respect to remaining DP3 work areas after the completion of DP5 & DP6 in 2012 and intake diversion in 2013

Contract No.	Remaining DP3 and work area(s)	Relevant Water quality monitoring Stations,	Division of WQM w.r.t tentative works commenced / to be commenced
HK/2009/01	WCR3	C1[1]	Apr 2013
HK/2009/02	WCR3, WCR4, TWCR4	RW21-P789[2], C1[1]	Apr 2013
HK/2012/08	HKCEC2W, HKCEC2E	WSD19, P1[3], P3[3], P4[3], P5[3]	Aug 2013
HY/2009/15	TCBR2, TCBR3, TCBR1W, TPCWAE, TPCWAW	C6[4], C7, Ex-WPCWA SW, Ex-WPCWA SE (plus enhanced DO monitoring)	Nov 2010
HY/2010/08	TCBR3, TCBR4	C6[4], C7 (plus enhanced DO monitoring)	Mar 2014

Remarks:

1. 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.
2. 4 intakes (re-provisioned Wanchai WSD intake, Great Eagle Centre, China Resources Centre & Sun Hung Kai Centre constructed adjacent to each other) taken as a single group for silt screen protection and monitoring. Re-provisioned intake reference: P1: HKCEC Phase 1; P3: APA, P4: Shui On; P5: Government Buildings (Wanchai Tower / Revenue Tower / Immigration Tower)
3. The water quality monitoring stations for WSD19, P1, P3, P4, P5 shall be associated with Contract No. HK/2009/01 prior to their transition to Contract HK/2012/08.
4. Enhanced DO Monitoring at C6 since the intake abandon in May 2011.

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

5.3.4 . Water quality monitoring for Contract no. HK/2009/01 was commenced on 23 July 2010. The proposed division of water quality monitoring stations are summarized in ***Table 5.12*** below.

Table 5.12 Water quality monitoring Stations for Contract no. HK/2009/01

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

5.3.5 . There were 3 action level and 1 limit level turbidity exceedances recorded at C1 on 29 January 2016, 1, 3 and 11 February 2016 in the reporting month.

5.3.6 After checking with the contractor, no marine construction activity was conducted on 29 January 2016, 1, 3 and 11 February 2016. In view of no marine activity conducted, it was considered that the exceedances were not project related.

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

5.3.7 Water quality monitoring for Contract no. HK/2009/02 was commenced on 8 July 2010. The proposed division of water quality monitoring stations are summarized in ***Table 5.13*** below.

Table 5.13 Water quality 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 / WSD Salt Water Intake			
RW21-P789	Great Eagle Centre/ Sun Hung Kai Centre/WSD Wanchai salt water intake / China Resources Building	836268.0	816020.0

5.3.8 There were 7 action level and 2 limit level turbidity exceedances recorded at RW21-P789 on 27 and 29 January 2016, 1, 3, 5, 11 and 13 February 2016 in the reporting month.

5.3.9 After checking with the contractor, despite placing berm block was conducted on 1 February 2016, contractor mitigation measure including the use of silt curtain was in place. The installed silt screen was generally in order. In view of the above, it was considered that the exceedance was not project related.

5.3.10 No marine construction activity was conducted on 27 and 29 January 2016, 1, 5, 11 and 13 February 2016. The installed silt screen was generally in order. In view of no marine activity conducted, it was considered that the exceedances were not project related.

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

5.3.11 Water quality monitoring for Contract no. HK/2012/08 was commenced on 5 March 2013. The proposed division of water quality monitoring stations are summarized in ***Table 5.14*** below.

Table 5.14 Water quality 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
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

5.3.12 There were 9 action level and 3 limit level turbidity exceedances recorded at WSD19 on 27 and 29 January 2016, 1, 3, 5, 11, 13, 15 and 24 February 2016 in the reporting month.

5.3.13 After checking with contractor, despite installation of seawall blocks was conducted near Zone D on 27 and 29 January 2016, 3, 13, and 15 February 2016, contractor mitigation measures including the use of localized silt curtain was in place. In view of the above, it was considered that the exceedances were not project related.

5.3.14 Despite trimming of grade 400 rock mound was conducted near Zone D on 1 and 24 February 2016, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above, it was considered that the exceedances were not project related.

5.3.15 Despite placing of levelling stones was conducted near Zone D on 5 February 2016, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

5.3.16 No marine activity was conducted on 11 February 2016. In view of no marine activity conducted, it was considered that the exceedances were not project related.

5.3.17 There were 3 action level and 1 limit level turbidity exceedances recorded at P1 on 27 and 29 January 2016, 1 and 5 February 2016 in the reporting month.

5.3.18 After checking with contractor, despite installation of seawall blocks was conducted near Zone D on 27 and 29 January 2016, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P1 monitoring station during monitoring period. In view of the above, it was considered that the exceedances were not project related.

5.3.19 Despite trimming of grade 400 rock mound was conducted near Zone D on 1 February 2016, contractor mitigation measures including the use of localized silt curtain was generally in place. The construction area was located at downstream of P1 monitoring station during monitoring period. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedances were not project related.

5.3.20 Despite placing of levelling stones was conducted near Zone D on 5 February 2016, contractor mitigation measures including the use of localized silt curtain was generally in place. The construction area was located at downstream of P1 monitoring station during monitoring period. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

5.3.21 There was 1 action level turbidity exceedance recorded at P3 on 29 January 2016 in the reporting month.

5.3.22 Despite installation of seawall blocks was conducted near Zone D on 29 January 2016, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P3 monitoring station. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

5.3.23 There were 2 limit level turbidity exceedances recorded at P4 on 27 and 29 January 2016 in the reporting month.

5.3.24 After checking with contractor, despite installation of seawall blocks was conducted near Zone D on 27 and 29 January 2016, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P4 monitoring station during monitoring period. In view of the above, it was considered that the exceedances were not project related.

5.3.25 There were 2 limit level turbidity exceedances recorded at P5 on 27 and 29 January 2016 in the reporting month.

5.3.26 After checking with contractor, despite installation of seawall blocks was conducted near Zone D on 27 and 29 January 2016, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P5 monitoring station during monitoring period. In view of the above, it was considered that the exceedances were not project related.

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

5.3.27 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 quality monitoring stations are summarized in **Table 5.15** and **Table 5.16** below.

Table 5.15 Water quality 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 quality monitoring at C6 was then terminated since 17 May 2011.

Table 5.16 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

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-PCWAE was temporarily suspended from 31 August 2015 with respect to seawall reinstatement works and formation of active works area, to be resumed upon completion of seawall reinstatement works

5.3.28 There were 2 limit level DO exceedances recorded at Ex-WPCWA SW on 11 and 24 February 2016 in the reporting month.

5.3.29 After checking with contractor, no marine activity was conducted at TPCWAE on 11 and 24 February 2016, while upstream discharge from nearby culvert was noted. In view of no marine activity was conducted and no exceedance was recorded on the subsequent monitoring, the exceedances were considered not related to Project works.

5.3.30 There was 1 action level turbidity exceedance recorded at C7 on 1 February 2016 in the reporting month.

5.3.31 After checking with contractor, no marine construction activity was conducted at Causeway Bay Typhoon Shelter on 1 February 2016. In view of no marine construction activities was conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

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

5.3.32 The proposed division of water quality monitoring stations are summarized in ***Table 5.17*** and **Table 5.18** below:

Table 5.17 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 5.18 Enhance Dissolved Oxygen Monitoring Stations for Contract no. HY/2010/08

Station Ref.	Location
C6	Excelsior Hotel

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.

5.3.33 There was 1 action level turbidity exceedance recorded at C7 on 1 February 2016 in the reporting month.

5.3.34 After checking with contractor, no marine construction activity was conducted on 1 February 2016, and the installed silt screen was in place. In view of no marine construction activities was conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

5.3.35 Water quality monitoring results measured in this reporting period are reviewed and summarized. Details of water quality monitoring results and graphical presentation can be referred in **Appendix 5.4**.

5.4 Waste Monitoring Results

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

5.4.1. No inert C&D waste and non- inert C&D waste disposed in this reporting month. Details of the waste flow table are summarized in ***Table 5.19.***

Table 5.19 Details of Waste Disposal for Contract no. HK/2009/01

Waste Type	Quantity this month	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

5.4.2. There were no marine sediment Type 1- Open Sea Disposal and no marine sediments Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting month.

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

5.4.3. No inert C&D waste and Non-inert C&D waste disposed of in this reporting month. Details of the waste flow table are summarized in ***Table 5.20.***

Table 5.20 Details of Waste Disposal for Contract no. HK/2009/02

Waste Type	Quantity this month	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

5.4.4. There were no marine sediment Type 1 – Open Sea Disposal and no Type 1 Open Sea Disposal (Dedicate Sties) & Type 2 – Confined Marine Disposal disposed in this reporting month.

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

5.4.5. No Inert C&D waste and no non- inert C&D waste disposed of in this reporting month. Details of the waste flow table are summarized in ***Table 5.21***

Table 5.21 Details of Waste Disposal for Contract no. HY/2009/15

Waste Type	Quantity this month	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	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

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds	Remarks
Chemical waste disposed, kg	NIL	8,200	N/A	NIL
Marine Sediment (Type 1 – Open Sea Disposal), m^3	NIL (Bulk Volume)	156909 (Bulk Volume)	Cheung Chau South	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 (Bulk Volume)	322796 (Bulk Volume)	East of Sha Chau / South of the Brothers	Dredging from TCBR1E / TCBR1W / TCBR2/ TCBR3 / TCBR4 / Maintenance dredging
Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers) m^3	NIL (Bulk Volume)	12640 (Bulk Volume)	East of Sha Chau / South of the Brothers	Dredging from TCBR1W / Maintenance dredging
Marine Sediment (Type 2 – Confined Marine Disposal), m^3	NIL	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

5.4.6. There were no Type 1 Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal disposed, and no Type 1 Open Sea Disposal disposed in this reporting month.

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

5.4.7. No inert C&D waste and non-inert C&D waste disposed in this reporting month. Details of the waste flow table are summarized in ***Table 5.22.***

Table 5.22 Details of Waste Disposal for Contract no. HY/2009/19

Waste Type	Quantity this month	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 disposed, m^3	NIL	1068.6	N/A
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	

5.4.8. There was no marine sediment Type1- Open Sea Disposal and there was no Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal generated were disposed in this reporting month.

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

5.4.9. There was no Inert C&D waste and no non-inert C&D waste disposed in this reporting month. Details of the waste flow table are summarized in ***Table 5.23.***

Table 5.23 Details of Waste Disposal for Contract no. HK/2012/08

Waste Type	Quantity this month	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	NIL	N/A
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

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m3	NIL (Bulk volume)	108485 (Bulk volume)	South of The Brothers (from 27 Aug 2013 onwards)

5.4.10. There were no Marine Sediment Type 1 – Open Sea Disposal and no marine sediment Type 1 – Open Sea Disposal (Delicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting month.

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

5.4.11. No Inert C&D waste and no non-inert C&D waste disposed in this reporting month. Details of the waste flow table are summarized in ***Table 5.24***

Table 5.24 Details of Waste Disposal for Contract no. HY/2010/08

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m^3	NIL	267660.2	N/A
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	55290	South Cheung Chau / Brothers Island *
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal)	NIL	27760	Brothers Island
Marine Sediment (Type 3 – Special Treatment)	NIL	7780	Brothers Island

Remarks: Under the condition of EP/MD/15-169, dredged sediment required to dispose at South of the Brothers since 9 Feb 2015.

5.4.12. There was no Type 1 – Open Sea Disposal, Type 3 – Special Treatment and Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting month.

6. Compliance Audit

6.0.1. The Event Action Plan for construction noise, air quality and water quality are presented in ***Appendix 6.1***.

6.1 Noise Monitoring

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

6.1.1 Two limit level exceedances were recorded at M1a- Harbour Road Sports Centre on 16 and 23 February 2016 in this reporting month.

6.1.2 Piling works and operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Habour Road Sports Centre directly opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring on 16 and 23 February 2016. As such, the exceedance was considered as non-Project related.

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

6.1.3 Two limit level exceedances were recorded at M1a- Harbour Road Sports Centre on 12 and 19 January 2016 in this reporting month.

6.1.4 Piling works and operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Habor Road Sports Centre directly opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring on 16 and 23 February 2016. As such, the exceedance was considered as non-Project related.

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

6.1.5 No exceedance was recorded in the reporting month.

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

6.1.6. No exceedance was recorded in the reporting month.

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

6.1.7. No exceedance was recorded in the reporting month.

6.2 Air Monitoring

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

6.2.1 No exceedance was recorded in the reporting month.

Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East (CWB Tunnel)

6.2.2 No exceedance was recorded in the reporting month.

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

6.2.3 No exceedance was recorded in the reporting month.

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

6.3.4. No exceedance was recorded in the reporting month.

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

6.3.5. No exceedance was recorded in the reporting month.

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

6.3.6. No exceedance was recorded in the reporting month.

6.3 Water Quality Monitoring

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

6.3.1 There were 3 action level and 1 limit level turbidity exceedances recorded at C1 on 29 January 2016, 1, 3 and 11 February 2016 in the reporting month.

6.3.2 After checking with the contractor, no marine construction activity was conducted on 29 January 2016, 1, 3 and 11 February 2016. In view of no marine activity conducted, it was considered that the exceedances were not project related.

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

6.3.3 There were 7 action level and 2 limit level turbidity exceedances recorded at RW21-P789 on 27 and 29 January 2016, 1, 3, 5, 11 and 13 February 2016 in the reporting month.

6.3.4 After checking with the contractor, despite placing berm block was conducted on 1 February 2016, contractor mitigation measure including the use of silt curtain was in place. The installed silt screen was generally in order. In view of the above, it was considered that the exceedance was not project related.

6.3.5 No marine construction activity was conducted on 27 and 29 January 2016, 1, 5, 11 and 13 February 2016. The installed silt screen was generally in order. In view of no marine activity conducted, it was considered that the exceedances were not project related.

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

6.3.6 There were 2 limit level DO exceedances recorded at Ex-WPCWA SW on 11 and 24 February 2016 in the reporting month.

6.3.7 After checking with contractor, no marine activity was conducted at TPCWAE on 11 and 24 February 2016, while upstream discharge from nearby culvert was noted. In view of no marine activity was conducted and no exceedance was recorded on the subsequent monitoring, the exceedances were considered not related to Project works.

6.3.8 There was 1 action level turbidity exceedance recorded at C7 on 1 February 2016 in the reporting month.

6.3.9 After checking with contractor, no marine construction activity was conducted at Causeway Bay Typhoon Shelter on 1 February 2016. In view of no marine construction activities was conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

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

6.3.10 No exceedance was recorded in this reporting month.

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

6.3.11 There were 9 action level and 3 limit level turbidity exceedances recorded at WSD19 on 27 and 29 January 2016, 1, 3, 5, 11, 13, 15 and 24 February 2016 in the reporting month.

6.3.12 After checking with contractor, despite installation of seawall blocks was conducted near Zone D on 27 and 29 January 2016, 3, 13, and 15 February 2016, contractor mitigation measures including the use of localized silt curtain was in place. In view of the above, it was considered that the exceedances were not project related.

6.3.13 Despite trimming of grade 400 rock mound was conducted near Zone D on 1 and 24 February 2016, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above, it was considered that the exceedances were not project related.

6.3.14 Despite placing of levelling stones was conducted near Zone D on 5 February 2016, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

6.3.15 No marine activity was conducted on 11 February 2016. In view of no marine activity conducted, it was considered that the exceedances were not project related.

6.3.16 There were 3 action level and 1 limit level turbidity exceedances recorded at P1 on 27 and 29 January 2016, 1 and 5 February 2016 in the reporting month.

6.3.17 After checking with contractor, despite installation of seawall blocks was conducted near Zone D on 27 and 29 January 2016, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P1 monitoring station during monitoring period. In view of the above, it was considered that the exceedances were not project related.

6.3.18 Despite trimming of grade 400 rock mound was conducted near Zone D on 1 February 2016, contractor mitigation measures including the use of localized silt curtain was generally in place.

The construction area was located at downstream of P1 monitoring station during monitoring period. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedances were not project related.

6.3.19 Despite placing of levelling stones was conducted near Zone D on 5 February 2016, contractor mitigation measures including the use of localized silt curtain was generally in place. The construction area was located at downstream of P1 monitoring station during monitoring period. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

6.3.20 There was 1 action level turbidity exceedance recorded at P3 on 29 January 2016 in the reporting month.

6.3.21 Despite installation of seawall blocks was conducted near Zone D on 29 January 2016, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P3 monitoring station. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

6.3.22 There were 2 limit level turbidity exceedances recorded at P4 on 27 and 29 January 2016 in the reporting month.

6.3.23 After checking with contractor, despite installation of seawall blocks was conducted near Zone D on 27 and 29 January 2016, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P4 monitoring station during monitoring period. In view of the above, it was considered that the exceedances were not project related.

6.3.24 There were 2 limit level turbidity exceedances recorded at P5 on 27 and 29 January 2016 in the reporting month.

6.3.25 After checking with contractor, despite installation of seawall blocks was conducted near Zone D on 27 and 29 January 2016, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P5 monitoring station during monitoring period. In view of the above, it was considered that the exceedances were not project related.

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

6.3.26 There was 1 action level turbidity exceedance recorded at C7 on 1 February 2016 in the reporting month.

6.3.27 After checking with contractor, no marine construction activity was conducted on 1 February 2016, and the installed silt screen was in place. In view of no marine construction activities was conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

6.4 Review of the Reasons for and the Implications of Non-compliance

6.4.1 There was no non-compliance from the site audits in the reporting period. The observations and recommendations made in each individual site audit session were presented in Section 8.

6.4.2 No non-compliances from monitoring was recorded in the reporting month.

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

6.5.1 There was no particular action taken since no non-compliance was recorded from the site audit in the reporting period.

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 caisson seawall installation, structural works for tunnel construction, road works and drainage works and P1 landscaping works were performed in February 2016 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 tunnel works, ELS works and road works at Wan Chai East and caisson installation, D-wall construction and ELS works at Wan Chai West. The major construction activities under Central-Wan Chai Bypass and Island Eastern Corridor Link Projects were bridge construction and road works at Central Interchange, Tunnel works at Ex-PCWAW, ELS works and retaining wall construction at Victoria Park; D- wall construction, ELS works and tunnel works at TS3; IEC removal works, piling 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 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. Environmental Site Audit

8.0.1. During this reporting month, weekly environmental site audits were conducted for Contracts no. HK/2009/01, HK/2009/02, HY/2009/15, HY/2009/19, HK/2012/08 and HY/2010/08. No non-conformance was identified during the site audits.

8.0.2. Five site inspections for Contract no. HK/2009/01 were conducted on 27 January 2016, 3, 12, 18 and 24 February 2016 in reporting month. There was no particular findings observed in this reporting month.

8.0.3. Five site inspections for Contract no. HK/2009/02 were carried out on 28 January 2016, 4, 12, 16 and 25 February 2016 in reporting month. Results of these inspections and outcomes are summarized in ***Table 8.2***.

Table 8.2 Summary of Environmental Inspections for Contract no. HK/2009/02

Item	Date	Observations	Action taken by Contractor	Outcome
160128_01	28-Jan-16	Tarpaulin sheet at Portion 2 (near RW21-P789) shall repair and maintain properly.	Derrick barge was driven away at Portion 2 and no loading of material from barge to land was observed. Repaired tarpaulin sheet was placed nearby and ready for use.	Completion as observed on 4 February 2016
160128_02	28-Jan-16	Surface runoff was observed at Portion 3&4, bund shall be provided to avoid surface runoff to the nearby public road and stormwater drain.	Bunds have been provided along the concerned area and no potential surface runoff was observed.	Completion as observed on 4 February 2016
160212_01	12-Feb-16	Floating refuse shall be collected near Portion 2.	Floating refuse was collected near Portion 2.	Completion as observed on 16 February 2016
160216_01	16-Feb-16	Silt screen for RW21-P789 station shall be properly deployed and ensure the silt curtain is fully extended to seabed level.	Silt screen for RW21-P789 station was properly deployed.	Completion as observed on 25 February 2016
160216_02	16-Feb-16	Silt screen for RW21-P789 station shall fully deployed around all intake stations according to the agreed deployment plan.	Silt screen for RW21-P789 station was properly deployed around all intakes stations.	Completion as observed on 25 February 2016
160225_01	25-Feb-16	Drip tray shall be provided for oil container at Portion 3&4	Oil container was removed at Portion 3&4.	Completion as observed on 3 March 2016.
160225_02	25-Feb-16	Muddy dispersion was observed at Portion 3&4, it is to ensure that all discharges are properly treated by water treatment facility as accordance with the wastewater discharge licences.	All discharges are properly diverted to water sediment treatment facilities before discharge.	Completion as observed on 3 March 2016.

8.0.4. Four site inspections for Contract no. HY/2009/15 were carried out on 2, 12, 16 and 23 February 2016 in reporting month. The results of these inspections and outcomes are summarized in ***Table 8.3***.

Table 8.3 Summary of Environmental Inspections for Contract no. HY/2009/15

Item	Date	Observations	Action taken by Contractor	Outcome
160223_1	23-Feb-2016	Embankment shall be provided along the seawall to prevent muddy surface runoff and cause contamination to nearby water (EX-PCWA)	Embankment was provided along the seawall to avoid surface runoff	Completed as observed on 01 Mar 2016

8.0.5. Five site inspections for Contract no. HY/2009/19 were carried out on 21 January 2016, 3, 12, 17 and 24 February 2016 in reporting month. There was no particular findings observed in this reporting month.

8.0.6. Four site inspections for Contract no. HK/2012/08 were carried out on 2, 11, 16 and 23 February 2016 in this reporting period. No particular observation was found in this reporting month.

8.0.7. Five site inspections for Contract no. HY/2010/08 were carried out on 27 January 2016, 3, 12, 19 and 24 February 2016 in this reporting period. The results of these inspections and outcomes are summarized in ***Table 8.6***

Table 8.6 Summary of Environmental Inspections for Contract no. HY/2010/08

Item	Date	Observations	Action taken by Contractor	Outcome
160203_1	3-Feb-16	Drip tray shall be provided to generators (TS3)	Drip tray was provided	Completion as observed on 12 February 2016
160203_2	3-Feb-16	Clean the mud resting on the edge of sewall and provide embankment to avoid potential drop off (TS3)	The mud resting at the edge of seawall was cleared	Completion as observed on 12 February 2016
160203_3	3-Feb-16	Tarpaulin sheet shall be provided to mud/material transportation process to avoid potential drop off (TS3)	Tarpaulin sheet with wooden board was provided at the proper position for excavated material transfer	Completion as observed on 12 February 2016

160212_1	12-Feb-16	Diversion of discharge pipe from tunnel with potential muddy effluent discharge shall be checked and diverted to the wastewater treatment facilities for treatment before discharge (TS3 North)	No further muddy contaminated discharge was observed	Completion as observed on 19 February 2016
160212_2	12-Feb-16	Effluent for the post-treatment tank shall be diverted for re-treatment to avoid turbid discharge (TS3 North)	No further contaminated effluent was observed	Completion as observed on 19 February 2016
160212_3	12-Feb-16	Clean the floating refuses around the silt screen location (TS3 East)	Floating refuses were cleared	Completion as observed on 19 February 2016
160219_1	19-Feb-16	Clear the contaminated surface runoff at public road and reinforce the embankment to prevent further seepage (Victoria Park Road)	The contaminated runoff has been cleared	completion as observed on 24 February 2016
160219_2	19-Feb-16	Clear the leaked oil as chemical waste (TS3)	Leaked oil was cleared as chemical waste	Completion as observed on 24 February 2016
160224_1	24-Feb-16	Strengthen and reprovide the embankment near the boundary of seawall to avoid contaminated runoff (TS3 North)	Reinforced embankment was provided near the boundary of seawall	Completion as observed on 02 March 2016

9. Complaints, Notification of Summons and Prosecution

9.0.1. There was no environmental complaint received in this reporting month.

9.0.2. The details of cumulative complaint log and updated summary of complaints are presented in ***Appendix 9.1***

9.0.3. Cumulative statistic on complaints and successful prosecutions are summarized in ***Table 9.1*** and ***Table 9.2*** respectively.

Table 9.1 Cumulative Statistics on Complaints

Reporting Period	No. of Complaints
Commencement works (Mar 2010) to January 2016	44
February 2016	0
Total	**44**

Table 9.2 Cumulative Statistics on Successful Prosecutions

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

10. Conclusion

10.0.1. 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.

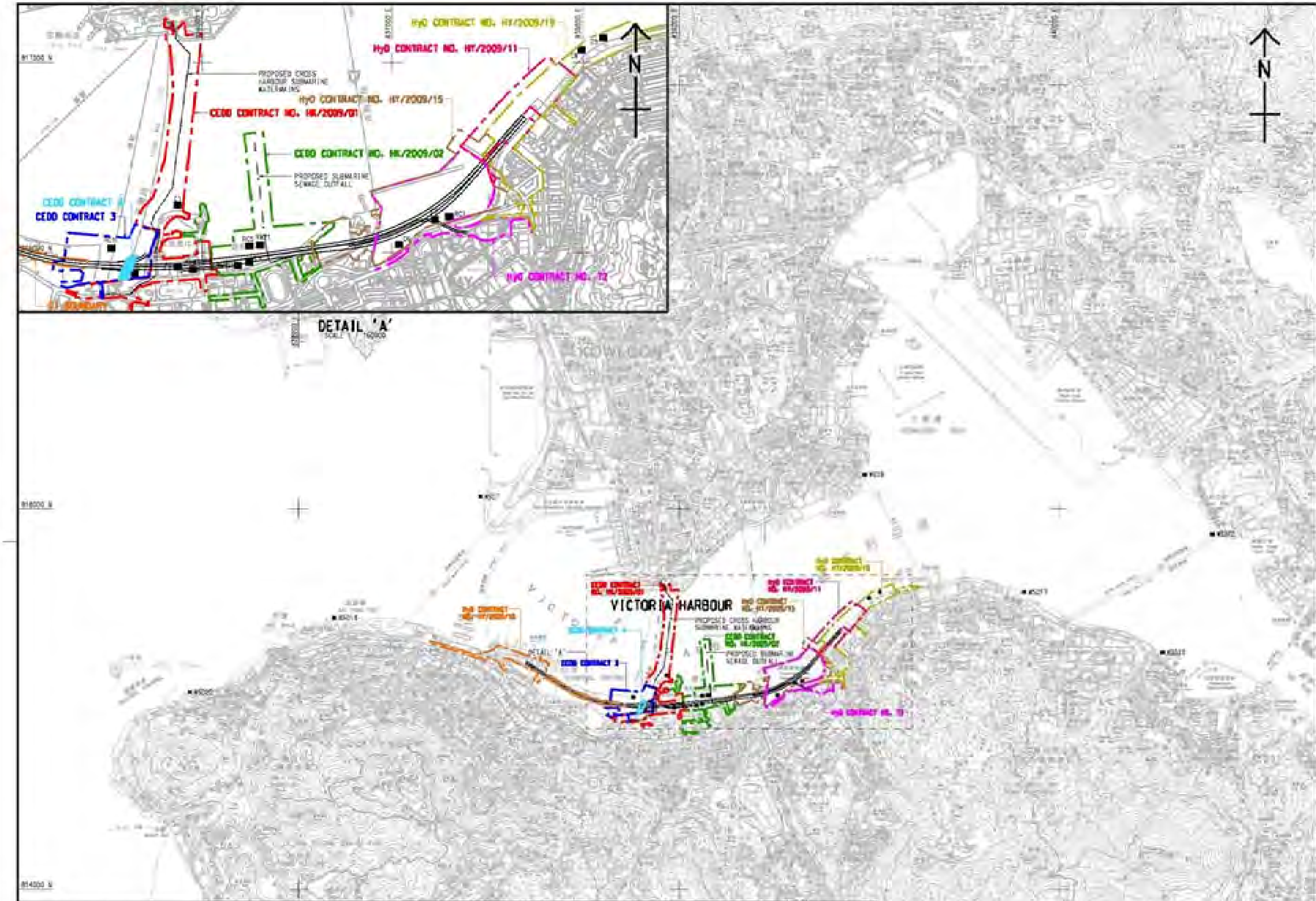
10.0.2. The scheduled construction activities and the recommended mitigation measures for the coming month are listed in ***Table 10.1***.

Table 10.1 Construction Activities and Recommended Mitigation Measures in Coming Reporting Month

Contract No.	Key Construction Works	Recommended Mitigation Measures
HK/2009/01	• Nil	• Nil
HK/2009/02	• Rock armour installation	• Daily visual inspection of silt screen and silt curtain to ensure its operation properly. • Implement silt curtain in accordance with the associated plans submitted to EPD.
HY/2009/15	• Reinstatement of vertical seawall at TPCWAE	• Daily visual inspection of silt screen and silt curtain to ensure its operation properly • Implement silt curtain in accordance with the associated plans submitted to EPD.
HY/2009/19	• Nil	• Nil
HK/2012/08	• Construction of culvert • Construction of dry dock • Trimming of rock bedding • Installation of seawall blocks	• To conform the installation and setting as in the silt screen and silt curtain deployment plan • To space out noisy equipment and position as far as possible from sensitive receiver. • Daily visual inspection of silt screen and silt curtain to ensure its operation properly
HY/2010/08	• Diversion pipe maintenance	• To conform the installation and setting as in the silt screen and silt curtain deployment plan • Daily visual inspection of silt screen and silt curtain to ensure its operation properly

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
[illegible]	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
DP2 IS COVERED BY EP - 376/2009
DP3, DP5 AND DP6 ARE COVERED BY EP - 340/2009

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	DP3	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

土木工程拓展署
Civil Engineering and Development Department

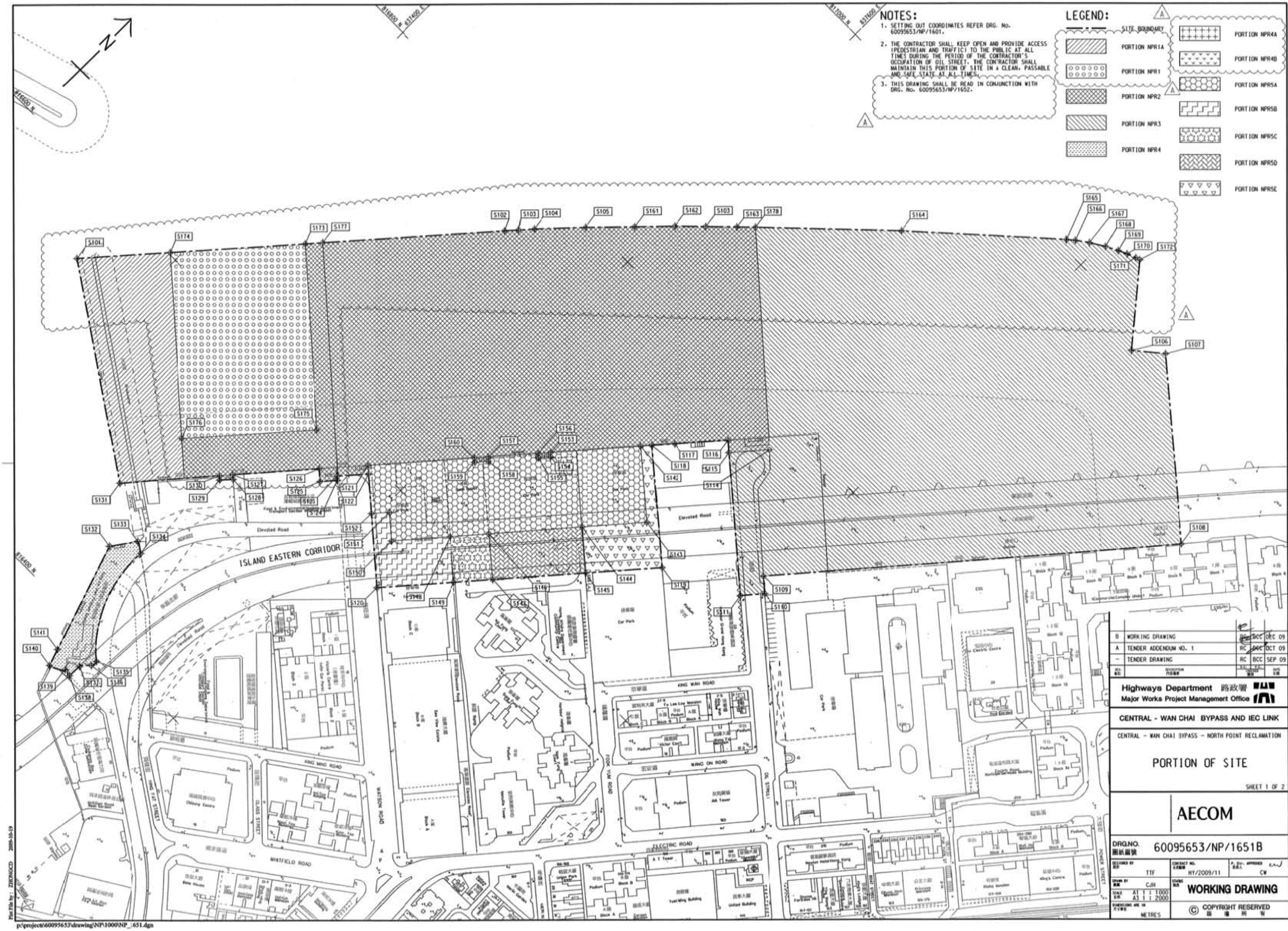
WAN CHAI DEVELOPMENT PHASE II

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. 圖則編號 60041297/C5/SK001



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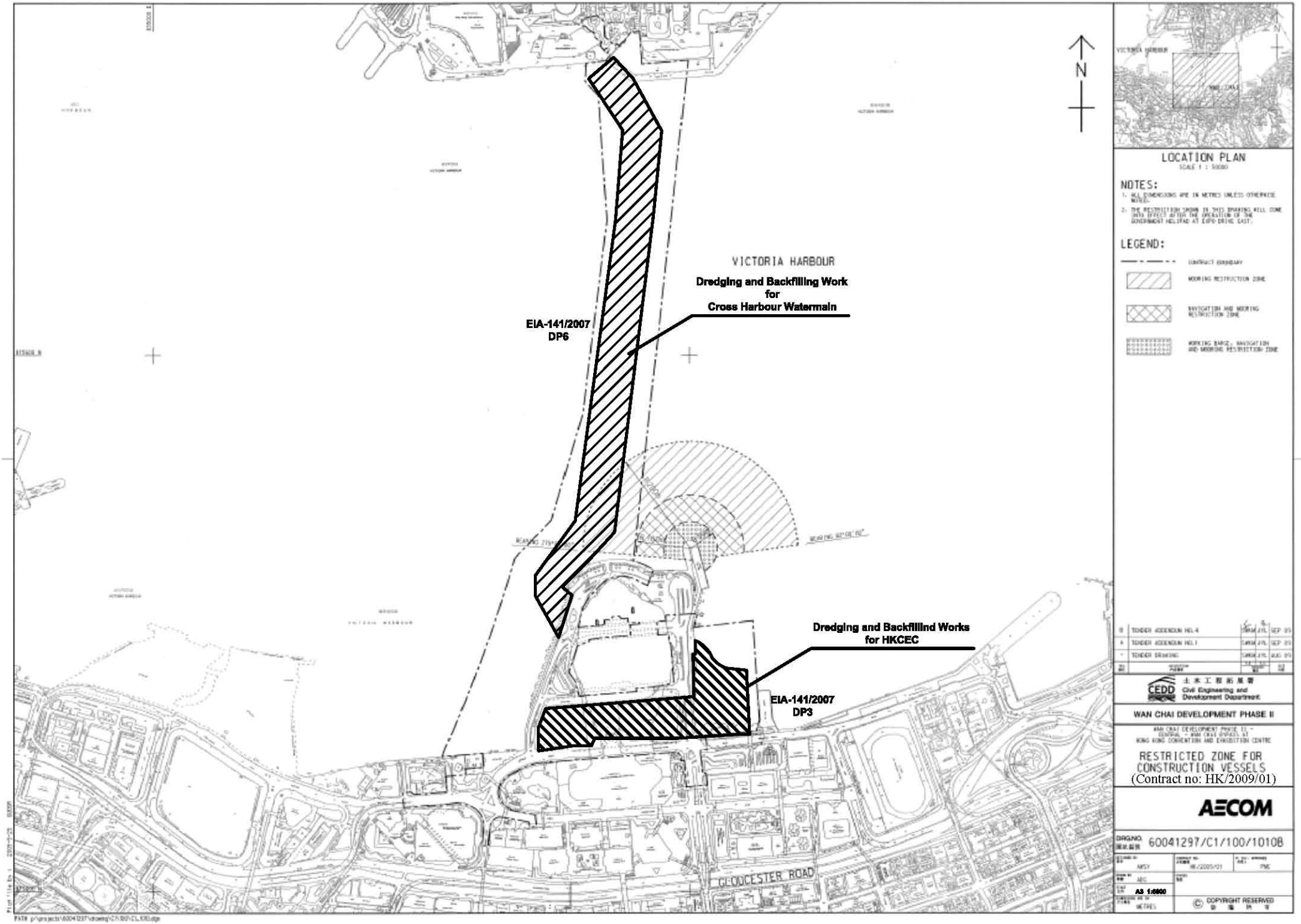
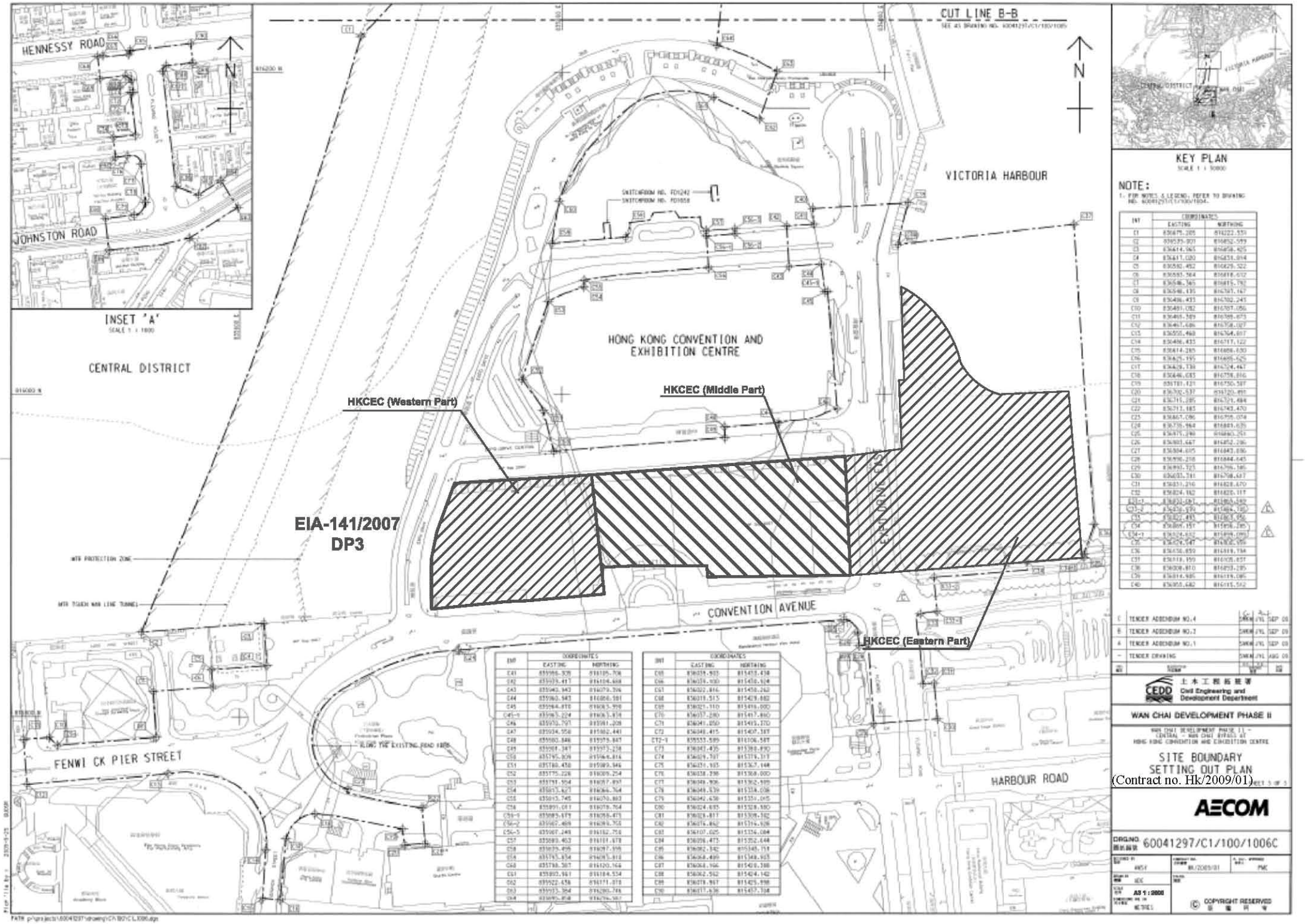
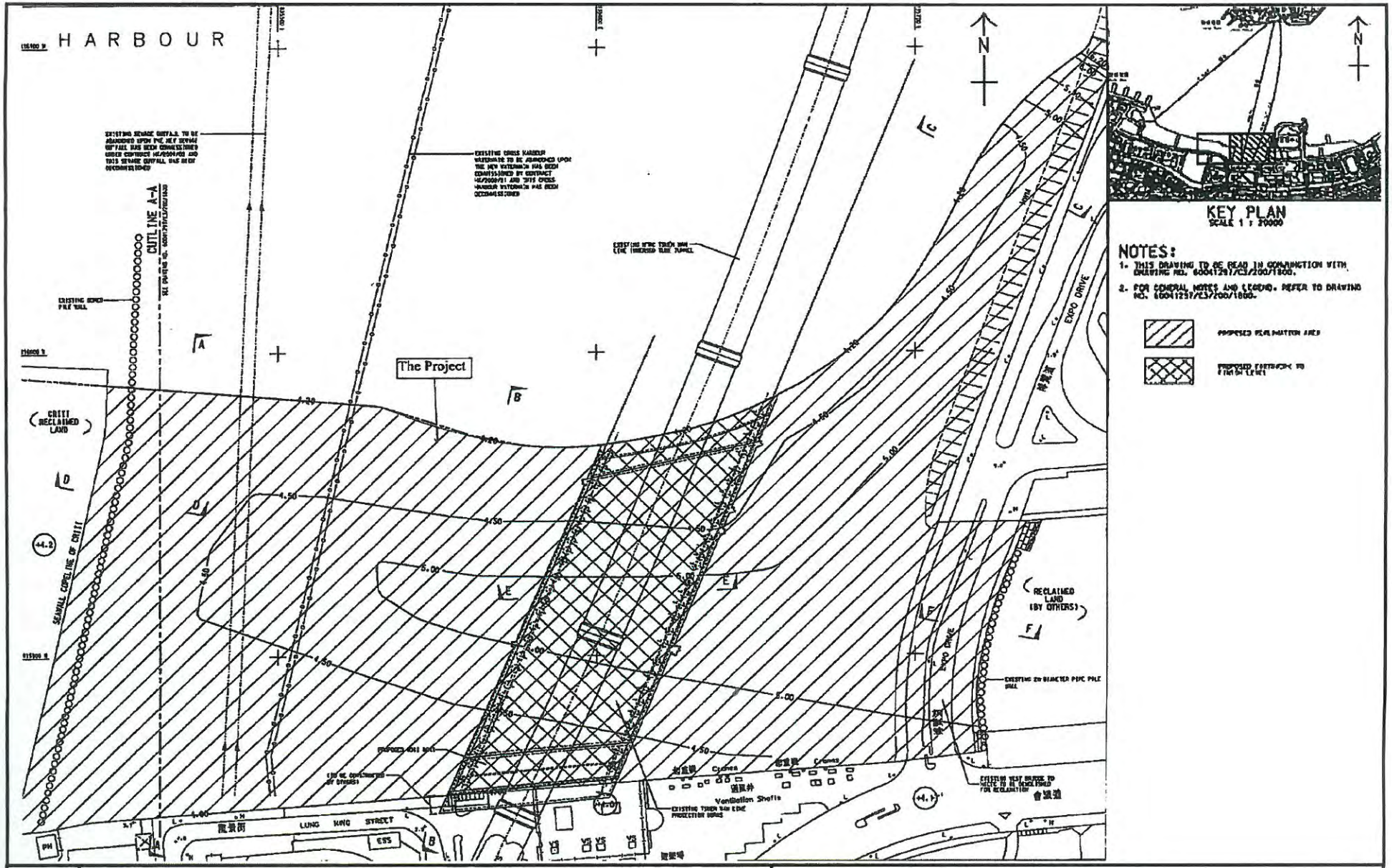

VICTORIA HARBOUR
Dredging and Backfilling Work
for
Cross Harbour Watermain
EIA-141/2007
DP6
Dredging and Backfillind Works
for HKCEC
EIA-141/2007
DP3
GLOUCESTER ROAD
N
LOCATION PLAN
SCALE 1 : 50000
NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. THE RESTRICTION SHOWN IN THIS DRAWING WILL CEASE TO HAVE EFFECT AFTER THE OPERATION OF THE GOVERNMENT HELIPAD AT EASTERN DRIVE EAST.
LEGEND:
CONTRACT BOUNDARY
MOORING RESTRICTION ZONE
NAVIGATION AND MOORING RESTRICTION ZONE
WORKING BARGE, NAVIGATION AND MOORING RESTRICTION ZONE
B TENDER ADDENDUM NO.4 SEP 09
A TENDER ADDENDUM NO.1 SEP 09
- TENDER DRAWING AUG 09
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

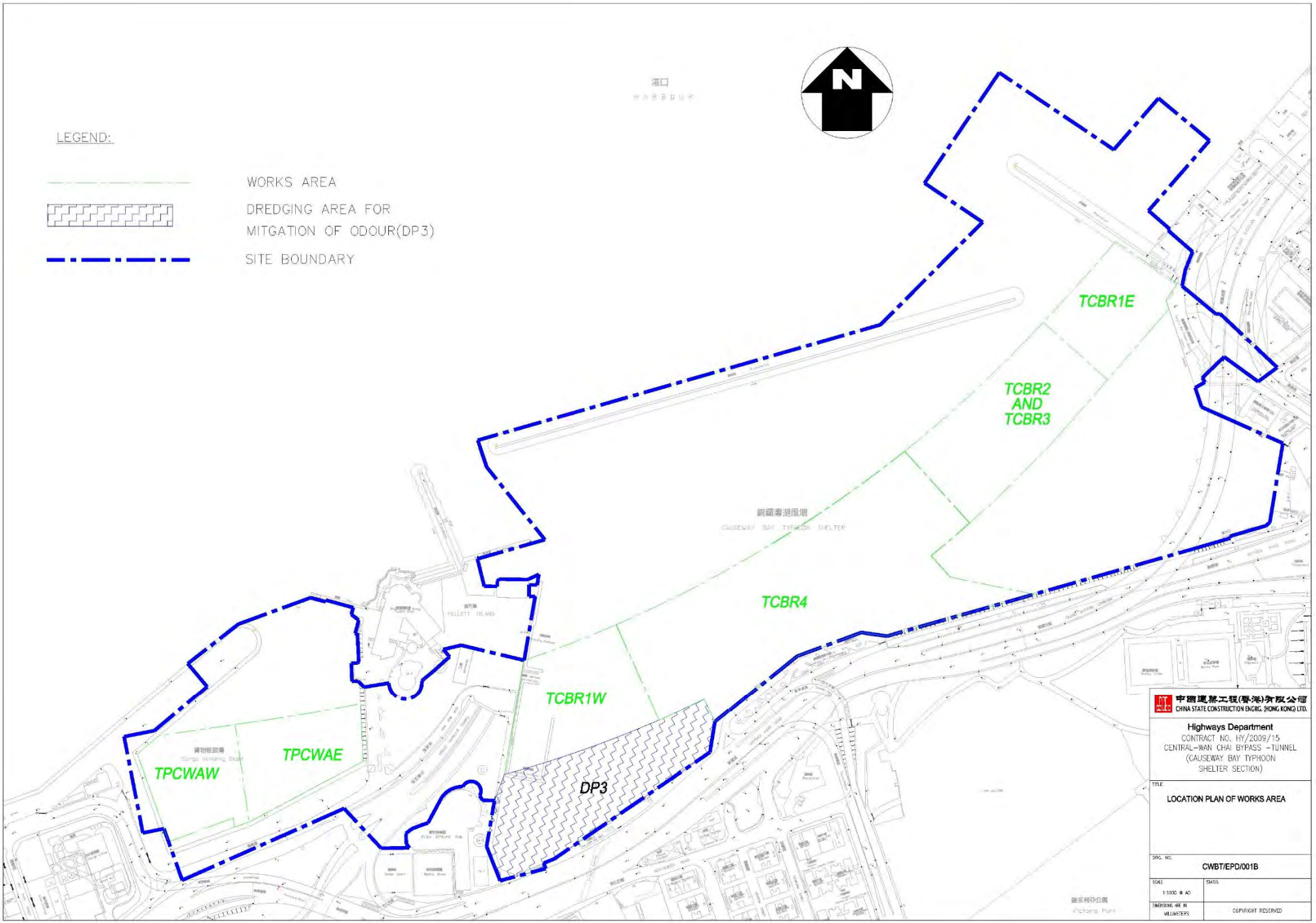

HENNESSY ROAD
JOHNSTON ROAD
INSET 'A'
SCALE 1 : 1000
CENTRAL DISTRICT
CUT LINE B-B
SEE A3 DRAWING NO. 60041297/C1/100/1005
VICTORIA HARBOUR
HONG KONG CONVENTION AND EXHIBITION CENTRE
HKCEC (Western Part)
HKCEC (Middle Part)
HKCEC (Eastern Part)
EIA-141/2007
DP3
MTR PROTECTION ZONE
MTR TSUEN WAN LINE TUNNEL
CONVENTION AVENUE
FENWI CK PIER STREET
HARBOUR ROAD
KEY PLAN
SCALE 1 : 50000
NOTE:
1. FOR NOTES & LEGEND, REFER TO DRAWING NO. 60041297/C1/100/1004.
WAN CHAI DEVELOPMENT PHASE II
WAN CHAI DEVELOPMENT PHASE II - CENTRAL - WAN CHAI BYPASS AT HONG KONG CONVENTION AND EXHIBITION CENTRE
SITE BOUNDARY SETTING OUT PLAN
(Contract no. Hk/2009/01)
Civil Engineering and Development Department
AECOM
DRG.NO. 60041297/C1/100/1006C
AS 1:2000
METRES
© 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-06/356/2009
環境許可證編號 : FEP-06/356/2009

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 145/2013))
(本圖是根據申請新的環境許可證(申請書編號 FEP-145/2013) 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

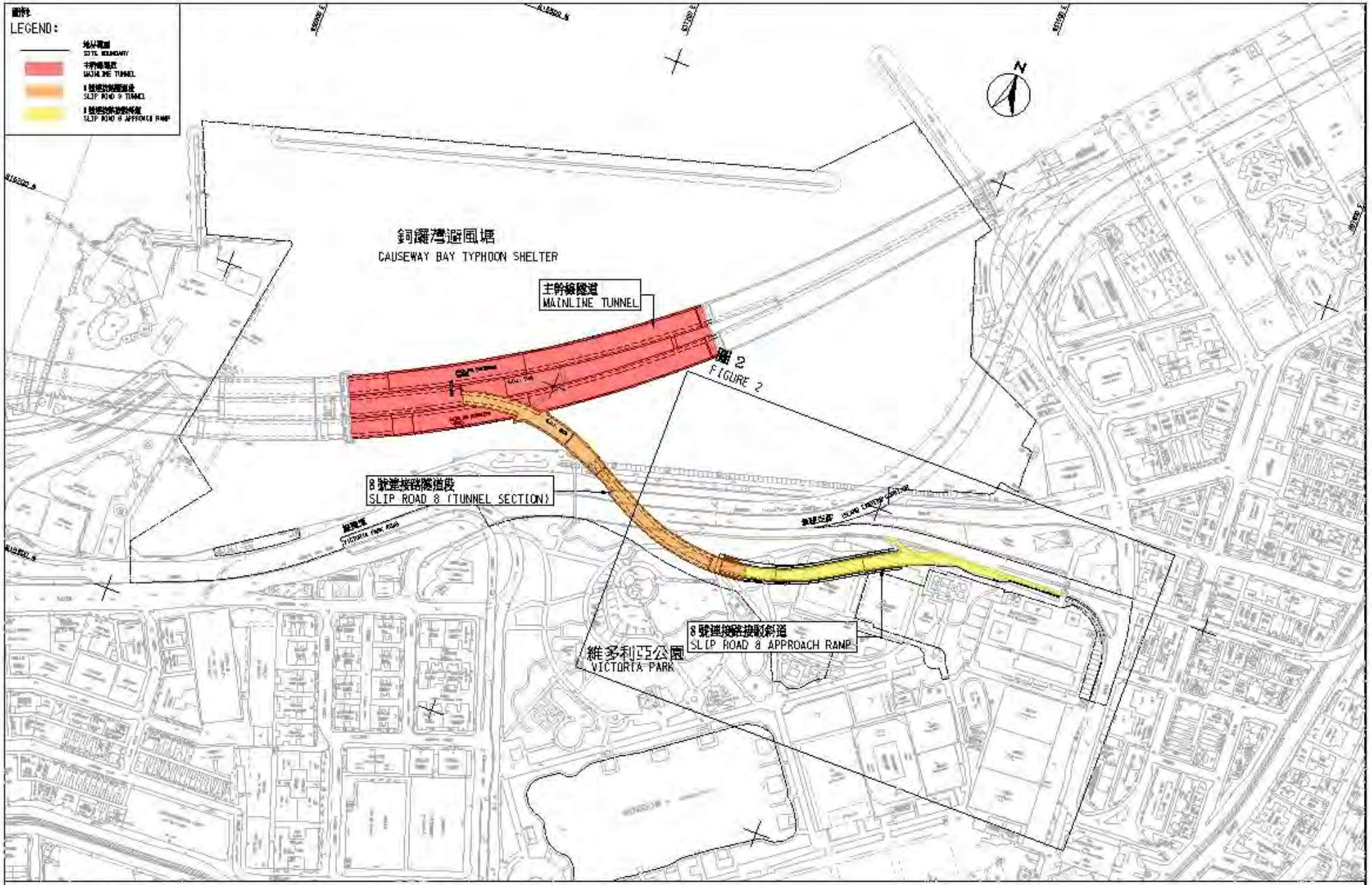
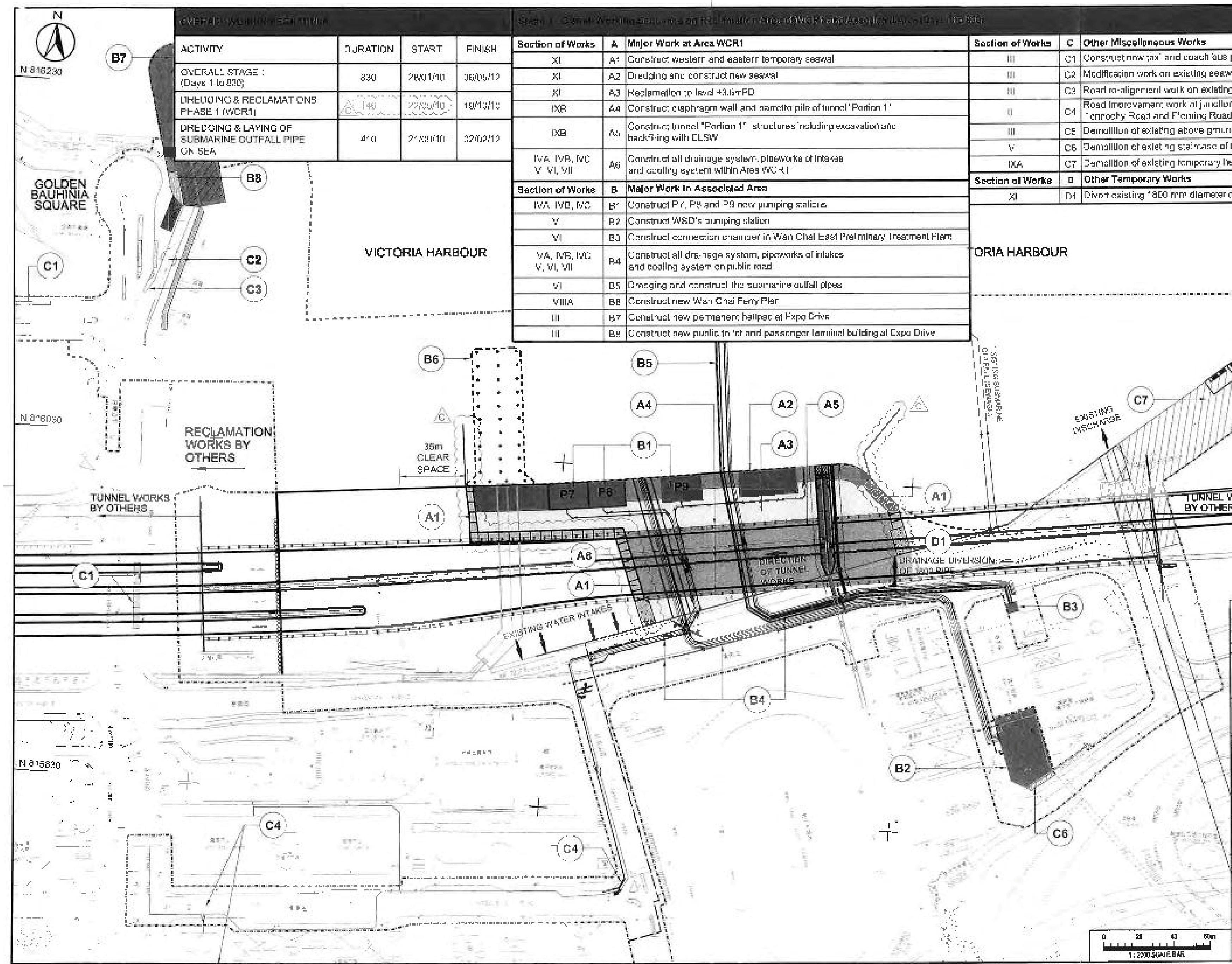


圖1- 合約編號 HY/2010/08中環灣仔繞道-8號連接路段隧道

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	22/03/10	19/10/12
DREDGING & LAYING OF SUBMARINE OUTFALL PIPE ON SEA	410	21/03/10	22/02/12

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 toilet 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

CLIENT

ENGINEER'S REPRESENTATIVE

CONTRACTOR

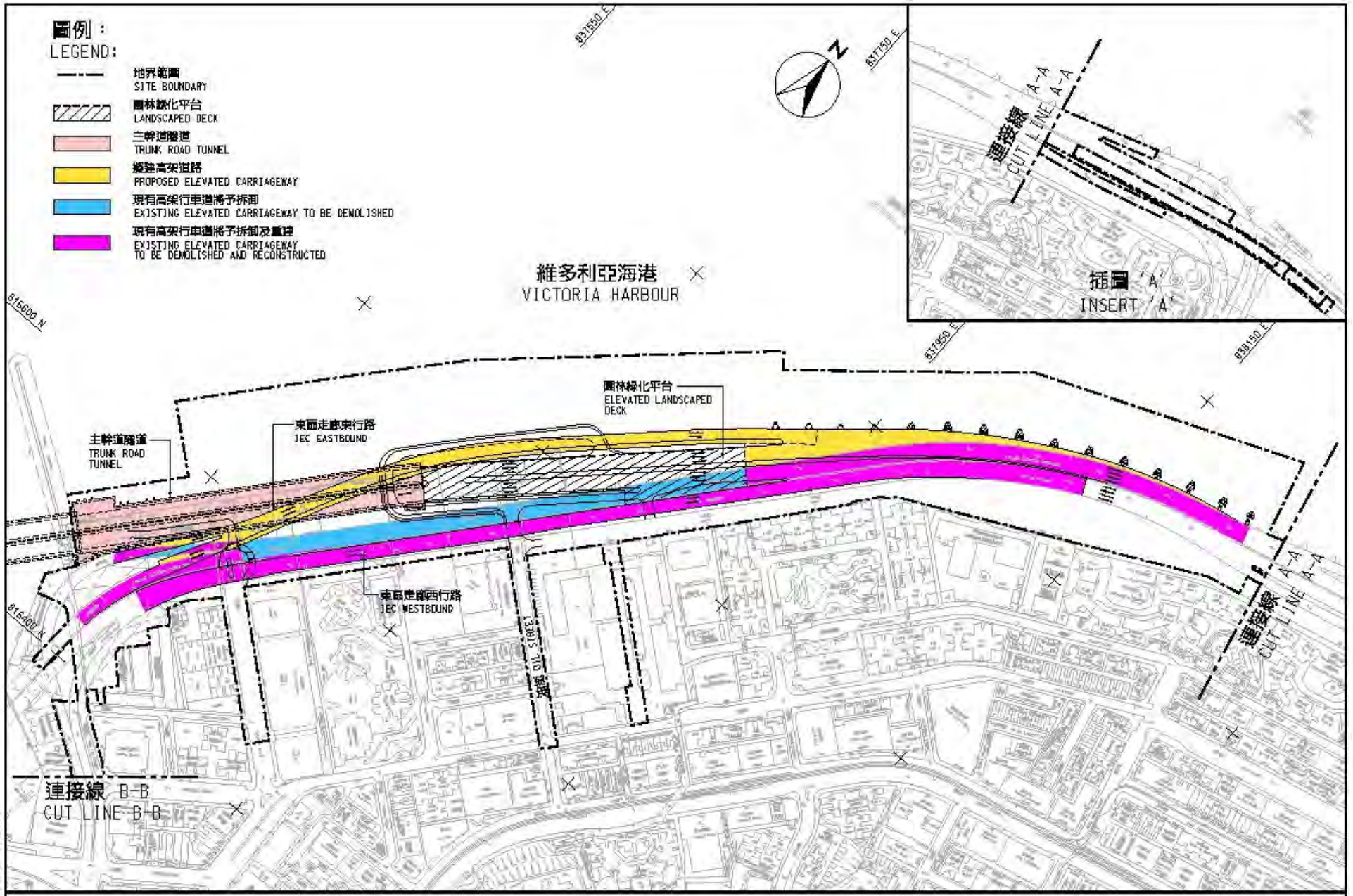
PROJECT
CONTRACT NO. HK/2009/02
WAN CHAI DEVELOPMENT PHASE II
CENTRAL - WAN CHAI BYPASS AT WAN CHAI EAST

DRAWING TITLE
DETAILED WORKS SCHEDULE AND LOCATION PLAN - STAGE 1

	DESIGN	DRAWN	CHECKED
INITIAL	-	N.G.C.B.	-
DATE	-	20/04/2010	-

DRAWING NO. DWCR/WMK202902/SK0031 REV C

SCALE 1:2000 (A1)



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

Mr. Stephen Lo
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Project Proponent

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Senior Engineer
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Environmental Protection Officer
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Fax: 2591 0558

Engineer's Representative for WDII

AECOM

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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: 3529 2829

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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HK/2009/02 Contractor

Chun Wo – CRGL JV

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Site Agent
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HK/2012/08 Contractor

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HY/2009/15 Contractor

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Fax: 2865 5229

HY/2009/19 Contractor

Chun Wo- CRGL JV

Mr. David Lau
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HY/2010/08 Contractor

China State Construction Engineering (HK) Ltd.

Mr. Chan Ying Lun
Project Manager
Tel: 3418 3001
Fax: 2566 8061

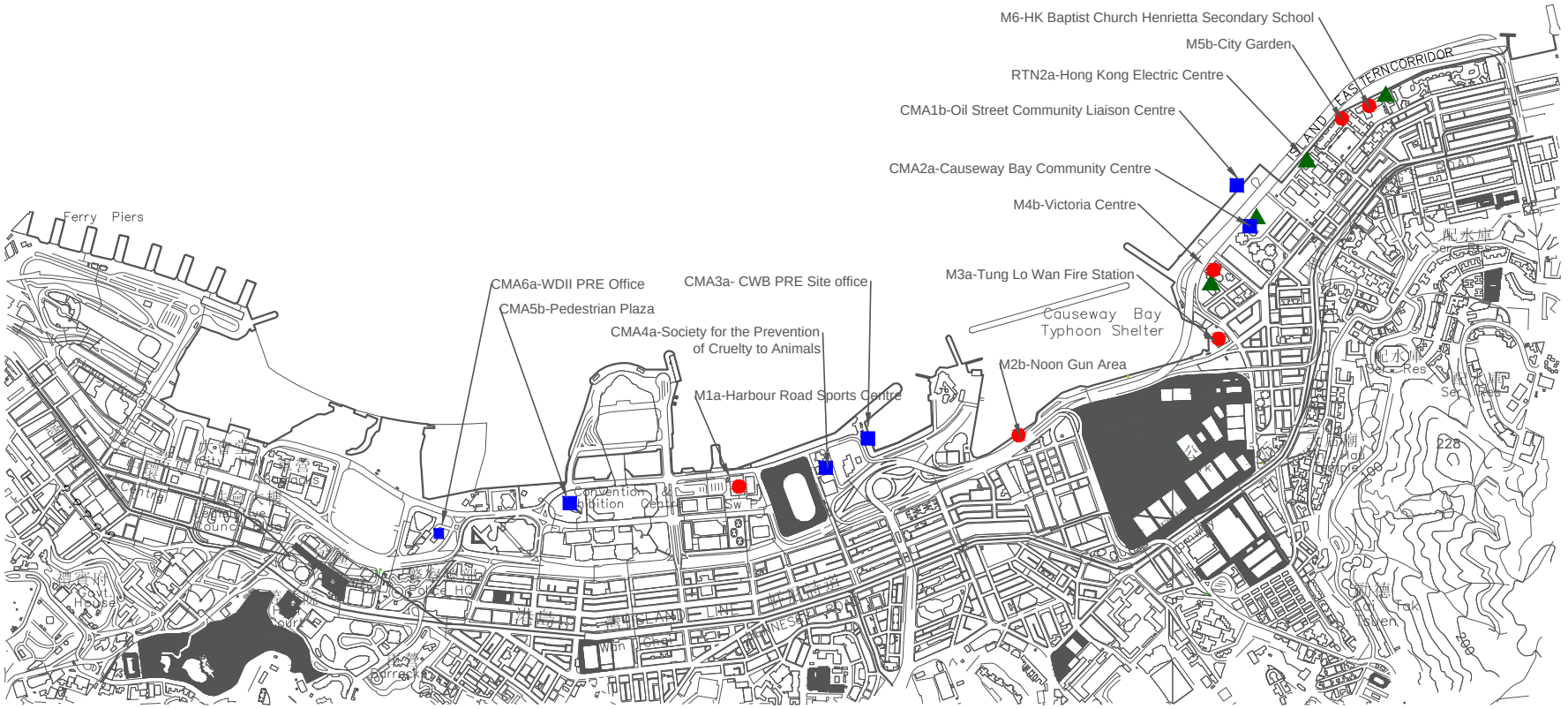
Environmental Team

Lam Geotechnics Limited

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

Figure 4.1

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

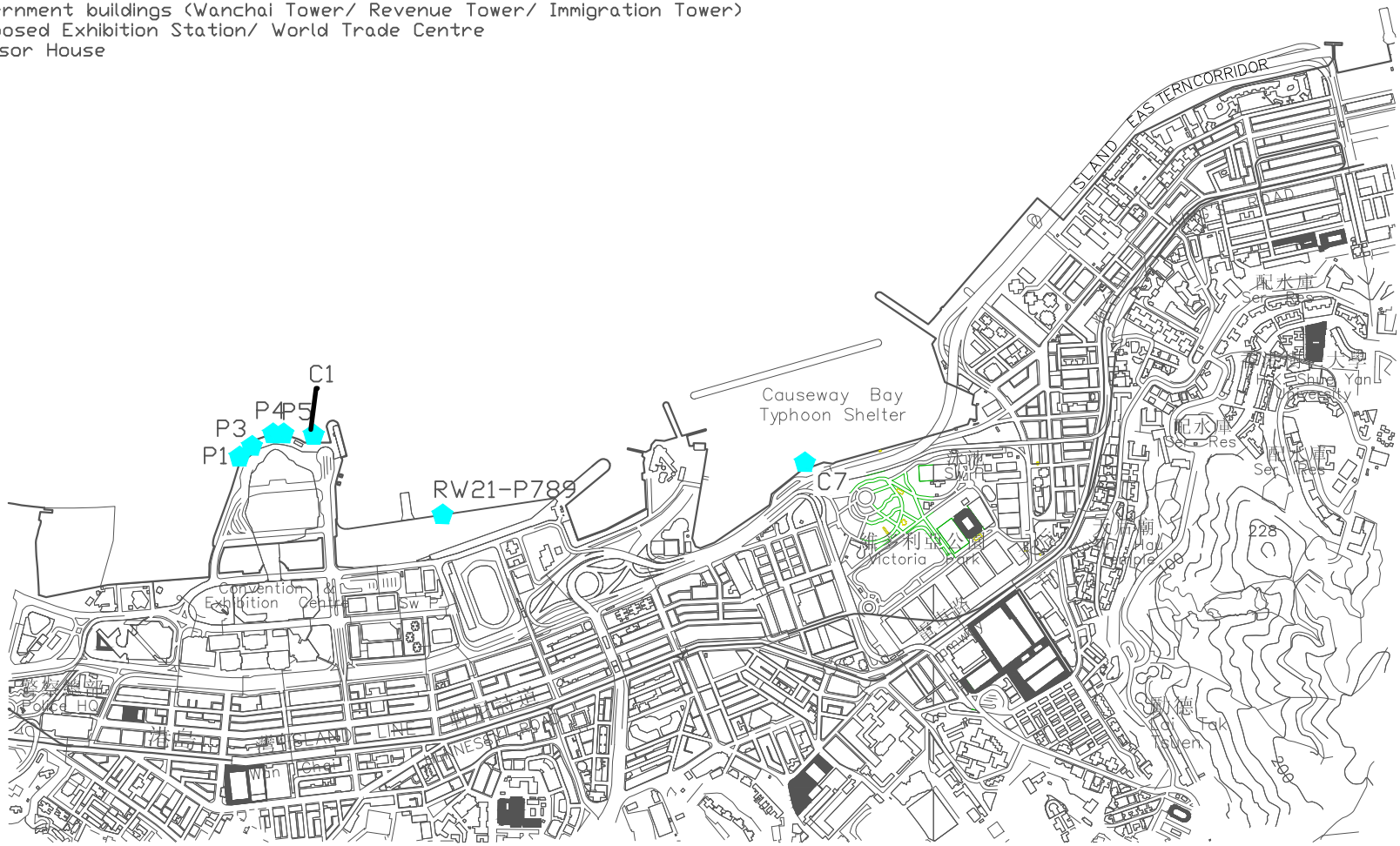


FIGURE	LOCATIONS OF WATER QUALITY MONITORING STATIONS

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

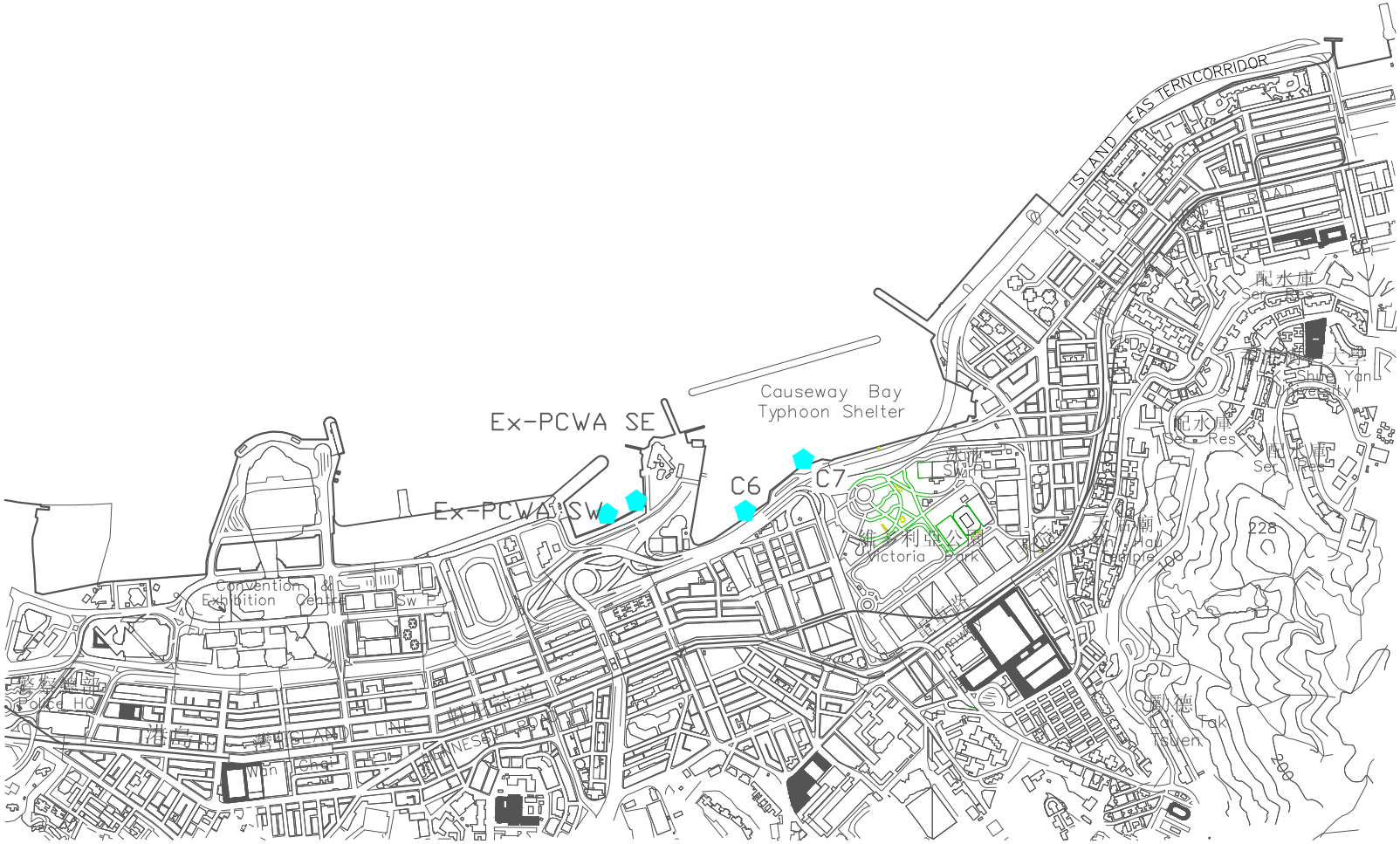


FIGURE	LOCATIONS OF ENHANCE DO MONITORING STATIONS

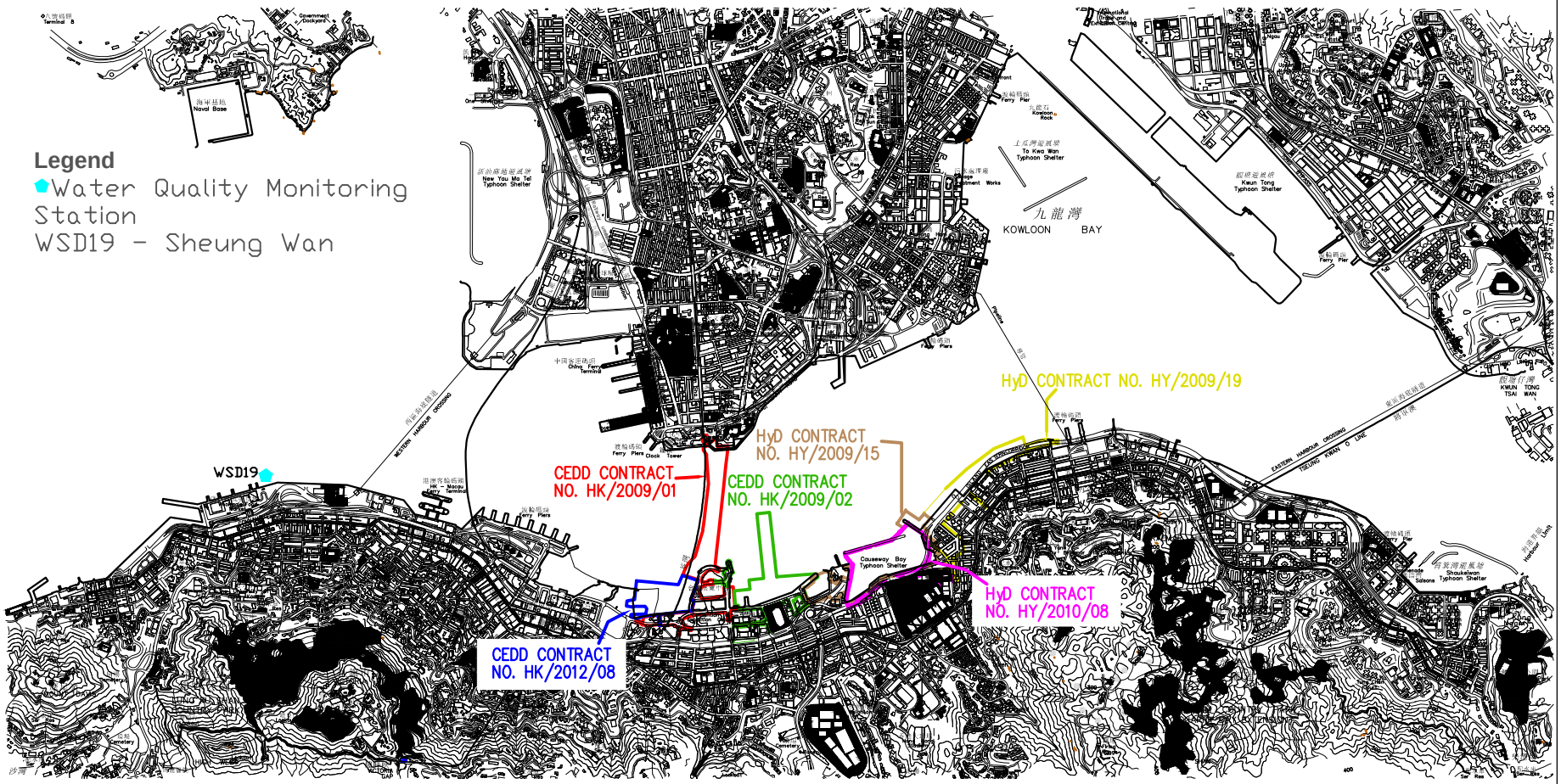
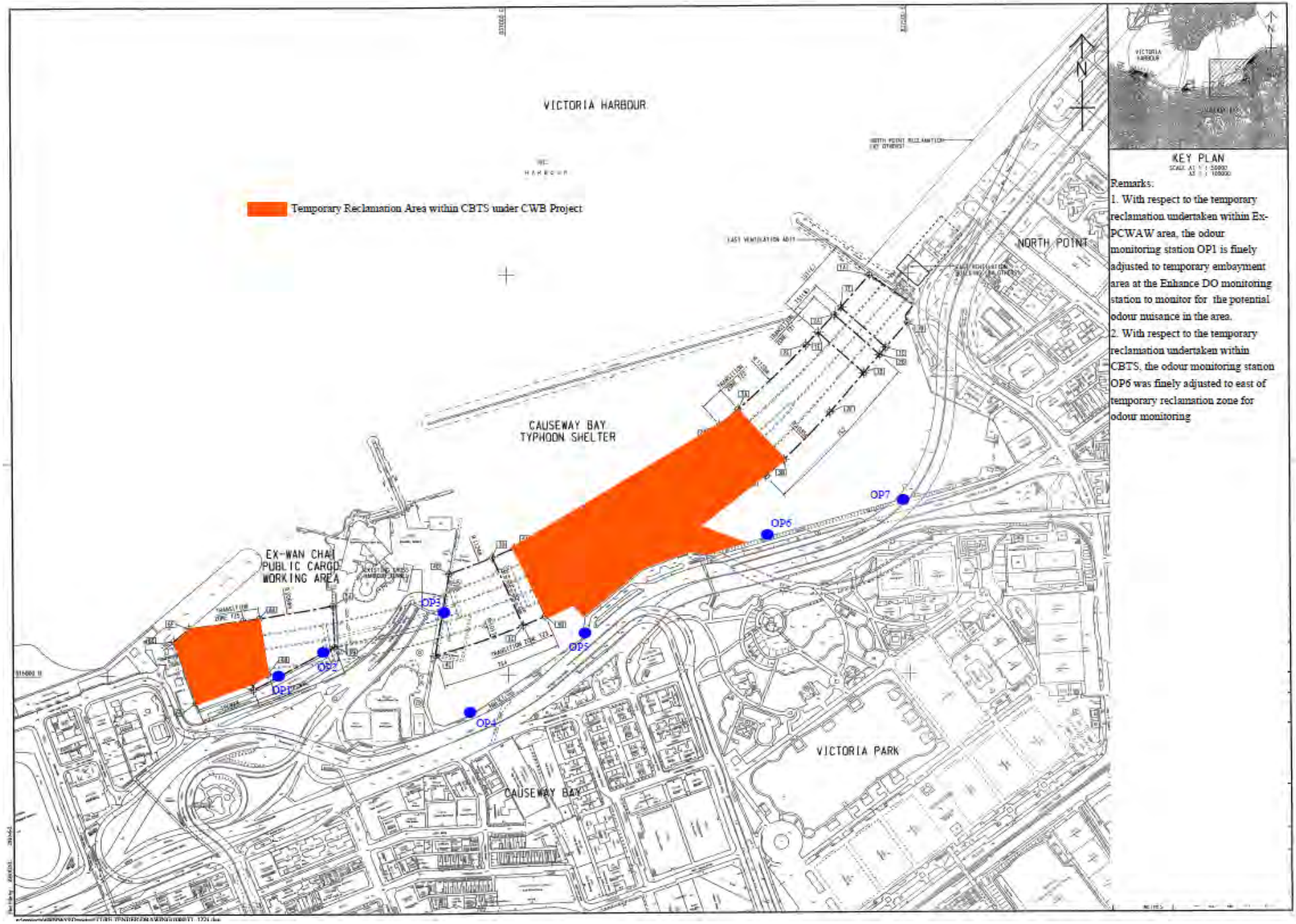


FIGURE	LOCATIONS OF WATER QUALITY MONITORING STATIONS



Remarks:

1. With respect to the temporary reclamation undertaken within Ex-PCWAW area, the odour monitoring station OP1 is finely adjusted to temporary embayment area at the Enhance DO monitoring station to monitor for the potential odour nuisance in the area.
2. With respect to the temporary reclamation undertaken within CBTS, the odour monitoring station OP6 was finely adjusted to east of temporary reclamation zone for odour monitoring

Appendix 3.1

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

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

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

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	√	√ #			

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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- Sampling, Field Measurement and Testing Works (Stage 3)
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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	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

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.

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				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

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				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.							

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				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								

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	√	√			

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

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

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.							

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

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 4.1

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 4.2

Copies of Calibration Certificates

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong.
香港黃竹坑道37號利達中心地下，9樓，12樓，13樓及20樓
E-mail: smec@cigismec.com Website: www.cigismec.com
Tel : (852) 2873 6860
Fax : (852) 2555 7533

CERTIFICATE OF CALIBRATION

Certificate No.: 15CA1203 04-01 Page 1 of 2

Item tested

Description:	Sound Level Meter (Type 1)	,	Microphone
Manufacturer:	B & K	,	B & K
Type/Model No.:	2236	,	4188
Serial/Equipment No.:	2100736	,	2288941
Adaptors used:	-	,	-

Item submitted by

Customer Name:	Lam Geotechnics Limited
Address of Customer:	-
Request No.:	-
Date of receipt:	03-Dec-2015

Date of test: 04-Dec-2015

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	19-Jun-2016	CIGISMEC
Signal generator	DS 360	33873	16-Apr-2016	CEPREI
Signal generator	DS 360	61227	16-Apr-2016	CEPREI

Ambient conditions

Temperature:	22 ± 1 °C
Relative humidity:	50 ± 10 %
Air pressure:	1010 ± 10 hPa

Test specifications

1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of ±20%.

3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Actual Measurement data are documented on worksheets.

Approved Signatory: Huang Jian Min/Feng Jun Qi **Date:** 05-Dec-2015 **Company Chop:** SOILS & MATERIALS ENGINEERING COMPANY LTD. 綜合試驗有限公司

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

綜合試驗有限公司
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CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 15CA1203 04-01 Page 2 of 2

1, Electrical Tests

The electrical tests were perfomed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances.

Test:	Subtest:	Status:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	1.0	2.1
	Lin	Pass	2.0	2.2
Linearity range for Leq	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	A	Pass	0.3	
	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100μs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor $1/10^3$ at 4kHz	Pass	0.3	
	1 ms burst duty factor $1/10^4$ at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test result at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Expanded Uncertainty (dB)	Coverage Factor
Acoustic response	Weighting A at 125 Hz	Pass	0.3	
	Weighting A at 8000 Hz	Pass	0.5	

3, Response to associated sound calibrator

N/A

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

- End -

Calibrated by: Fung Chi Yip Date: 04-Dec-2015

Checked by: Lam Tze Wai Date: 05-Dec-2015

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong.
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Fax : (852) 2555 7533

CERTIFICATE OF CALIBRATION

Certificate No.: 15CA0528 04-03 **Page:** 1 **of** 2

Item tested

Description:	Acoustical Calibrator (Class 1)
Manufacturer:	Rion Co., Ltd.
Type/Model No.:	NC-73
Serial/Equipment No.:	10465798
Adaptors used:	-

Item submitted by

Curstomer:	Lam Geotechnics Ltd.
Address of Customer:	-
Request No.:	-
Date of receipt:	28-May-2015

Date of test: 30-May-2015

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Lab standard microphone	B&K 4180	2341427	15-Apr-2016	SCL
Preamplifier	B&K 2673	2239857	22-Apr-2016	CEPREI
Measuring amplifier	B&K 2610	2346941	22-Apr-2016	CEPREI
Signal generator	DS 360	61227	16-Apr-2016	CEPREI
Digital multi-meter	34401A	US36087050	17-Apr-2016	CEPREI
Audio analyzer	8903B	GB41300350	17-Apr-2016	CEPREI
Universal counter	53132A	MY40003662	16-Apr-2016	CEPREI

Ambient conditions

Temperature:	21 ± 1 °C
Relative humidity:	60 ± 10 %
Air pressure:	1000 ± 5 hPa

Test specifications

1, The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.

2, The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.

3, The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on **page 2** of this certificate.

Approved Signatory: Huang Jian Min/Feng Jun Qi **Date:** 01-Jun-2015 **Company Chop:** SOILS AND MATERIALS ENGINEERING COMPANY LTD. 綜合試驗有限公司

Comments: The results reported in this certificate refer to the conditon of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

綜合試驗有限公司
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CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 15CA0528 04-03 **Page:** 2 **of** 2

1, Measured Sound Pressure Level

The output Sound Pressure Level in the calibrator head was measured at the setting and frequency shown using a calibrated laboratory standard microphone and insert voltage technique. The results are given in below with the estimated uncertainties.

(Output level in dB re 20 μPa)

Frequency Shown Hz	Output Sound Pressure Level Setting dB	Measured Output Sound Pressure Level dB	Estimated Expanded Uncertainty dB
1000	94.00	94.06	0.10

2, Sound Pressure Level Stability - Short Term Fluctuations

The Short Term Fluctuations was determined by measuring the maximum and minimum of the fast weighted DC output of the B&K 2610 measuring amplifier over a 20 second time interval as required in the standard. The Short Term Fluctuation was found to be:

At 1000 Hz **STF = 0.002 dB**

Estimated expanded uncertainty 0.005 dB

3, Actual Output Frequency

The determination of actual output frequency was made using a B&K 4180 microphone together with a B&K 2673 preamplifier connected to a B&K 2610 measuring amplifier. The AC output of the B&K 2610 was taken to an universal counter which was used to determine the frequency averaged over 20 second of operation as required by the standard. The actual output frequency at 1 KHz was:

At 1000 Hz **Actual Frequency = 966.3 Hz**

Estimated expanded uncertainty 0.1 Hz Coverage factor k = 2.2

4, Total Noise and Distortion

For the Total Noise and Distortion measurement, the unfiltered AC output of the B&K 2610 measuring amplifier was connected to an Agilent Type 8903 B distortion analyser. The TND result at 1 KHz was:

At 1000 Hz **TND = 0.5 %**

Estimated expanded uncertainty 0.7 %

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

- End -

Calibrated by: Fung Chi Yip **Date:** 30-May-2015

Checked by: Lam Tze Wai **Date:** 01-Jun-2015

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

Information supplied by customer:

CONTACT: MR. SAM LAM **WORK ORDER:** HK1610019
CLIENT: LAM GEOTECHNICS LIMITED
DATE RECEIVED: 07/01/2016
DATE OF ISSUE: 14/01/2016
ADDRESS: 11/F, CENTRE POINT, 181-185, GLOUCESTER ROAD, WANCHAI, HONG KONG
PROJECT: ---

METHOD OF PERFORMANCE CHECK/ CALIBRATION:
Ref: APHA22nd ed 2130B

COMMENTS
It is certified that the item under performance check/calibration has been calibrated/checked by corresponding calibrated equipment in the laboratory.
Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.

Scope of Test:	Turbidity
Equipment Type:	Turbidimeter
Brand Name:	Xin Rui
Model No.:	WGZ-3B
Serial No.:	1309192
Equipment No.:	---
Date of Calibration:	08/01/2016

Remarks:
This is the Final Report. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Approved Signatory: _____ Issue Date: 14/01/2016
Ms. Wong Po Yan, Pauline
Testing Engineer

Address: No.B12, 5th Floor, Block B, Tonic Industrial Centre, No.19 Lam Hing Street, Kowloon Bay, Kowloon
Phone +852 2527 6691 | Email info@pilot-testing.com

REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

WORK ORDER: HK1610019
DATE OF ISSUE: 14/01/2016
CLIENT: LAM GEOTECHNICS LIMITED

Equipment Type:	Turbidimeter
Brand Name:	Xin Rui
Model No.:	WGZ-3B
Serial No.:	1309192
Equipment No.:	---
Date of Calibration:	08/01/2016
Date of next Calibation:	08/04/2016

Parameters:
Turbidity

Method Ref: APHA 22nd ed. 2130B

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)
0	0.00	---
4	4.09	2.3
10	10.1	1.0
40	38.7	-3.3
100	104	4.0
400	389	-2.8
1000	991	-0.9
	Tolerance Limit (±%)	10.0

Remark: "Displayed Reading" presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.

Address: No.B12, 5th Floor, Block B, Tonic Industrial Centre, No.19 Lam Hing Street, Kowloon Bay, Kowloon
Phone +852 2527 6691 | Email info@pilot-testing.com

REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

Information supplied by customer:

CONTACT:	**MR. SAM LAM**	**WORK ORDER:**	**HK1610018**
CLIENT:	**LAM GEOTECHNICS LIMITED**		
DATE RECEIVED:	**07/01/2016**		
DATE OF ISSUE:	**14/01/2016**		
ADDRESS:	**11/F, CENTRE POINT, 181-185, GLOUCESTER ROAD, WANCHAI, HONG KONG**		
PROJECT:	---		

METHOD OF PERFORMANCE CHECK/ CALIBRATION:
Ref: APHA22nd ed 2130B

COMMENTS
It is certified that the item under performance check/calibration has been calibrated/checked by corresponding calibrated equipment in the laboratory.
Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.

Scope of Test:	Turbidity
Equipment Type:	Turbidimeter
Brand Name:	Xin Rui
Model No.:	WGZ-3B
Serial No.:	1203015
Equipment No.:	---
Date of Calibration:	08/01/2016

Remarks:
This is the Final Report. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Approved Signatory: 

Ms. Wong Po Yan, Pauline
Testing Engineer

Issue Date: 14/01/2016

Address: No.B12, 5th Floor, Block B, Tonic Industrial Centre, No.19 Lam Hing Street, Kowloon Bay, Kowloon
Phone +852 2527 6691 | Email info@pilot-testing.com

REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

WORK ORDER: HK1610018
DATE OF ISSUE: 14/01/2016
CLIENT: LAM GEOTECHNICS LIMITED

Equipment Type:	Turbidimeter
Brand Name:	Xin Rui
Model No.:	WGZ-3B
Serial No.:	1203015
Equipment No.:	---
Date of Calibration:	08/01/2016
Date of next Calibation:	08/04/2016

Parameters:
Turbidity

Method Ref: APHA 22nd ed. 2130B

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)
0	0.00	---
4	3.87	-3.3
10	10.6	6.0
40	41.4	3.5
100	98.4	-1.6
400	387	-3.3
1000	976	-2.4
	Tolerance Limit (±%)	10.0

Remark: "Displayed Reading" presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.

Address: No.B12, 5th Floor, Block B, Tonic Industrial Centre, No.19 Lam Hing Street, Kowloon Bay, Kowloon
Phone +852 2527 6691 | Email info@pilot-testing.com

REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

Information supplied by customer:

CONTACT: SAM LAM **WORK ORDER: HK1510427**
CLIENT: LAM GEOTECHNICS LIMITED
DATE RECEIVED: 2015-11-06
DATE OF ISSUE: 2015-11-13
ADDRESS: 11/F, CENTRE POINT, 181-185, GLOUCESTER ROAD, WANCHAI, HONG KONG
PROJECT: ---

METHOD OF PERFORMANCE CHECK/ CALIBRATION:
Ref: APHA22nd ed 2130B

COMMENTS
It is certified that the item under performance check/calibration has been calibrated/checked by corresponding calibrated equipment in the laboratory.
Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.

Scope of Test:	Turbidity
Equipment Type:	Turbidimeter
Brand Name:	Xin Rui
Model No.:	WGZ-3B
Serial No.:	1408039
Equipment No.:	---
Date of Calibration:	06-Nov-15

Remarks:
This is the Final Report. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Mr. Peter Lee
Director

REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

WORK ORDER: HK1510427
DATE OF ISSUE: 2015-11-13
CLIENT: LAM GEOTECHNICS LIMITED

Equipment Type:	Turbidimeter
Brand Name:	Xin Rui
Model No.:	WGZ-3B
Serial No.:	1408039
Equipment No.:	---
Date of Calibration:	06-Nov-15
Date of next Calibation:	06-Feb-16

Parameters:
Turbidity

Method Ref: APHA 22nd ed. 2130B

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)
0	0.00	---
4	4.12	3.0
10	9.87	-1.3
40	39.5	-1.3
100	104.0	4.0
400	402	0.5
1000	994	-0.6
	Tolerance Limit (±%)	10.0

Remark: "Displayed Reading" presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.

REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

Information supplied by customer:

CONTACT:	**MR. SAM LAM**	**WORK ORDER:**	**HK1610083**
CLIENT:	**LAM GEOTECHNICS LIMITED**		
DATE RECEIVED:	**05/02/2016**		
DATE OF ISSUE:	**17/02/2016**		
ADDRESS:	**11/F, CENTRE POINT, 181-185, GLOUCESTER ROAD, WANCHAI, HONG KONG**		
PROJECT:	---		

METHOD OF PERFORMANCE CHECK/ CALIBRATION:
Ref: APHA22nd ed 2130B

COMMENTS
It is certified that the item under performance check/calibration has been calibrated/checked by corresponding calibrated equipment in the laboratory.
Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.

Scope of Test:	Turbidity
Equipment Type:	Turbidimeter
Brand Name:	Xin Rui
Model No.:	WGZ-3B
Serial No.:	1408039
Equipment No.:	---
Date of Calibration:	05-Feb-16

Remarks:
This is the Final Report. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Approved Signatory: _____ Issue Date: 05/02/2016

Ms. Wong Po Yan, Pauline
Testing Engineer

REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

WORK ORDER: HK1610083
DATE OF ISSUE: 17/02/2016
CLIENT: LAM GEOTECHNICS LIMITED

Equipment Type:	Turbidimeter
Brand Name:	Xin Rui
Model No.:	WGZ-3B
Serial No.:	1408039
Equipment No.:	---
Date of Calibration:	05-Feb-16
Date of next Calibation:	05-May-16

Parameters:
Turbidity

Method Ref: APHA 22nd ed. 2130B

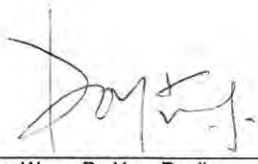
Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)
0	0.00	---
4	4.20	5.0
10	10.2	2.0
40	38.7	-3.3
100	106	6.0
400	406	1.5
1000	993	-0.7
	Tolerance Limit (±%)	10.0

Remark: "Displayed Reading" presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.

EQUIPMENT PERFORMANCE CHECK / CALIBRATION REPORT

Report No.	:	HK1610021
Project Name	:	EQUIPMENT PERFORMANCE CHECK/CALIBRATION REPORT
Date of Issue	:	21/01/2016
Customer	:	LAM GEOTECHNICS LIMITED
Address	:	11/F., CENTRE POINT, 181-185 GLOUCESTER ROAD, WAN CHAI, HONG KONG
Calibration Job No.	:	HK1610021
Test Item No.	:	HK1610021-01
Test Item Details		
Test Item Description	:	Multifunctional Meter
Manufacturer	:	YSI
Model No.	:	Professional Plus
Serial No.	:	14E100105
Performance Method	:	Checked according to in-house method CAL005 (References: Temperature (Section 6 of International Accreditation New Zealand Technical Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure), pH value (APHA 21e 4500H:B), Salinity (Refer to Conductivity APHA 19e 2510B) , Dissolved oxygen (APHA 19e 4500-O,C))
Test Item Receipt Date	:	14-Jan-16
Test Item Calibration Date	:	15-Jan-16

Notes :
1. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.
2. Results relate to item(s) as received.
3. ± indicates the tolerance limit
4. N/A = Not applicable
5. APHA - American Public Health Association, American Water Works Association and Water Environment Federation, Standard Methods for the Examination of Water and Wastewater, APHA-AWWA-WEF. USA
6. DO, pH, salinity and temperature performance check was conducted by Pilot Testing Limited.
7. Because of high sensitivity and ease of measurement, the conductivity method (according to APHA 19e 2510) is used to determine salinity.

Approved Signatory : 

Ms. Wong Po Yan, Pauline
(Testing Engineer)

Issue Date: 21/01/2016

Pilot Testing Limited
Address: Room B12, Block B, 5/F, Tonic Industrial Centre, 19 Lam Hing Street, Kowloon Bay, Kowloon
Tel: (852) 2527 6691 email: test@pilot-testing.com

PILOT TESTING

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK1610021
DATE OF ISSUE: 21/01/2016
CLIENT: LAM GEOTECHNICS LIMITED

Equipment Type	Multifunctional Meter
Manufacturer	YSI
Model No.	Professional Plus
Serial No.	14E100105
Date of Calibration	15-Jan-16
Date of next Calibation	15-Apr-16

Parameters:

Temperature (Method Ref: Section 6 of Intermational Accreditation New Zealand Technical Guide No.3 Second edition March 2008: Working Thermometer Calibration Procedure)

Reference Reading (°C)	Display Reading (°C)	Deviation (°C)
9.8	10.1	+0.3
20.6	20.4	-0.2
30.3	30.4	+0.1
	Tolerance Limit	±2.0

pH Value (Method Ref: APHA21e, 4500H:B)

Expected Reading (pH unit)	Reference Reading (pH unit)	Display Reading (pH unit)	Deviation (pH unit)
4.0	3.98	4.03	+0.05
7.0	7.11	7.08	-0.03
10.0	10.32	10.24	-0.08
	Tolerance Limit		±0.20

Conductivity (Method Ref: APHA 19e, 2510)

KCl concentration (mol/L)	Reference Reading (ms/cm)	Display Reading (ms/cm)	Deviation (%)
0.0000	0.00	0.00	--
0.1000	12.89	12.71	-1.40
0.2000	24.80	24.97	+0.69
0.5000	58.67	58.34	-0.56
	Tolerance Limit		±2.0

Dissolved Oxygen (DO) (Method Ref: APHA 19e, 4500-O, C)

Reference DO reading (mg/L)	DO reading od DO probe (mg/L)	Deviation (mg/L)
8.55	8.64	+0.09
5.47	5.34	-0.13
2.94	3.01	+0.07
	Tolerance Limit	±0.20

Remarks:
(1) Maxium tolerance and calibration frequency stated in the report, unless otherewise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.
(2) Displayed reading presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.
(3) Because of high sensitivity and ease of measurement, the conductivity method (accoridng to APHA 19e 2510) is used to determine salinity.

- End of Report -

EQUIPMENT PERFORMANCE CHECK / CALIBRATION REPORT

Report No.	:	HK1610022
Project Name	:	EQUIPMENT PERFORMANCE CHECK/CALIBRATION REPORT
Date of Issue	:	21/01/2016
Customer	:	LAM GEOTECHNICS LIMITED
Address	:	11/F., CENTRE POINT, 181-185 GLOUCESTER ROAD, WAN CHAI, HONG KONG
Calibration Job No.	:	HK1610022
Test Item No.	:	HK1610022-01
Test Item Details		
Test Item Description	:	Multifunctional Meter
Manufacturer	:	YSI
Model No.	:	Professional Plus
Serial No.	:	14M100277
Performance Method	:	Checked according to in-house method CAL005 (References: Temperature (Section 6 of Intermational Accreditation New Zealand Technical Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure), pH value (APHA 21e 4500H:B), Salinity (Refer to Conductivity APHA 19e 2510B) , Dissolved oxygen (APHA 19e 4500-O,C))
Test Item Receipt Date	:	14-Jan-16
Test Item Calibration Date	:	15-Jan-16

Notes :
1. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.
2. Results relate to item(s) as received.
3. ± indicates the tolerance limit
4. N/A = Not applicable
5. APHA - American Public Health Association, American Water Works Association and Water Environment Federation, Standard Methods for the Examination of Water and Wastewater, APHA-AWWA-WEF. USA
6. DO, pH, salinity and temperature performance check was conducted by Pilot Testing Limited.
7. Because of high sensitivity and ease of measurement, the conductivity method (according to APHA 19e 2510) is used to determine salinity.

Approved Signatory : 

Ms. Wong Po Yan, Pauline
(Testing Engineer)

Issue Date: 21/01/2016

Pilot Testing Limited
Address: Room B12, Block B, 5/F, Tonic Industrial Centre, 19 Lam Hing Street, Kowloon Bay, Kowloon
Tel: (852) 2527 6691 email: test@pilot-testing.com

PILOT TESTING

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK1610022
DATE OF ISSUE: 21/01/2016
CLIENT: LAM GEOTECHNICS LIMITED

Equipment Type	Multifunctional Meter
Manufacturer	YSI
Model No.	Professional Plus
Serial No.	14M100277
Date of Calibration	15-Jan-16
Date of next Calibation	15-Apr-16

Parameters:

Temperature (Method Ref: Section 6 of International Accreditation New Zealand Technical Guide No.3 Second edition March 2008: Working Thermometer Calibration Procedure)

Reference Reading (°C)	Display Reading (°C)	Deviation (°C)
10.3	10.7	+0.4
20.9	20.4	-0.5
30.1	30.3	+0.2
	Tolerance Limit	±2.0

pH Value (Method Ref: APHA21e, 4500H:B)

Expected Reading (pH unit)	Reference Reading (pH unit)	Display Reading (pH unit)	Deviation (pH unit)
4.0	4.06	3.98	-0.08
7.0	7.05	7.16	+0.11
10.0	10.13	10.06	-0.07
	Tolerance Limit		±0.20

Conductivity (Method Ref: APHA 19e, 2510)

KCl concentration (mol/L)	Reference Reading (ms/cm)	Display Reading (ms/cm)	Deviation (%)
0.0000	0.00	0.00	--
0.1000	12.89	12.69	-1.55
0.2000	24.80	25.04	+0.97
0.5000	58.67	59.13	+0.78
	Tolerance Limit		±2.0

Dissolved Oxygen (DO) (Method Ref: APHA 19e, 4500-O, C)

Reference DO reading (mg/L)	DO reading od DO probe (mg/L)	Deviation (mg/L)
8.86	8.71	-0.15
4.59	4.46	-0.13
2.11	2.21	+0.10
	Tolerance Limit	±0.20

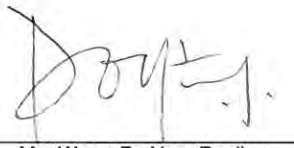
Remarks:
(1) Maxium tolerance and calibration frequency stated in the report, unless otherewise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.
(2) Displayed reading presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.
(3) Because of high sensitivity and ease of measurement, the conductivity method (accoridng to APHA 19e 2510) is used to determine salinity.

- End of Report -

EQUIPMENT PERFORMANCE CHECK / CALIBRATION REPORT

Report No.	:	HK1610020
Project Name	:	EQUIPMENT PERFORMANCE CHECK/CALIBRATION REPORT
Date of Issue	:	21/01/2016
Customer	:	LAM GEOTECHNICS LIMITED
Address	:	11/F., CENTRE POINT, 181-185 GLOUCESTER ROAD, WAN CHAI, HONG KONG
Calibration Job No.	:	HK1610020
Test Item No.	:	HK1610020-01
Test Item Details		
Test Item Description	:	Multifunctional Meter
Manufacturer	:	YSI
Model No.	:	Professional Plus
Serial No.	:	11F100420
Performance Method	:	Checked according to in-house method CAL005 (References: Temperature (Section 6 of International Accreditation New Zealand Technical Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure), pH value (APHA 21e 4500H:B), Salinity (Refer to Conductivity APHA 19e 2510B) , Dissolved oxygen (APHA 19e 4500-O,C))
Test Item Receipt Date	:	14-Jan-16
Test Item Calibration Date	:	15-Jan-16

Notes :
1. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.
2. Results relate to item(s) as received.
3. ± indicates the tolerance limit
4. N/A = Not applicable
5. APHA - American Public Health Association, American Water Works Association and Water Environment Federation, Standard Methods for the Examination of Water and Wastewater, APHA-AWWA-WEF. USA
6. DO, pH, salinity and temperature performance check was conducted by Pilot Testing Limited.
7. Because of high sensitivity and ease of measurement, the conductivity method (according to APHA 19e 2510) is used to determine salinity.

Approved Signatory : 

Ms. Wong Po Yan, Pauline
(Testing Engineer)

Issue Date: 21/01/2016

Pilot Testing Limited
Address: Room B12, Block B, 5/F, Tonic Industrial Centre, 19 Lam Hing Street, Kowloon Bay, Kowloon
Tel: (852) 2527 6691 email: test@pilot-testing.com

PILOT TESTING

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK1610020
DATE OF ISSUE: 21/01/2016
CLIENT: LAM GEOTECHNICS LIMITED

Equipment Type	Multifunctional Meter
Manufacturer	YSI
Model No.	Professional Plus
Serial No.	11F100420
Date of Calibration	15-Jan-16
Date of next Calibation	15-Apr-16

Parameters:

Temperature (Method Ref: Section 6 of Intermational Accreditation New Zealand Technical Guide No.3 Second edition March 2008: Working Thermometer Calibration Procedure)

Reference Reading (°C)	Display Reading (°C)	Deviation (°C)
10.1	10.4	+0.3
19.8	20.3	+0.5
30.4	30.9	+0.5
	Tolerance Limit	±2.0

pH Value (Method Ref: APHA21e, 4500H:B)

Expected Reading (pH unit)	Reference Reading (pH unit)	Display Reading (pH unit)	Deviation (pH unit)
4.0	3.97	4.02	+0.05
7.0	7.15	7.08	-0.07
10.0	10.06	9.98	-0.08
	Tolerance Limit		±0.20

Conductivity (Method Ref: APHA 19e, 2510)

KCl concentration (mol/L)	Reference Reading (ms/cm)	Display Reading (ms/cm)	Deviation (%)
0.0000	0.00	0.00	--
0.1000	12.89	12.74	-1.16
0.2000	24.80	24.42	-1.53
0.5000	58.67	58.94	+0.46
	Tolerance Limit		±2.0

Dissolved Oxygen (DO) (Method Ref: APHA 19e, 4500-O, C)

Reference DO reading (mg/L)	DO reading od DO probe (mg/L)	Deviation (mg/L)
8.43	8.51	+0.08
4.44	4.38	-0.06
2.13	2.02	-0.11
	Tolerance Limit	±0.20

Remarks:
(1) Maxium tolerance and calibration frequency stated in the report, unless otherewise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.
(2) Displayed reading presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.
(3) Because of high sensitivity and ease of measurement, the conductivity method (accoridng to APHA 19e 2510) is used to determine salinity.

- End of Report -

Pilot Testing Limited
Address: Room B12, Block B, 5/F, Tonic Industrial Centre, 19 Lam Hing Street, Kowloon Bay, Kowloon
Tel: (852) 2527 6691 email: test@pilot-testing.com

TISCH ENVIRONMENTAL, INC.
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877.263.7610 TOLL FREE
513.467.9009 FAX

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Jun 30, 2015 Rootsmeter S/N 0438320 Ta (K) - 296
Operator Tisch Orifice I.D. - 0005 Pa (mm) - 749.3

PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1	NA	NA	1.00	1.3930	3.2	2.00
2	NA	NA	1.00	0.9800	6.4	4.00
3	NA	NA	1.00	0.8790	7.9	5.00
4	NA	NA	1.00	0.8350	8.7	5.50
5	NA	NA	1.00	0.6900	12.7	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)		Va	(x axis) Qa	(y axis)
0.9883	0.7095	1.4090		0.9957	0.7148	0.8889
0.9841	1.0042	1.9926		0.9915	1.0117	1.2570
0.9820	1.1172	2.2278		0.9894	1.1256	1.4054
0.9810	1.1749	2.3365		0.9884	1.1837	1.4740
0.9757	1.4141	2.8179		0.9830	1.4247	1.7777
Qstd slope (m) =		2.00072		Qa slope (m) =		1.25282
intercept (b) =		-0.01209		intercept (b) =		-0.00763
coefficient (r) =		0.99995		coefficient (r) =		0.99995
y axis = SQRT[H2O(Pa/760)(298/Ta)]				y axis = SQRT[H2O(Ta/Pa)]		

CALCULATIONS

Vstd = Diff. Vol[(Pa-Diff. Hg)/760](298/Ta)
Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg)/Pa]
Qa = Va/Time

For subsequent flow rate calculations:

Qstd = 1/m{[SQRT(H2O(Pa/760)(298/Ta))]- b}
Qa = 1/m{[SQRT H2O(Ta/Pa)]- b}

Lam Geotechincs Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	CMA1b	**Calbration Date**	:	30-Nov-15
Equipment no.	:	EL452	**Calbration Due Date**	:	30-Jan-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	295	Kelvin	**Pressure, P_a**	1019	mmHg

Orifice Transfer Standard Information					
Equipment No.	**EL086**	**Slope, m_c**	2.00072	**Intercept, bc**	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Jun-16	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)** (up)	(down)	(difference)	**Q_{std}** (m^3 / min.) **X-axis**	**Continuous Flow Recorder, W** (CFM)	**IC** ($W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$) **Y-axis**
1	6.1	6.1	12.2	1.7656	58	58.4579
2	4.8	4.8	9.6	1.5669	52	52.4105
3	3.7	3.7	7.4	1.3764	44	44.3474
4	2.4	2.4	4.8	1.1097	36	36.2842
5	1.5	1.5	3.0	0.8786	24	24.1895

By Linear Regression of Y on X

Slope, m = 37.9882 Intercept, b = -7.7457

Correlation Coefficient* = 0.9953

Calibration Accepted = Yes/~~No~~**

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks :

Calibrated by	:	Kit Au	**Checked by**	:	Derek Lo
Date	:	30-Nov-15	**Date**	:	30-Nov-15

Lam Geotechincs Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	CMA1b	**Calbration Date**	:	30-Jan-16
Equipment no.	:	EL452	**Calbration Due Date**	:	30-Mar-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	290	Kelvin	**Pressure, P_a**	1018	mmHg

Orifice Transfer Standard Information					
Equipment No.	**EL086**	**Slope, m_c**	2.00072	**Intercept, bc**	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Jun-16	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)** (up)	(down)	(difference)	**Q_{std}** (m^3 / min.) **X-axis**	**Continuous Flow Recorder, W** (CFM)	**IC** ($W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$) **Y-axis**
1	6.2	6.2	12.4	1.7943	60	60.9628
2	4.6	4.6	9.2	1.5464	52	52.8345
3	3.8	3.8	7.6	1.4061	44	44.7061
4	2.2	2.2	4.4	1.0713	33	33.5296
5	1.5	1.5	3.0	0.8856	23	23.3691

By Linear Regression of Y on X

Slope, m = 40.9148 Intercept, b = -11.7761

Correlation Coefficient* = 0.9963

Calibration Accepted = Yes/~~No~~**

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks :

Calibrated by	:	LuLu Mar	**Checked by**	:	Derek Lo
Date	:	30-Jan-16	**Date**	:	30-Jan-16

Lam Geotechincs Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	CMA2a	**Calbration Date**	:	30-Nov-15
Equipment no.	:	EL449	**Calbration Due Date**	:	30-Jan-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	295	Kelvin	**Pressure, P_a**	1019	mmHg

Orifice Transfer Standard Information					
Equipment No.	**EL086**	**Slope, m_c**	2.00072	**Intercept, bc**	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Jun-16	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)** (up)	(down)	(difference)	**Q_{std}** (m^3 / min.) **X-axis**	**Continuous Flow Recorder, W** (CFM)	**IC** $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$ **Y-axis**
1	6.7	6.7	13.4	1.8501	62	62.4895
2	5.3	5.3	10.6	1.6462	55	55.4342
3	4.1	4.1	8.2	1.4486	48	48.3789
4	2.7	2.7	5.4	1.1767	38	38.3000
5	1.6	1.6	3.2	0.9072	30	30.2368

By Linear Regression of Y on X

Slope, m = 34.6157 Intercept, b = -1.6936

Correlation Coefficient* = 0.9994

Calibration Accepted = Yes/~~No~~**

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks :

Calibrated by	:	Kit Au	**Checked by**	:	Derek Lo
Date	:	30-Nov-15	**Date**	:	30-Nov-15

Lam Geotechincs Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	CMA2a	**Calbration Date**	:	30-Jan-16
Equipment no.	:	EL449	**Calbration Due Date**	:	30-Mar-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	290	Kelvin	**Pressure, P_a**	1018	mmHg

Orifice Transfer Standard Information					
Equipment No.	**EL086**	**Slope, m_c**	2.00072	**Intercept, bc**	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Jun-16	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)** (up)	(down)	(difference)	**Q_{std}** (m^3 / min.) **X-axis**	**Continuous Flow Recorder, W** (CFM)	**IC** $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$ **Y-axis**
1	7.4	7.4	14.8	1.9597	62	62.9949
2	5.7	5.7	11.4	1.7207	52	52.8345
3	4.4	4.4	8.8	1.5125	48	48.7703
4	2.6	2.6	5.2	1.1641	38	38.6098
5	1.6	1.6	3.2	0.9145	30	30.4814

By Linear Regression of Y on X

Slope, m = 29.9012 Intercept, b = 3.2523

Correlation Coefficient* = 0.9959

Calibration Accepted = Yes/~~No~~**

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks :

Calibrated by	:	LuLu Mar	**Checked by**	:	Derek Lo
Date	:	30-Jan-16	**Date**	:	30-Jan-16

Lam Geotechincs Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	CMA3a	**Calbration Date**	:	30-Nov-15
Equipment no.	:	EL333	**Calbration Due Date**	:	30-Jan-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	295	Kelvin	**Pressure, P_a**	1019	mmHg

Orifice Transfer Standard Information					
Equipment No.	**EL086**	**Slope, m_c**	2.00072	**Intercept, bc**	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Jun-16	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)** (up)	(down)	(difference)	**Q_{std}** (m^3 / min.) **X-axis**	**Continuous Flow Recorder, W** (CFM)	**IC** ($W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$) **Y-axis**
1	5.8	5.8	11.6	1.7218	56	56.4421
2	4.5	4.5	9.0	1.5173	50	50.3947
3	3.5	3.5	7.0	1.3389	44	44.3474
4	2.3	2.3	4.6	1.0865	36	36.2842
5	1.5	1.5	3.0	0.8786	28	28.2211

By Linear Regression of Y on X

Slope, m = 33.3404 Intercept, b = -0.4922

Correlation Coefficient* = 0.9990

Calibration Accepted = Yes/~~No~~**

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks :

Calibrated by	:	Kit Au	**Checked by**	:	Derek Lo
Date	:	30-Nov-15	**Date**	:	30-Nov-15

Lam Geotechincs Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	CMA3a	**Calbration Date**	:	30-Jan-16
Equipment no.	:	EL333	**Calbration Due Date**	:	30-Mar-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	290	Kelvin	**Pressure, P_a**	1018	mmHg

Orifice Transfer Standard Information					
Equipment No.	**EL086**	**Slope, m_c**	2.00072	**Intercept, bc**	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Jun-16	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)** (up)	(down)	(difference)	**Q_{std}** (m^3 / min.) **X-axis**	**Continuous Flow Recorder, W** (CFM)	**IC** ($W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$) **Y-axis**
1	6.2	6.2	12.4	1.7943	58	58.9308
2	4.8	4.8	9.6	1.5795	52	52.8345
3	3.8	3.8	7.6	1.4061	44	44.7061
4	2.4	2.4	4.8	1.1187	38	38.6098
5	1.5	1.5	3.0	0.8856	30	30.4814

By Linear Regression of Y on X

Slope, m = 31.0014 Intercept, b = 3.0482

Correlation Coefficient* = 0.9948

Calibration Accepted = Yes/~~No~~**

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks :

Calibrated by	:	LuLu Mar	**Checked by**	:	Derek Lo
Date	:	30-Jan-16	**Date**	:	30-Jan-16

Lam Geotechincs Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	CMA4a	**Calbration Date**	:	30-Nov-15
Equipment no.	:	EL390	**Calbration Due Date**	:	30-Jan-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	295	Kelvin	**Pressure, P_a**	1019	mmHg

Orifice Transfer Standard Information					
Equipment No.	**EL086**	**Slope, m_c**	2.00072	**Intercept, bc**	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Jun-16	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)**			**Q_{std}** (m^3 / min.)	**Continuous Flow Recorder, W**	**IC** $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$
	(up)	(down)	(difference)	**X-axis**	(CFM)	**Y-axis**
1	6.4	6.4	12.8	1.8084	58	58.4579
2	5.1	5.1	10.2	1.6149	52	52.4105
3	3.9	3.9	7.8	1.4130	46	46.3632
4	2.6	2.6	5.2	1.1548	34	34.2684
5	1.6	1.6	3.2	0.9072	24	24.1895

By Linear Regression of Y on X

Slope, m	=	38.5259	Intercept, b	=	-10.0149
Correlation Coefficient*	=	0.9962			
Calibration Accepted	=	Yes/~~No~~**			

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : _____

Calibrated by	:	Kit Au	**Checked by**	:	Derek Lo
Date	:	30-Nov-15	**Date**	:	30-Nov-15

Lam Geotechincs Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	CMA4a	**Calbration Date**	:	30-Jan-16
Equipment no.	:	EL390	**Calbration Due Date**	:	30-Mar-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	290	Kelvin	**Pressure, P_a**	1018	mmHg

Orifice Transfer Standard Information					
Equipment No.	**EL086**	**Slope, m_c**	2.00072	**Intercept, bc**	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Jun-16	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)**			**Q_{std}** (m^3 / min.)	**Continuous Flow Recorder, W**	**IC** $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$
	(up)	(down)	(difference)	**X-axis**	(CFM)	**Y-axis**
1	6.3	6.3	12.6	1.8087	58	58.9308
2	5.1	5.1	10.2	1.6280	50	50.8024
3	4.0	4.0	8.0	1.4424	44	44.7061
4	2.6	2.6	5.2	1.1641	34	34.5456
5	1.7	1.7	3.4	0.9425	24	24.3851

By Linear Regression of Y on X

Slope, m = 38.8441 Intercept, b = -11.5962

Correlation Coefficient* = 0.9986

Calibration Accepted = Yes/~~No~~**

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks :

Calibrated by	:	LuLu Mar	**Checked by**	:	Derek Lo
Date	:	30-Jan-16	**Date**	:	30-Jan-16

Lam Geotechincs Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	CMA5b	**Calbration Date**	:	30-Nov-15
Equipment no.	:	EL222	**Calbration Due Date**	:	30-Jan-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	295	Kelvin	**Pressure, P_a**	1019	mmHg

Orifice Transfer Standard Information					
Equipment No.	**EL086**	**Slope, m_c**	2.00072	**Intercept, bc**	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Jun-16	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)** (up)	(down)	(difference)	**Q_{std}** (m^3 / min.) **X-axis**	**Continuous Flow Recorder, W** (CFM)	**IC** ($W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$) **Y-axis**
1	5.2	5.2	10.4	1.6306	62	62.4895
2	4.3	4.3	8.6	1.4834	58	58.4579
3	3.3	3.3	6.6	1.3002	53	53.4184
4	2.0	2.0	4.0	1.0136	46	46.3632
5	1.3	1.3	2.6	0.8183	38	38.3000

By Linear Regression of Y on X

Slope, m = 28.8602 Intercept, b = 15.7526

Correlation Coefficient* = 0.9958

Calibration Accepted = Yes/~~No~~**

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : _____

Calibrated by	:	Kit Au	**Checked by**	:	Derek Lo
Date	:	30-Nov-15	**Date**	:	30-Nov-15

Lam Geotechincs Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	CMA5b	**Calbration Date**	:	30-Jan-16
Equipment no.	:	EL222	**Calbration Due Date**	:	30-Mar-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	290	Kelvin	**Pressure, P_a**	1018	mmHg

Orifice Transfer Standard Information					
Equipment No.	**EL086**	**Slope, m_c**	2.00072	**Intercept, bc**	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Jun-16	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)** (up)	(down)	(difference)	**Q_{std}** (m^3 / min.) **X-axis**	**Continuous Flow Recorder, W** (CFM)	**IC** ($W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$) **Y-axis**
1	5.5	5.5	11.0	1.6904	62	62.9949
2	4.4	4.4	8.8	1.5125	58	58.9308
3	3.4	3.4	6.8	1.3303	52	52.8345
4	2.2	2.2	4.4	1.0713	46	46.7382
5	1.4	1.4	2.8	0.8558	38	38.6098

By Linear Regression of Y on X

Slope, m	=	28.9045	Intercept, b	=	14.6750
Correlation Coefficient*	=	0.9967			
Calibration Accepted	=	Yes/~~No~~**			

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : _____

Calibrated by	:	LuLu Mar	**Checked by**	:	Derek Lo
Date	:	30-Jan-16	**Date**	:	30-Jan-16

Lam Geotechincs Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	CMA6a	**Calbration Date**	:	30-Nov-15
Equipment no.	:	EL448	**Calbration Due Date**	:	30-Jan-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	295	Kelvin	**Pressure, P_a**	1019	mmHg

Orifice Transfer Standard Information					
Equipment No.	**EL086**	**Slope, m_c**	2.00072	**Intercept, bc**	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Jun-16	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)** (up)	(down)	(difference)	**Q_{std}** (m^3 / min.) **X-axis**	**Continuous Flow Recorder, W** (CFM)	**IC** ($W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$) **Y-axis**
1	6.6	6.6	13.2	1.8363	60	60.4737
2	5.3	5.3	10.6	1.6462	54	54.4263
3	4.5	4.5	9.0	1.5173	50	50.3947
4	2.6	2.6	5.2	1.1548	40	40.3158
5	1.5	1.5	3.0	0.8786	30	30.2368

By Linear Regression of Y on X

Slope, m = 30.9785 Intercept, b = 3.5936

Correlation Coefficient* = 0.9989

Calibration Accepted = Yes/~~No~~**

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks :

Calibrated by	:	Kit Au	**Checked by**	:	Derek Lo
Date	:	30-Nov-15	**Date**	:	30-Nov-15

Lam Geotechincs Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	CMA6a	**Calbration Date**	:	30-Jan-16
Equipment no.	:	EL448	**Calbration Due Date**	:	30-Mar-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	290	Kelvin	**Pressure, P_a**	1018	mmHg

Orifice Transfer Standard Information					
Equipment No.	**EL086**	**Slope, m_c**	2.00072	**Intercept, bc**	-0.01209
Last Calibration Date	30-Jun-15	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Jun-16	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)** (up)	(down)	(difference)	**Q_{std}** (m^3 / min.) **X-axis**	**Continuous Flow Recorder, W** (CFM)	**IC** ($W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$) **Y-axis**
1	6.6	6.6	13.2	1.8511	55	55.8826
2	5.2	5.2	10.4	1.6438	50	50.8024
3	4.0	4.0	8.0	1.4424	42	42.6740
4	2.5	2.5	5.0	1.1416	34	34.5456
5	1.6	1.6	3.2	0.9145	26	26.4172

By Linear Regression of Y on X

Slope, m	=	31.6095	Intercept, b	=	-2.1475
Correlation Coefficient*	=	0.9980			
Calibration Accepted	=	Yes/~~No~~**			

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : _____

Calibrated by	:	LuLu Mar	**Checked by**	:	Derek Lo
Date	:	30-Jan-16	**Date**	:	30-Jan-16

Appendix 5.1

Monitoring Schedules for Reporting Month and Coming Reporting Month

Contract No. HK/2015/01
Wan Chai Development Phase II and Central-Wan Chai Bypass
Sampling, Field Measurement and Testing Works (Stage 3)
Environmental Monitoring Schedule
February 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			27-Jan 24hr TSP Mid-ebb 2:12 Mid-flood 8:53	28-Jan 1hr TSP 24hr TSP (CMA5b)	29-Jan Mid-ebb 3:14 Mid-flood 9:53	30-Jan
31-Jan	1-Feb 24hr TSP Impact WQM Mid-flood 11:48 Mid-ebb 18:31	2-Feb 24hr TSP (CMA1b) 1hr TSP Noise (daytime) (M1a, M2b, M3a, M4b)	3-Feb Noise (daytime) (M5b, M6) Impact WQM Mid-flood 13:25 Mid-ebb 21:23	4-Feb	5-Feb 24hr TSP Impact WQM Mid-flood 15:16 Mid-ebb 22:37	6-Feb 1hr TSP
7-Feb	8-Feb	9-Feb Impact WQM Mid-ebb 13:05 Mid-flood 18:41	10-Feb	11-Feb 24hr TSP Noise (daytime) (M1a, M2b, M3a, M4b, M5b, M6) Impact WQM Mid-flood 8:35 Mid-ebb 14:29	12-Feb 24hr TSP (CMA1b) 1hr TSP	13-Feb Impact WQM Mid-flood 9:59 Mid-ebb 16:09
14-Feb	15-Feb Impact WQM Mid-flood 11:36 Mid-ebb 18:30	16-Feb Noise (daytime) (M1a, M2b, M3a, M4b, M5b, M6)	17-Feb 24hr TSP Impact WQM Mid-flood 13:27 Mid-ebb 21:08	18-Feb 1hr TSP	19-Feb Impact WQM Mid-flood 15:45 Mid-ebb 22:51	20-Feb
21-Feb	22-Feb Noise (daytime) (M2b) Impact WQM Mid-flood 12:28 Mid-ebb 18:05	23-Feb 24hr TSP Noise (daytime) (M1a, M3a, M4b, M5b, M6)	24-Feb 1hr TSP Impact WQM Mid-ebb 13:24 Mid-flood 19:20	25-Feb	26-Feb Impact WQM Mid-flood 8:31 Mid-ebb 14:27	

Remarks: Due to blockage of acesses at Water Quality Monitoring Station C7 by obstruction of electric circuit box, the water quality monitoring at water quality monitoring station C7 was cancelled on 5 February 2016 during flood

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

Tentative Environmental Monitoring Schedule
March 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						27-Feb
28-Feb	29-Feb 24hr TSP Noise (daytime) Impact WQM Mid-flood 9:59 Mid-ebb 16:23	1-Mar 1hr TSP Noise (daytime)	2-Mar Impact WQM Mid-flood 11:21 Mid-ebb 18:48	3-Mar	4-Mar Impact WQM Mid-flood 13:37 Mid-ebb 21:19	5-Mar 24hr TSP
6-Mar	7-Mar 1hr TSP Noise (daytime) Impact WQM Mid-ebb 11:26 Mid-flood 16:51	8-Mar Noise (daytime)	9-Mar Impact WQM Mid-ebb 12:41 Mid-flood 18:35	10-Mar	11-Mar 24hr TSP Impact WQM Mid-ebb 7:58 Mid-flood 14:04	12-Mar 1hr TSP
13-Mar	14-Mar Noise (daytime) Impact WQM Mid-flood 9:58 Mid-ebb 16:36	15-Mar Noise (daytime)	16-Mar Impact WQM Mid-flood 11:48 Mid-ebb 19:22	17-Mar 24hr TSP	18-Mar 1hr TSP Impact WQM Mid-flood 14:21 Mid-ebb 21:38	19-Mar
20-Mar	21-Mar Noise (daytime) Impact WQM Mid-ebb 11:33 Mid-flood 17:16	22-Mar Noise (daytime)	23-Mar 24hr TSP Impact WQM Mid-ebb 12:28 Mid-flood 18:34	24-Mar 1hr TSP	25-Mar Impact WQM Mid-flood 7:22 Mid-ebb 13:26	26-Mar

Appendix 5.2

Noise Monitoring Results and Graphical Presentations

Noise Monitoring Result

Day Time (0700 - 1900hrs on normal weekdays)

Location: M1a - Harbour Road Sports Centre

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30-min)					
02/02/16	13:00	Fine	77.1	79.5	72.5	72	75	75
11/02/16	8:45	Fine	75.4	77.0	72.5	72	73	75
16/02/16	10:54	Fine	79.1	81.0	76.0	72	**78**	75
23/02/16	10:34	Cloudy	82.7	83.5	81.5	72	**82**	75

Location: M2b - Noon-day gun area

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30-min)					
02/02/16	13:55	Fine	67.5	70.0	66.5	68	68	75
11/02/16	9:40	Fine	67.6	69.0	65.5	68	68	75
16/02/16	13:00	Fine	67.3	68.5	65.0	68	67	75
22/02/16	14:30	Cloudy	67.1	68.0	65.0	68	67	75

Location: M3a - Tung Lo Wan Fire Station

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30-min)					
02/02/16	14:41	Fine	64.9	66.5	62.5	69	65	75
11/02/16	10:24	Fine	65.7	66.0	64.0	69	66	75
16/02/16	13:45	Fine	65.9	67.0	64.0	69	66	75
23/02/16	13:00	Cloudy	65.7	67.0	63.5	69	66	75

Location: M4b - Victoria Centre

Date	Time	Weather	Measurement Noise Level			Baseline Noise Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30min)					
02/02/16	15:25	Fine	65.1	66.0	61.0	67	65	75
11/02/16	11:03	Fine	64.5	66.0	61.5	67	65	75
16/02/16	14:25	Fine	68.5	71.0	63.5	67	62	75
23/02/16	13:40	Cloudy	67.2	69.0	64.0	67	67	75

Location: M5b - City Garden

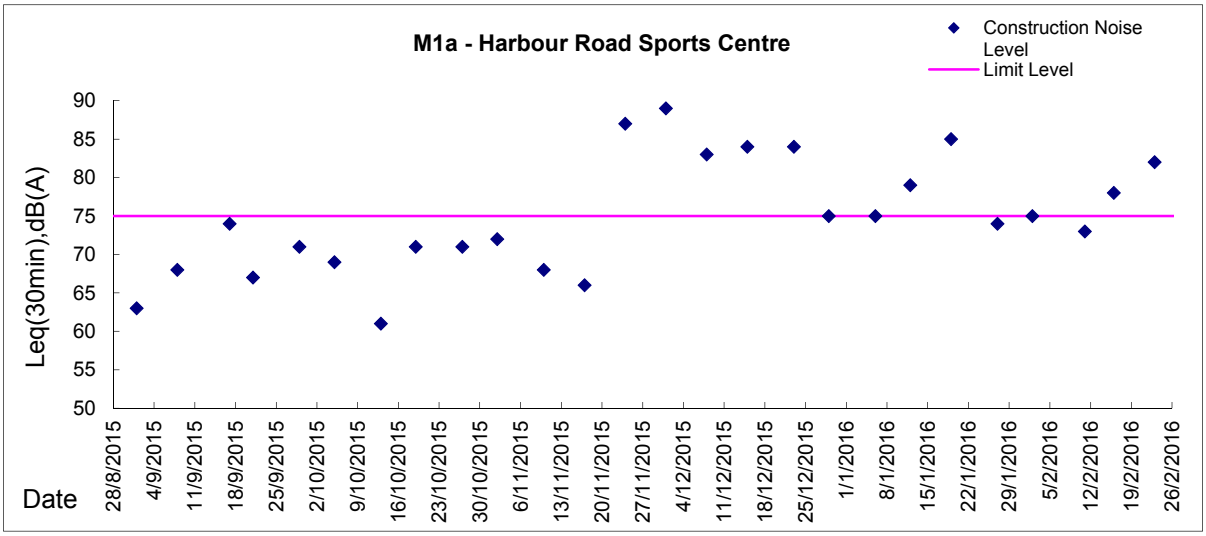
Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30min)					
03/02/16	14:25	Fine	68.8	70.5	63.0	68	61	75
11/02/16	14:57	Fine	66.1	67.5	63.5	68	66	75
16/02/16	15:05	Fine	66.5	68.0	64.0	68	67	75
23/02/16	14:20	Cloudy	67.1	68.5	64.5	68	67	75

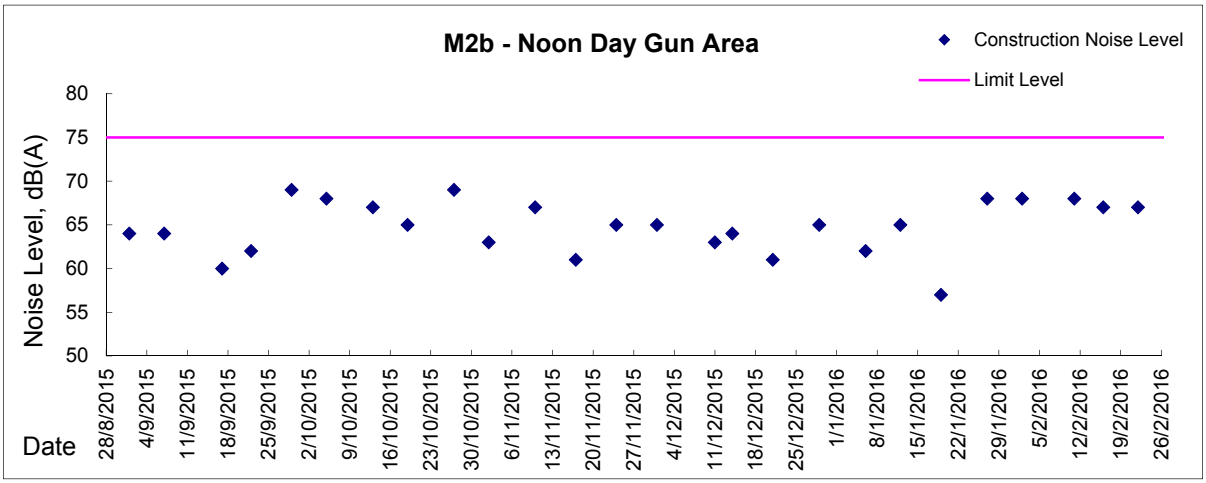
Location: M6 - HK Baptist Church Henrietta Secondary School

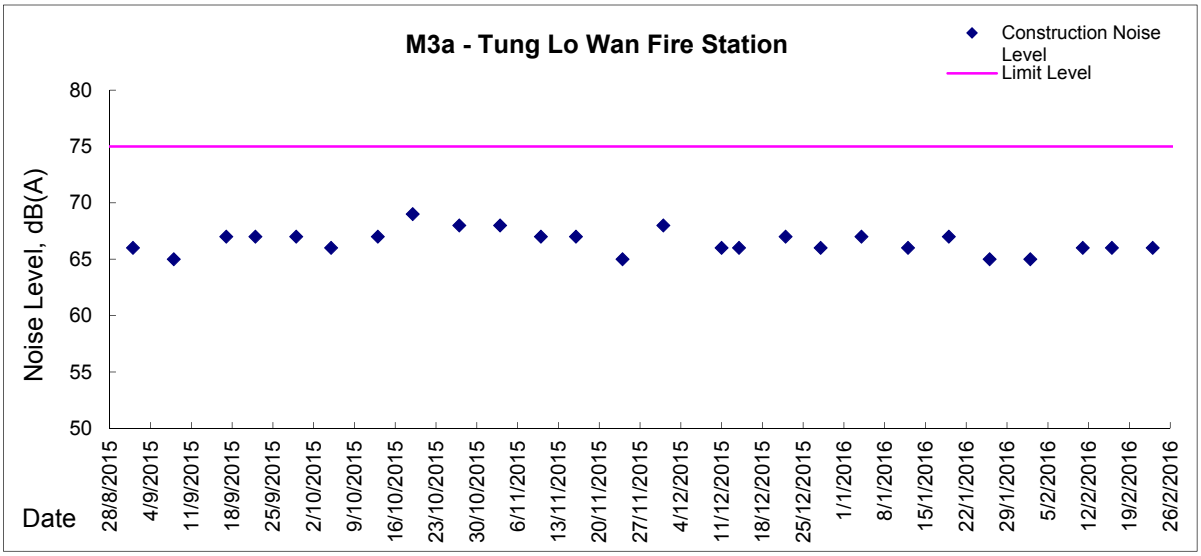
Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30-min)					
03/02/16	15:05	Fine	68.1	69.5	66.0	71	68	70
11/02/16	15:35	Fine	70.4	71.5	68.0	71	70	70
16/02/16	15:42	Fine	71.9	73.0	70.0	71	66	70
23/02/16	15:00	Cloudy	69.9	71.5	67.0	71	70	70

Graphic Presentation of Noise Monitoring Result

Day Time (0700 - 1900hrs on normal weekdays)

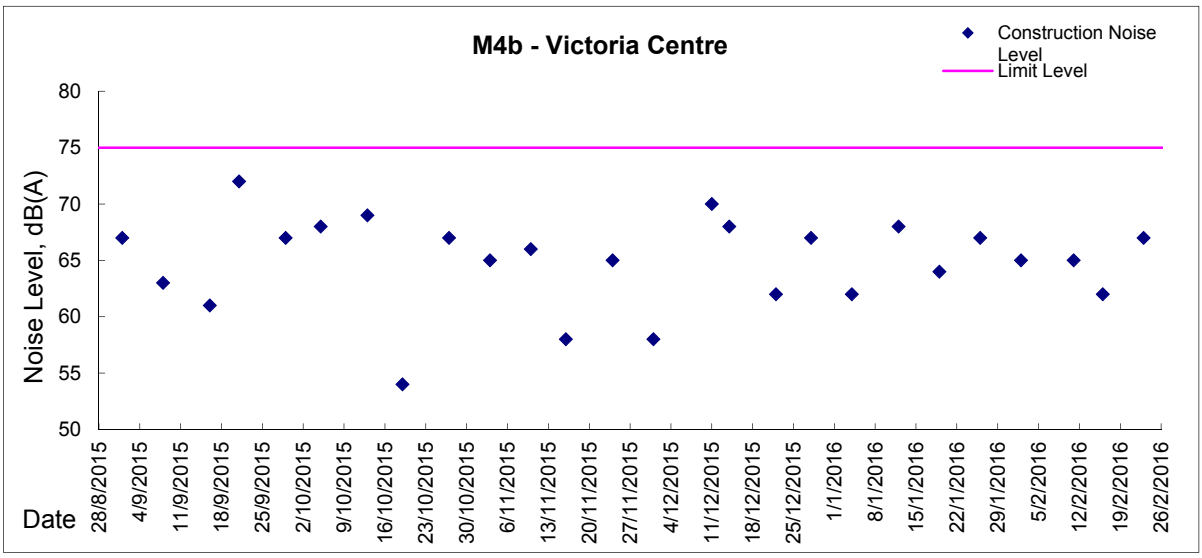


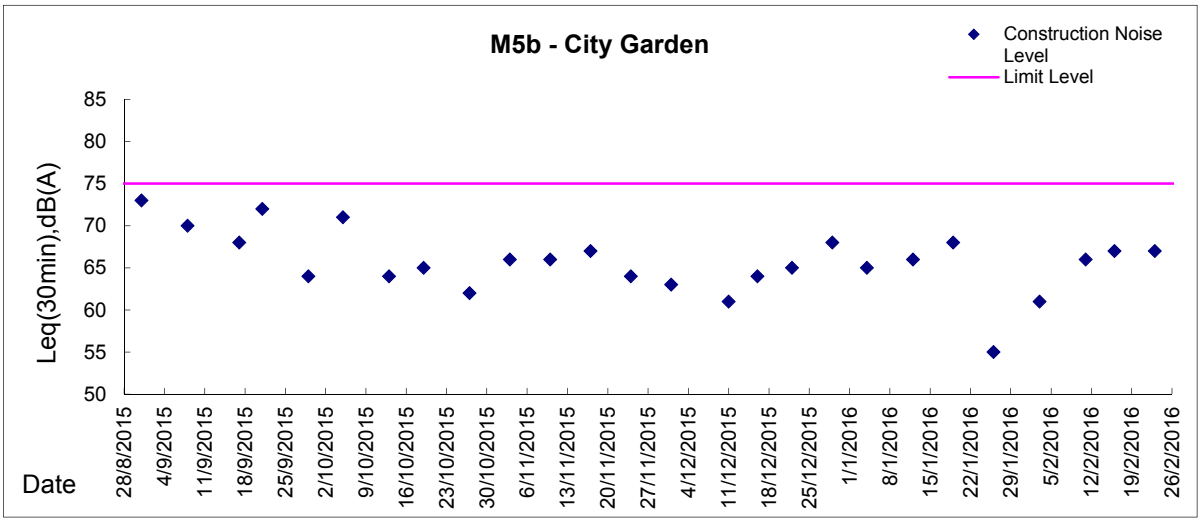


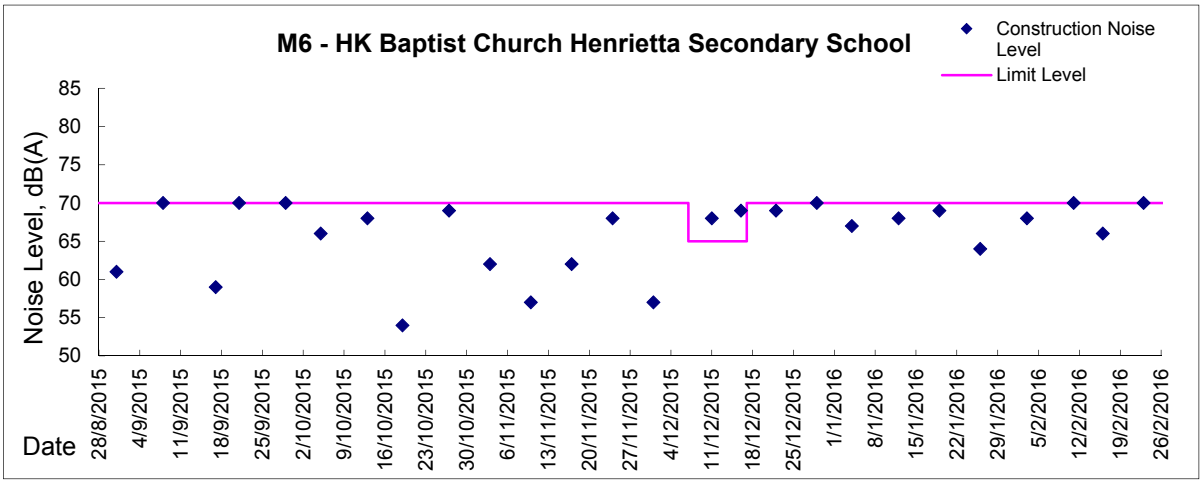


Graphic Presentation of Noise Monitoring Result

Day Time (0700 - 1900hrs on normal weekdays)







Appendix 5.3

Air Quality Monitoring Results and Graphical Presentations, and odour Patrol Results

Location: CMA1b - Oil Street Site Office

Report on 24-hour TSP monitoring

Action Level (μ g/m3) - 176.7

Limit Level (μ g/m3) - 260

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu g/m^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
27-Jan-16	8:00	Cloudy	014413	2.7780	2.9513	7600.68	7624.68	24.00	1.19	1.18	1.18	1705	101.6
2-Feb-16	14:03	Cloudy	014554	2.8401	2.9262	7630.68	7654.68	24.00	1.20	1.20	1.20	1730	49.8
5-Feb-16	8:00	Fine	014553	2.8310	3.0142	7654.68	7678.68	24.00	1.20	1.20	1.20	1727	106.1
12-Feb-16	14:05	Fine	014523	2.8764	2.9676	7685.99	7709.99	24.00	1.19	1.18	1.19	1707	53.4
17-Feb-16	8:00	Rainy	014776	2.8458	2.9811	7709.99	7733.99	24.00	1.20	1.20	1.20	1726	78.4
23-Feb-16	8:00	Cloudy	014764	2.8231	2.9163	7736.99	7760.99	24.00	1.22	1.22	1.22	1759	53.0

Remarks: Due to interruption of electricity, the 24hr TSP was rescheduled from 1 and 11 February 2016 to 2 and 12 February 2016 respectively.

Report on 1-hour TSP monitoring

Action Level (μ g/m3) - 320.1

Limit Level (μ g/m3) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu g/m^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
28-Jan-16	8:55	Rainy	014416	2.8247	2.8378	7624.68	7625.68	1.00	1.18	1.18	1.18	71	184.9
28-Jan-16	10:35	Rainy	014419	2.7953	2.8084	7625.68	7626.68	1.00	1.18	1.18	1.18	71	184.9
28-Jan-16	13:00	Rainy	014283	2.8982	2.9103	7626.68	7627.68	1.00	1.18	1.18	1.18	71	170.8
2-Feb-16	9:50	Cloudy	014159	2.8055	2.8080	7627.68	7628.68	1.00	1.20	1.20	1.20	72	34.6
2-Feb-16	11:00	Cloudy	014151	2.8136	2.8158	7628.68	7629.68	1.00	1.20	1.20	1.20	72	30.5
2-Feb-16	13:00	Cloudy	014555	2.8488	2.8499	7629.68	7630.68	1.00	1.30	1.30	1.30	78	14.1
6-Feb-16	9:13	Fine	014547	2.8408	2.8466	7678.68	7679.68	1.00	1.20	1.20	1.20	72	80.5
6-Feb-16	10:30	Fine	014544	2.8596	2.8680	7479.68	7480.68	1.00	1.20	1.20	1.20	72	116.6
6-Feb-16	13:00	Fine	014541	2.8583	2.8634	7680.68	7681.68	1.00	1.20	1.20	1.20	72	70.8
12-Feb-16	8:40	Fine	014534	2.8338	2.8412	7682.99	7683.99	1.00	1.19	1.19	1.19	71	103.8
12-Feb-16	10:05	Fine	014531	2.8713	2.8769	7683.99	7684.99	1.00	1.19	1.19	1.19	71	78.6
12-Feb-16	13:00	Fine	014528	2.8734	2.8792	7684.99	7685.99	1.00	1.19	1.19	1.19	71	81.4
18-Feb-16	8:45	Rainy	014773	2.8142	2.8214	7733.99	7734.99	1.00	1.25	1.25	1.25	75	96.4
18-Feb-16	10:10	Rainy	014770	2.8163	2.8206	7734.99	7735.99	1.00	1.25	1.25	1.25	75	57.6
18-Feb-16	13:00	Rainy	014767	2.8112	2.8148	7735.99	7736.99	1.00	1.25	1.25	1.25	75	48.2
24-Feb-16	9:00	Cloudy	014761	2.8322	2.8355	7760.99	7761.99	1.00	1.20	1.20	1.20	72	45.8
24-Feb-16	10:25	Cloudy	014758	2.8009	2.8030	7761.99	7762.99	1.00	1.20	1.20	1.20	72	29.2
24-Feb-16	13:00	Cloudy	014755	2.7861	2.7901	7762.99	7763.99	1.00	1.20	1.20	1.20	72	55.6

Location: CMA2a - Causeway Bay Community Centre

Report on 24-hour TSP monitoring
Action Level (μg/m3) - 169.5
Limit Level (μg/m3) - 260

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu g/m^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
27-Jan-16	8:00	Cloudy	014398	2.8024	2.9520	17250.02	17274.02	24.00	1.24	1.23	1.24	1783	83.9
1-Feb-16	8:00	Cloudy	014279	2.8705	2.8947	17277.05	17301.05	24.00	1.14	1.15	1.15	1649	14.7
5-Feb-16	8:00	Fine	014145	2.7881	2.8972	17304.05	17328.05	24.00	1.14	1.14	1.14	1639	66.6
11-Feb-16	8:00	Fine	014663	2.8234	2.9796	17331.06	17355.06	24.00	1.12	1.12	1.12	1618	96.5
17-Feb-16	8:00	Rainy	014650	2.7973	2.8994	17358.06	17382.06	24.00	1.14	1.14	1.14	1642	62.2
23-Feb-16	8:00	Cloudy	014649	2.8184	2.8800	17385.06	17409.06	24.00	1.14	1.14	1.14	1640	37.6

Report on 1-hour TSP monitoring
Action Level (μg/m3) - 323.4
Limit Level (μg/m3) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu g/m^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
28-Jan-16	9:00	Rainy	014186	2.7924	2.8017	17274.02	17275.02	1.00	1.23	1.23	1.23	74	125.6
28-Jan-16	10:34	Rainy	014277	2.8830	2.8910	17275.02	17276.02	1.00	1.23	1.23	1.23	74	108.1
28-Jan-16	13:00	Rainy	014195	2.8287	2.8363	17276.02	17277.02	1.00	1.23	1.23	1.23	74	102.7
2-Feb-16	10:05	Cloudy	014154	2.8028	2.8046	17301.05	17302.05	1.00	1.15	1.15	1.15	69	26.1
2-Feb-16	13:00	Cloudy	014165	2.8478	2.8499	17302.05	17303.05	1.00	1.15	1.15	1.15	69	30.5
2-Feb-16	14:05	Cloudy	014147	2.8116	2.8139	17303.05	17304.05	1.00	1.15	1.15	1.15	69	33.4
6-Feb-16	8:05	Fine	014671	2.8529	2.8571	17328.05	17329.05	1.00	1.14	1.14	1.14	68	61.4
6-Feb-16	10:00	Fine	014667	2.8686	2.8736	17329.06	17330.06	1.00	1.27	1.27	1.27	76	65.5
6-Feb-16	13:00	Fine	014664	2.8174	2.8231	17330.06	17331.06	1.00	1.14	1.14	1.14	68	83.3
12-Feb-16	8:52	Fine	014681	2.7728	2.7787	17355.06	17356.06	1.00	1.12	1.12	1.12	67	87.5
12-Feb-16	10:13	Fine	014660	2.8084	2.8119	17356.06	17357.06	1.00	1.12	1.12	1.12	67	51.9
12-Feb-16	13:00	Fine	014655	2.8153	2.8187	17357.06	17358.06	1.00	1.12	1.12	1.12	67	50.4
18-Feb-16	8:50	Rainy	014729	2.7923	2.7963	17382.06	17383.06	1.00	1.14	1.14	1.14	68	58.6
18-Feb-16	10:07	Rainy	014733	2.8175	2.8219	17383.06	17384.06	1.00	1.14	1.14	1.14	68	64.4
18-Feb-16	13:00	Rainy	014686	2.8080	2.8098	17384.06	17385.06	1.00	1.14	1.14	1.14	68	26.3
24-Feb-16	8:58	Cloudy	014722	2.8025	2.8043	17409.06	17410.06	1.00	1.14	1.14	1.14	69	26.3
24-Feb-16	10:20	Cloudy	014696	2.8345	2.8367	17410.06	17411.06	1.00	1.14	1.14	1.14	69	32.1
24-Feb-16	13:00	Cloudy	014700	2.8204	2.8237	17411.06	17412.06	1.00	1.14	1.14	1.14	69	48.1

Location: CMA3a - CWB PRE Site Office Area

Report on 24-hour TSP monitoring
Action Level (μg/m3) - 171
Limit Level (μg/m3) - 260

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, μg/m^3
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
27-Jan-16	8:00	Cloudy	014411	2.7879	2.9090	4742.15	4766.15	24.00	1.33	1.32	1.33	1913	63.3
1-Feb-16	8:00	Cloudy	014281	2.8703	2.9149	4769.15	4793.15	24.00	1.36	1.37	1.37	1966	22.7
5-Feb-16	8:00	Fine	013701	2.8026	2.9883	4796.15	4820.15	24.00	1.36	1.36	1.36	1958	94.9
11-Feb-16	8:00	Fine	014538	2.8485	3.0794	4823.15	4847.15	24.00	1.35	1.35	1.35	1940	119.0
17-Feb-16	8:00	Rainy	014526	2.8668	2.9897	4850.15	4874.15	24.00	1.36	1.36	1.36	1960	62.7
23-Feb-16	8:00	Cloudy	014765	2.8351	2.9475	4877.15	4901.15	24.00	1.36	1.36	1.36	1959	57.4

Report on 1-hour TSP monitoring
Action Level (μg/m3) - 311.3
Limit Level (μg/m3) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, μg/m^3
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
28-Jan-16	8:45	Rainy	014415	2.8438	2.8515	4766.15	4767.15	1.00	1.24	1.24	1.24	75	103.1
28-Jan-16	10:25	Rainy	014418	2.7916	2.7978	4767.15	4768.15	1.00	1.24	1.24	1.24	75	83.0
28-Jan-16	13:00	Rainy	014421	2.7919	2.8016	4768.15	4769.15	1.00	1.24	1.24	1.24	75	129.9
2-Feb-16	9:50	Cloudy	014156	2.8064	2.8084	4793.15	4794.15	1.00	1.24	1.24	1.24	74	26.9
2-Feb-16	11:00	Cloudy	014152	2.8210	2.8230	4794.15	4795.15	1.00	1.24	1.24	1.24	74	26.9
2-Feb-16	13:00	Cloudy	014149	2.7918	2.7964	4795.15	4796.15	1.00	1.24	1.24	1.24	74	61.8
6-Feb-16	8:50	Fine	014548	2.8264	2.8383	4820.15	4821.15	1.00	1.23	1.23	1.23	74	160.8
6-Feb-16	10:15	Fine	014545	2.8478	2.8569	4821.15	4822.15	1.00	1.23	1.23	1.23	74	123.0
6-Feb-16	13:00	Fine	014542	2.8666	2.8742	4822.15	4823.15	1.00	1.23	1.23	1.23	74	102.7
12-Feb-16	8:25	Fine	014535	2.8363	2.8455	4847.15	4848.15	1.00	1.22	1.22	1.22	73	126.2
12-Feb-16	9:50	Fine	014532	2.8472	2.8531	4848.15	4849.15	1.00	1.22	1.22	1.22	73	80.9
12-Feb-16	10:55	Fine	014529	2.8607	2.8668	4849.15	4850.15	1.00	1.22	1.22	1.22	73	83.7
18-Feb-16	8:20	Rainy	014774	2.8054	2.8099	4874.15	4875.15	1.00	1.23	1.23	1.23	74	60.9
18-Feb-16	9:45	Rainy	014771	2.8066	2.8115	4875.15	4876.15	1.00	1.23	1.23	1.23	74	66.3
18-Feb-16	10:50	Rainy	014768	2.8196	2.8235	4876.15	4877.15	1.00	1.23	1.23	1.23	74	52.8
24-Feb-16	8:40	Cloudy	014762	2.7981	2.8001	4901.15	4902.15	1.00	1.24	1.24	1.24	74	27.0
24-Feb-16	10:05	Cloudy	014759	2.7978	2.8011	4902.15	4903.15	1.00	1.24	1.24	1.24	74	44.5
24-Feb-16	13:00	Cloudy	014756	2.8389	2.8411	4903.15	4904.15	1.00	1.24	1.24	1.24	74	29.7

Location: CMA4a - SPCA

Report on 24-hour TSP monitoring
Action Level (μg/m3) - 171.2
Limit Level (μg/m3) - 260

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu g/m^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
27-Jan-16	8:00	Cloudy	012025	2.8675	2.9961	21527.13	21551.13	24.00	1.33	1.32	1.33	1913	67.2
1-Feb-16	8:00	Cloudy	014280	2.8827	2.9312	21554.13	21578.13	24.00	1.31	1.32	1.31	1893	25.6
5-Feb-16	8:00	Fine	01429	2.7769	2.9383	21581.13	21605.13	24.00	1.31	1.36	1.33	1921	84.0
11-Feb-16	8:00	Fine	014665	2.8869	3.1604	21608.14	21632.14	24.00	1.25	1.25	1.25	1796	152.3
17-Feb-16	8:00	Rainy	014652	2.8159	2.9215	21635.14	21659.14	24.00	1.26	1.26	1.26	1814	58.2
23-Feb-16	8:00	Cloudy	014401	2.7933	2.8856	21662.14	21686.14	24.00	1.31	1.31	1.31	1886	48.9

Report on 1-hour TSP monitoring
Action Level (μg/m3) - 312.5
Limit Level (μg/m3) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu g/m^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
28-Jan-16	8:45	Rainy	014187	2.8207	2.8293	21551.13	21552.13	1.00	1.32	1.32	1.32	79	108.2
28-Jan-16	10:21	Rainy	014160	2.7939	2.7998	21552.13	21553.13	1.00	1.32	1.32	1.32	79	74.2
28-Jan-16	13:00	Rainy	013625	2.7824	2.7936	21553.13	21554.13	1.00	1.32	1.32	1.32	79	140.9
2-Feb-16	9:40	Cloudy	014157	2.8123	2.8154	21578.13	21579.13	1.00	1.27	1.27	1.27	76	40.8
2-Feb-16	11:00	Cloudy	014167	2.8136	2.8214	21579.13	21580.13	1.00	1.27	1.27	1.27	76	102.7
2-Feb-16	13:00	Cloudy	014163	2.8090	2.8116	21580.13	21581.13	1.00	1.27	1.27	1.27	76	34.2
6-Feb-16	8:57	Fine	014676	2.8314	2.8383	21605.14	21606.14	1.00	1.31	1.31	1.31	79	87.7
6-Feb-16	10:12	Fine	014672	2.8551	2.8612	21606.14	21607.14	1.00	1.26	1.26	1.26	76	80.7
6-Feb-16	13:00	Fine	014668	2.8720	2.8795	21607.14	21608.14	1.00	1.31	1.31	1.31	79	95.4
12-Feb-16	8:27	Fine	014683	2.7907	2.8022	21632.14	21633.14	1.00	1.32	1.32	1.32	79	145.0
12-Feb-16	9:57	Fine	014662	2.8035	2.8116	21633.14	21634.14	1.00	1.32	1.32	1.32	79	102.1
12-Feb-16	11:00	Fine	014657	2.8225	2.8301	21634.14	21635.14	1.00	1.30	1.30	1.30	78	97.7
18-Feb-16	8:32	Rainy	014728	2.7838	2.7889	21659.14	21660.14	1.00	1.26	1.26	1.26	76	67.5
18-Feb-16	9:46	Rainy	014732	2.8086	2.8145	21660.14	21661.14	1.00	1.31	1.31	1.31	79	75.1
18-Feb-16	10:54	Rainy	014736	2.8123	2.8151	21661.14	21662.14	1.00	1.26	1.26	1.26	76	37.1
24-Feb-16	8:40	Cloudy	014721	2.8089	2.8128	21686.15	21687.15	1.00	1.31	1.31	1.31	79	49.5
24-Feb-16	10:05	Cloudy	014695	2.8196	2.8221	21687.15	21688.15	1.00	1.36	1.36	1.36	82	30.6
24-Feb-16	13:00	Cloudy	014699	2.8273	2.8309	21688.15	21689.15	1.00	1.31	1.31	1.31	79	45.7

Location: CMA5b - Pedestrian Plaza

Report on 24-hour TSP monitoring
Action Level (μg/m3) - 181
Limit Level (μg/m3) - 260

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu g/m^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
27-Jan-16	8:00	Cloudy	014412	2.7928	2.9074	6071.07	6095.07	24.00	0.75	0.74	0.74	1072	106.9
1-Feb-16	8:00	Cloudy	014282	2.8700	2.9471	6098.07	6122.07	24.00	0.79	0.79	0.79	1137	67.8
5-Feb-16	8:00	Fine	013702	2.7972	2.9340	6125.07	6149.07	24.00	0.78	0.78	0.78	1126	121.4
11-Feb-16	8:00	Fine	014666	2.8715	3.0461	6152.07	6176.07	24.00	0.77	0.77	0.77	1105	158.0
17-Feb-16	8:00	Rainy	014653	2.8074	2.9508	6179.07	6203.07	24.00	0.79	0.78	0.78	1129	127.0
23-Feb-16	8:00	Cloudy	014688	2.8102	2.8746	6206.07	6230.07	24.00	0.78	0.79	0.78	1128	57.1

Report on 1-hour TSP monitoring
Action Level (μg/m3) - 332
Limit Level (μg/m3) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu g/m^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
28-Jan-16	8:33	Rainy	014188	2.8374	2.8418	6095.07	6096.07	1.00	0.81	0.81	0.81	48	90.8
28-Jan-16	9:40	Rainy	014278	2.8737	2.8792	6096.07	6097.07	1.00	0.81	0.81	0.81	48	113.5
28-Jan-16	13:00	Rainy	014184	2.8151	2.8172	6097.07	6098.07	1.00	0.81	0.81	0.81	48	43.3
2-Feb-16	9:30	Cloudy	014158	2.8041	2.8088	6122.07	6123.07	1.00	0.79	0.79	0.79	48	98.9
2-Feb-16	10:50	Cloudy	014194	2.8076	2.8116	6123.07	6124.07	1.00	0.79	0.79	0.79	48	84.1
2-Feb-16	13:00	Cloudy	014162	2.8185	2.8242	6124.07	6125.07	1.00	0.79	0.86	0.83	50	114.9
6-Feb-16	8:47	Fine	014677	2.8131	2.8180	6149.07	6150.07	1.00	0.78	0.78	0.78	47	104.1
6-Feb-16	10:00	Fine	014673	2.8514	2.8616	6150.07	6151.07	1.00	0.92	0.92	0.92	55	184.7
6-Feb-16	13:00	Fine	014669	2.8546	2.8614	6151.07	6152.07	1.00	0.78	0.78	0.78	47	144.5
12-Feb-16	8:16	Fine	014684	2.7879	2.7952	6176.07	6177.07	1.00	0.77	0.77	0.77	46	158.7
12-Feb-16	9:42	Fine	014679	2.8102	2.8150	6177.07	6178.07	1.00	0.77	0.83	0.80	48	100.0
12-Feb-16	10:45	Fine	014658	2.8056	2.8108	6178.07	6179.07	1.00	0.77	0.77	0.77	46	113.0
18-Feb-16	8:20	Rainy	014727	2.8010	2.8039	6203.07	6204.07	1.00	0.78	0.78	0.78	47	61.8
18-Feb-16	9:36	Rainy	014731	2.8037	2.8094	6204.07	6205.07	1.00	0.78	0.78	0.78	47	121.4
18-Feb-16	10:43	Rainy	014735	2.8255	2.8337	6205.07	6206.07	1.00	0.85	0.85	0.85	51	160.7
24-Feb-16	8:27	Cloudy	014720	2.8182	2.8225	6230.08	6231.08	1.00	0.79	0.79	0.79	47	91.1
24-Feb-16	9:55	Cloudy	014724	2.8219	2.8265	6231.08	6232.08	1.00	0.79	0.79	0.79	47	97.5
24-Feb-16	11:00	Cloudy	014698	2.8358	2.8406	6232.08	6233.08	1.00	0.79	0.79	0.79	47	101.7

Location: CMA6a - WD2 PRE Office

Report on 24-hour TSP monitoring

Action Level - 187.3 µg/m3

Limit Level - 260 µg/m3

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu g/m^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
28-Jan-16	13:00	Rainy	014525	2.8643	2.9188	21111.17	21135.17	24.00	1.14	1.14	1.14	1647	33.1
1-Feb-16	8:00	Cloudy	014558	2.8480	2.8966	21135.19	21159.19	24.00	1.25	1.26	1.25	1806	26.9
5-Feb-16	8:00	Fine	014549	2.8569	3.0908	21162.71	21186.71	24.00	1.25	1.25	1.25	1796	130.2
11-Feb-16	8:00	Fine	014539	2.8235	3.0444	21189.71	21213.71	24.00	1.30	1.29	1.30	1865	118.4
17-Feb-16	8:00	Rainy	014527	2.8794	3.0325	21270.25	21294.25	24.00	1.31	1.31	1.31	1889	81.1
23-Feb-16	8:00	Cloudy	014766	2.8027	2.8985	21297.25	21321.25	24.00	1.25	1.25	1.25	1798	53.3

Remarks: Due to interruption of electricity, the 24hr TSP was rescheduled from 27 January 2016 to 28 January 2016.

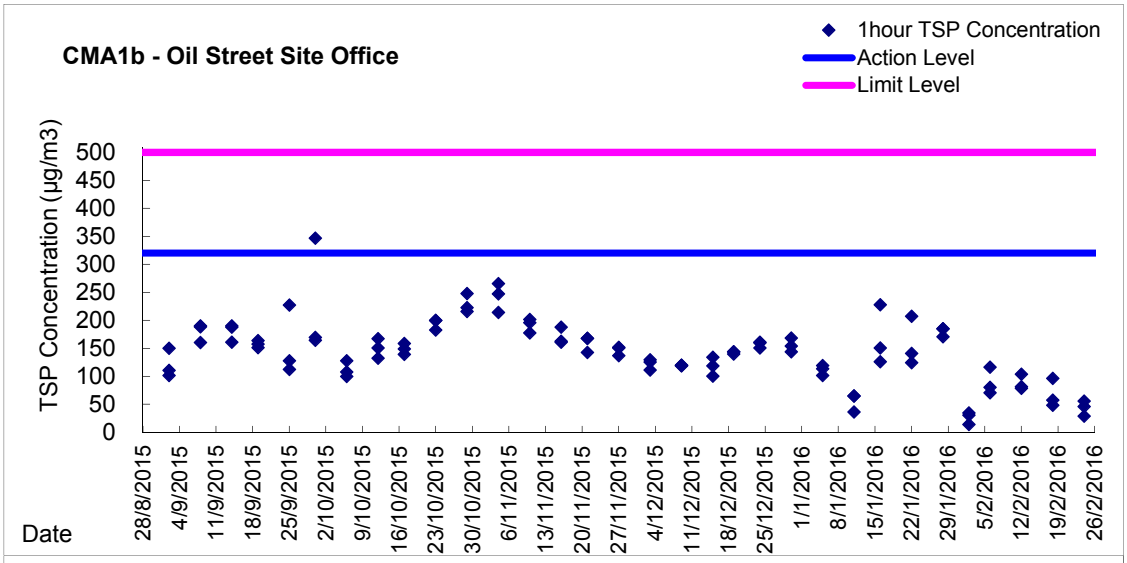
Report on 1-hour TSP monitoring

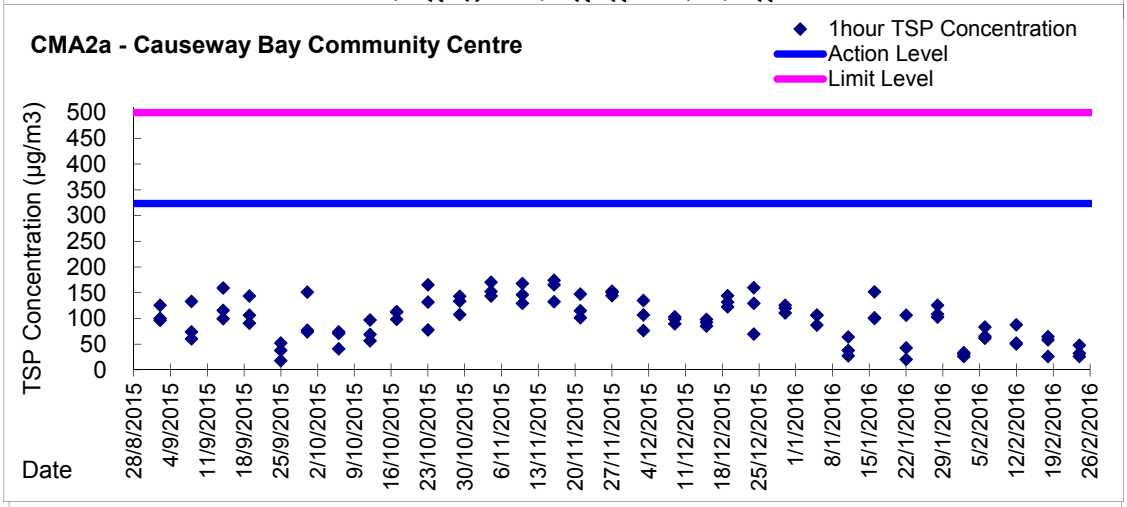
Action Level - 300.1 μ g/m^3

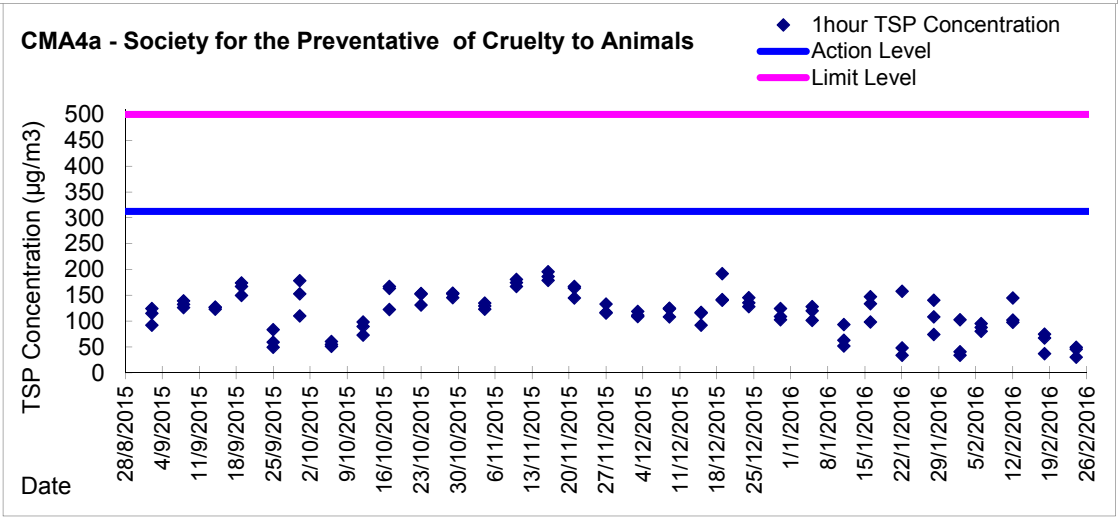
Limit Level - 500 μ g/m3

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu g/m^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
28-Jan-16	8:25	Rainy	014414	2.7825	2.7880	21108.17	21109.17	1.00	1.14	1.14	1.14	69	80.1
28-Jan-16	9:35	Rainy	014417	2.7845	2.7898	21109.17	21110.17	1.00	1.14	1.14	1.14	69	77.2
28-Jan-16	10:55	Rainy	014420	2.7965	2.8031	21110.17	21111.17	1.00	1.14	1.14	1.14	69	96.1
2-Feb-16	9:20	Cloudy	014557	2.8402	2.8428	21159.19	21160.19	1.00	1.26	1.26	1.26	75	34.5
2-Feb-16	10:28	Cloudy	014551	2.8511	2.8524	21160.19	21161.19	1.00	1.26	1.26	1.26	75	17.2
2-Feb-16	13:00	Cloudy	014150	2.8026	2.8064	21161.19	21162.19	1.00	1.38	1.38	1.38	83	45.8
6-Feb-16	8:30	Fine	014153	2.8130	2.8198	21186.71	21187.71	1.00	1.31	1.31	1.31	79	86.4
6-Feb-16	9:45	Fine	014546	2.8693	2.8759	21187.71	21188.71	1.00	1.37	1.37	1.37	82	80.1
6-Feb-16	10:50	Fine	014543	2.8680	2.8732	21188.71	21189.71	1.00	1.31	1.31	1.31	79	66.1
12-Feb-16	8:10	Fine	014536	2.8550	2.8623	21213.71	21214.71	1.00	1.23	1.23	1.23	74	98.6
12-Feb-16	9:15	Fine	014533	2.8427	2.8499	21214.71	21215.71	1.00	1.23	1.23	1.23	74	97.3
12-Feb-16	10:30	Fine	014530	2.8603	2.8670	21215.71	21216.71	1.00	1.23	1.23	1.23	74	90.5
18-Feb-16	8:03	Rainy	014775	2.8357	2.8402	21294.25	21295.25	1.00	1.31	1.31	1.31	79	57.3
18-Feb-16	9:20	Rainy	014772	2.8082	2.8135	21295.25	21296.25	1.00	1.31	1.31	1.31	79	67.4
18-Feb-16	10:30	Rainy	014769	2.7863	2.7899	21296.25	21297.25	1.00	1.31	1.31	1.31	79	45.8
24-Feb-16	8:22	Cloudy	014763	2.8228	2.8270	21321.25	21322.25	1.00	1.28	1.28	1.28	77	54.6
24-Feb-16	9:45	Cloudy	014760	2.8273	2.8298	21322.25	21323.25	1.00	1.28	1.28	1.28	77	32.5
24-Feb-16	11:00	Cloudy	014757	2.8094	2.8124	21323.25	21324.25	1.00	1.28	1.28	1.28	77	39.0

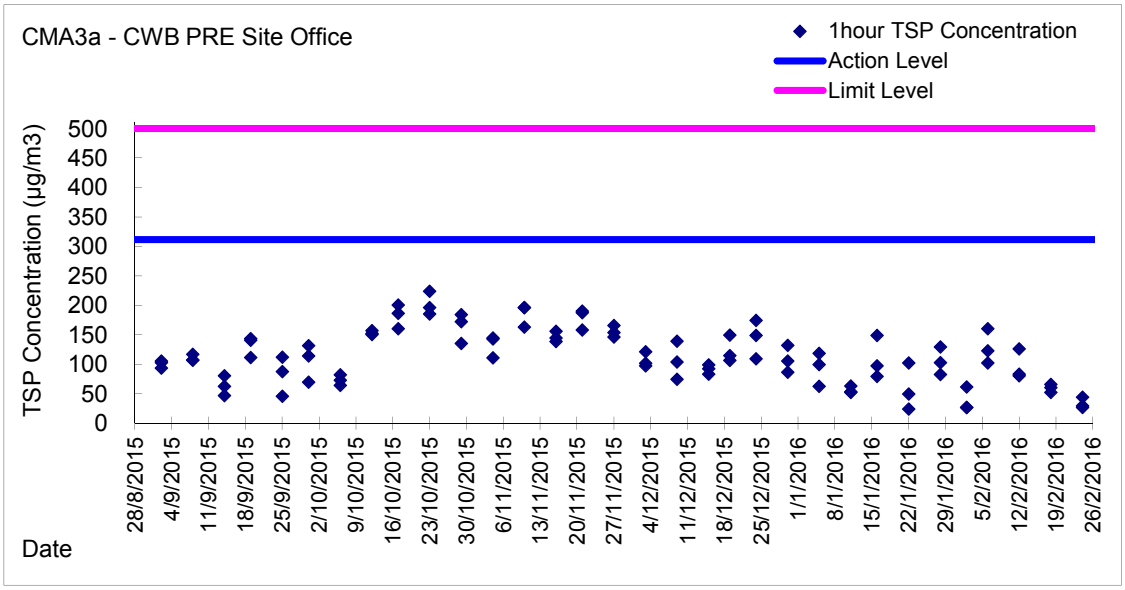
Graphic Presentation of 1 hour TSP Result

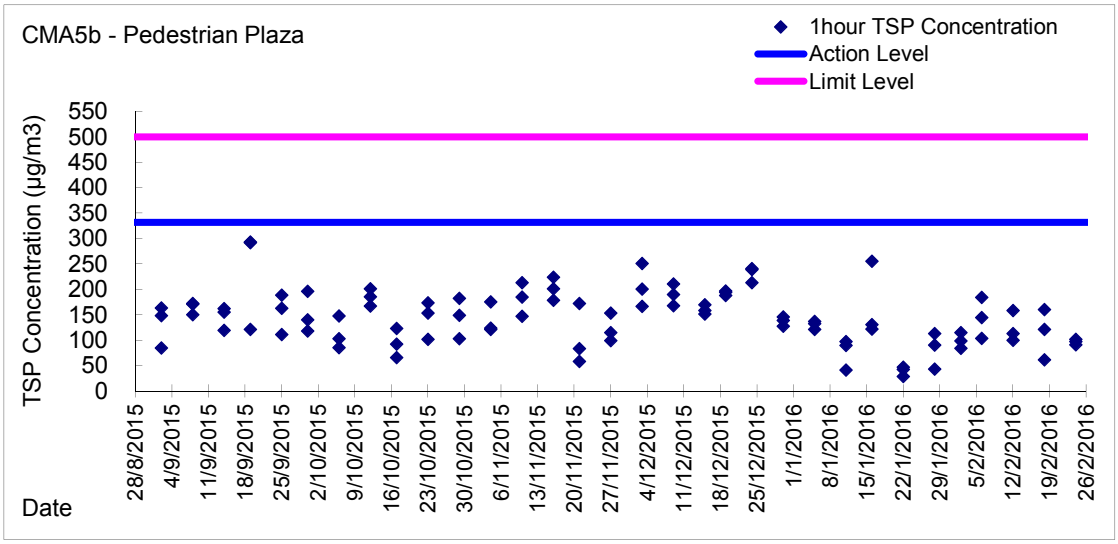


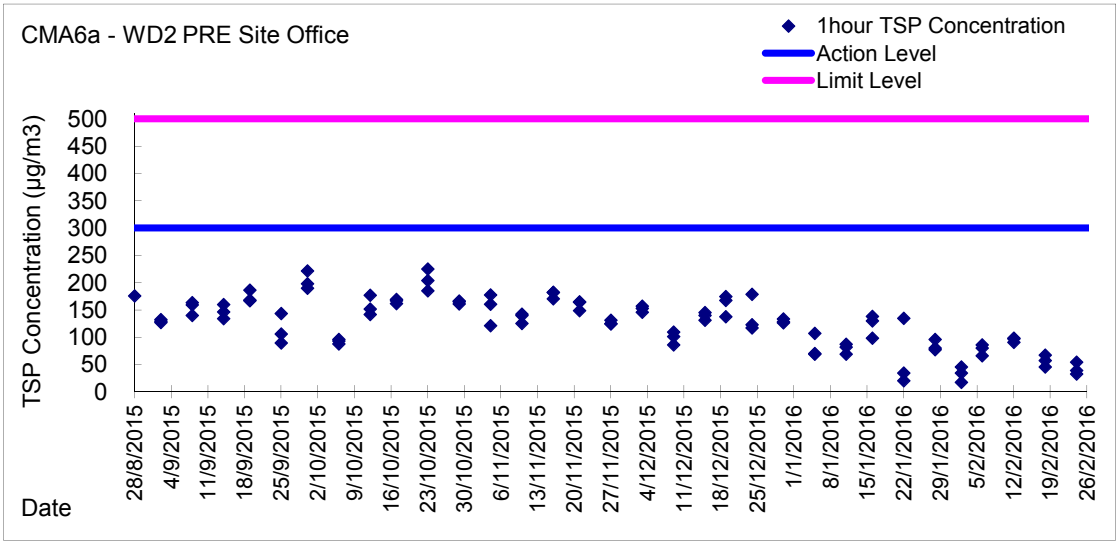




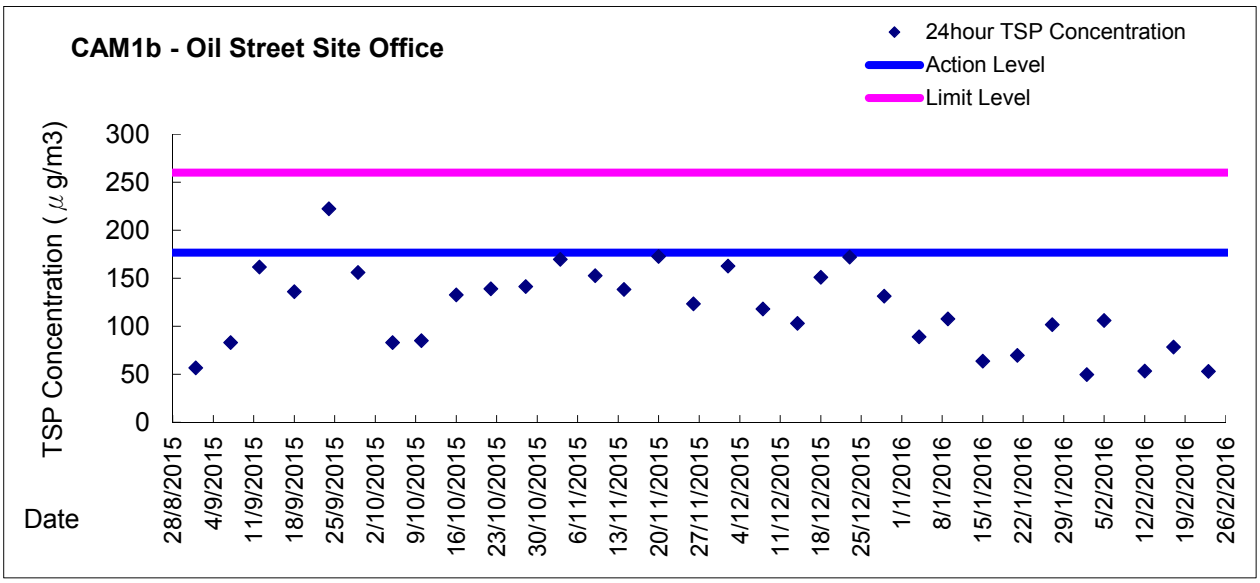
Graphic Presentation of 1 hour TSP Result

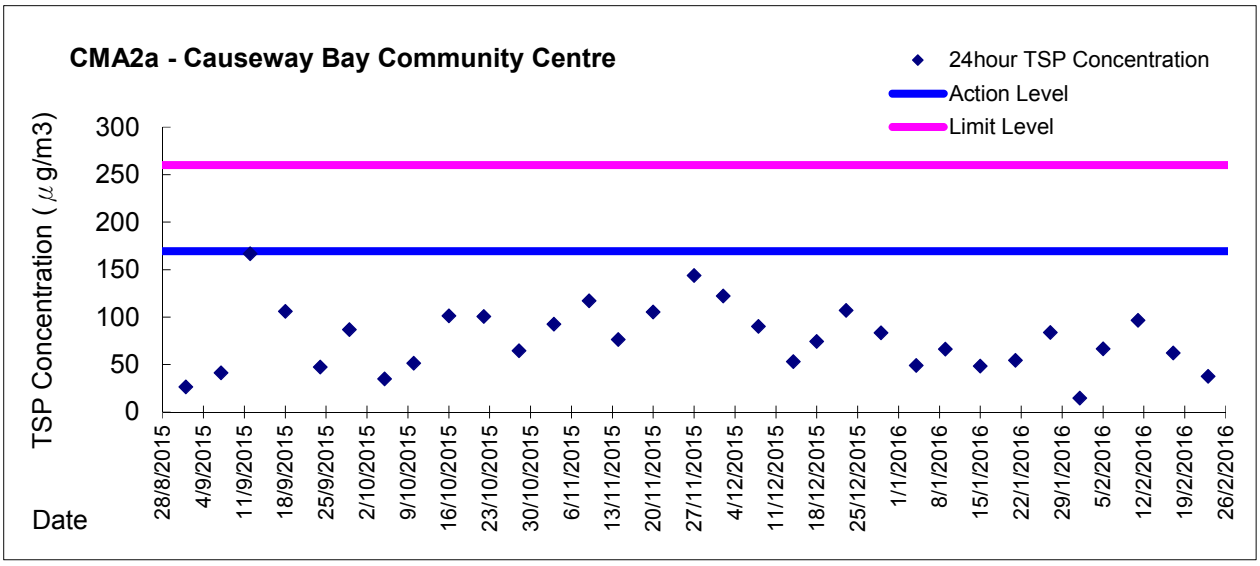


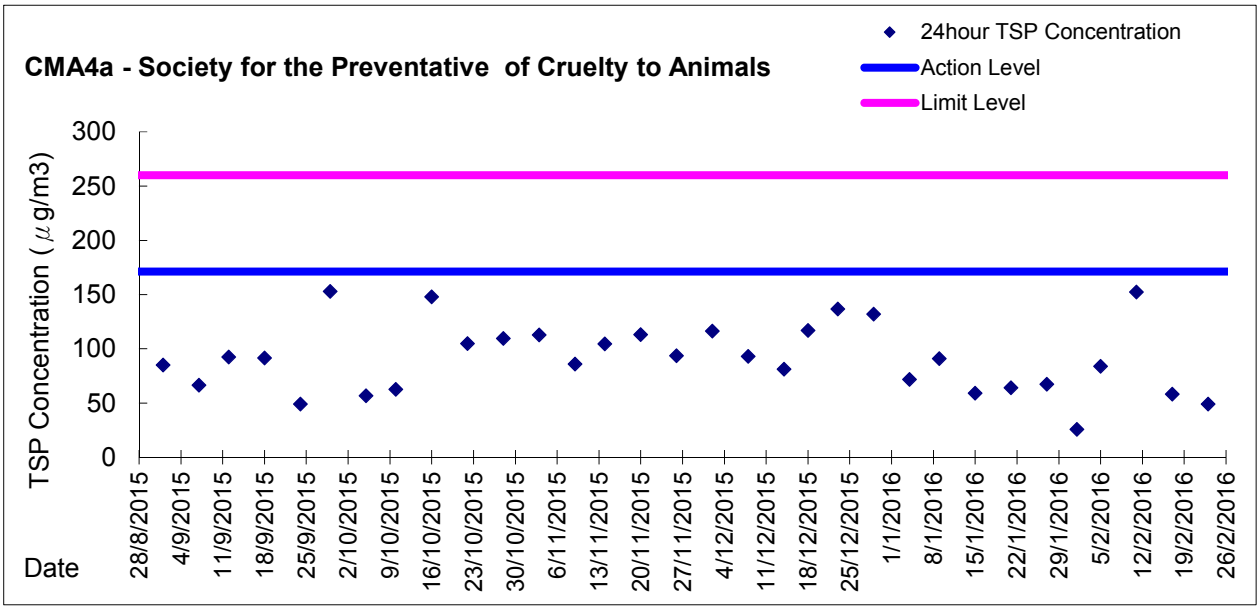




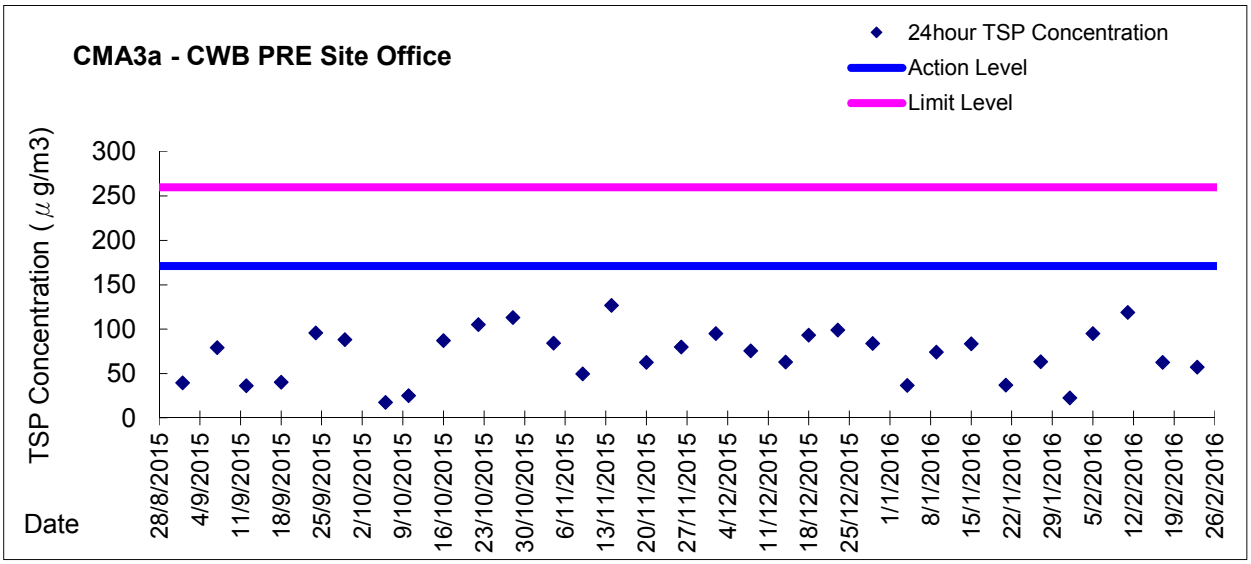
Graphic Presentation of 24 hour TSP Result

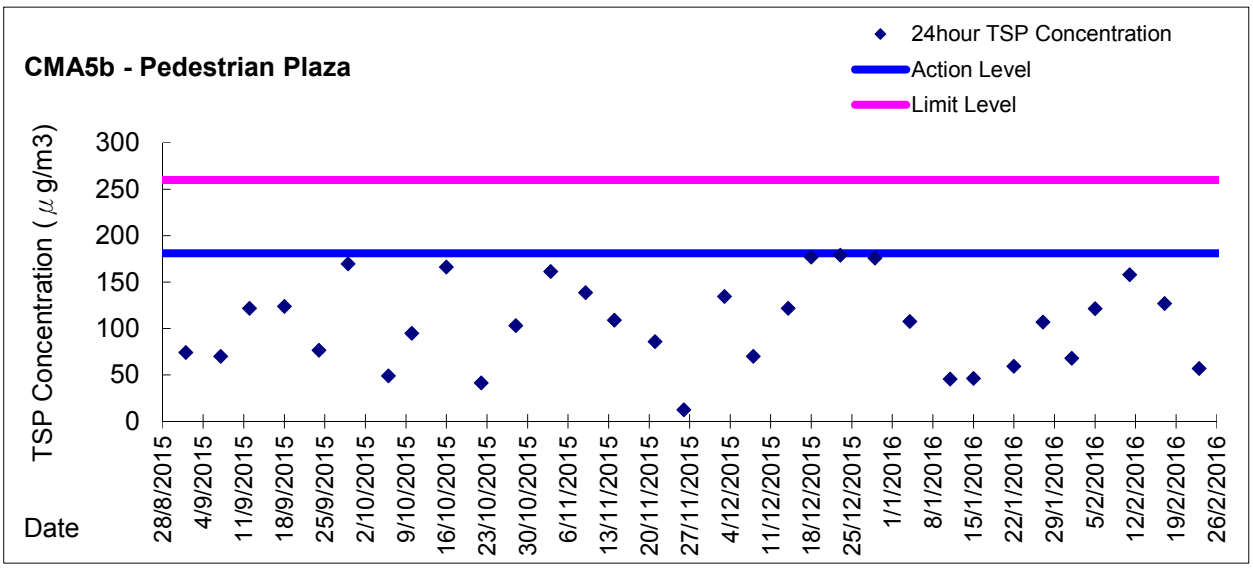


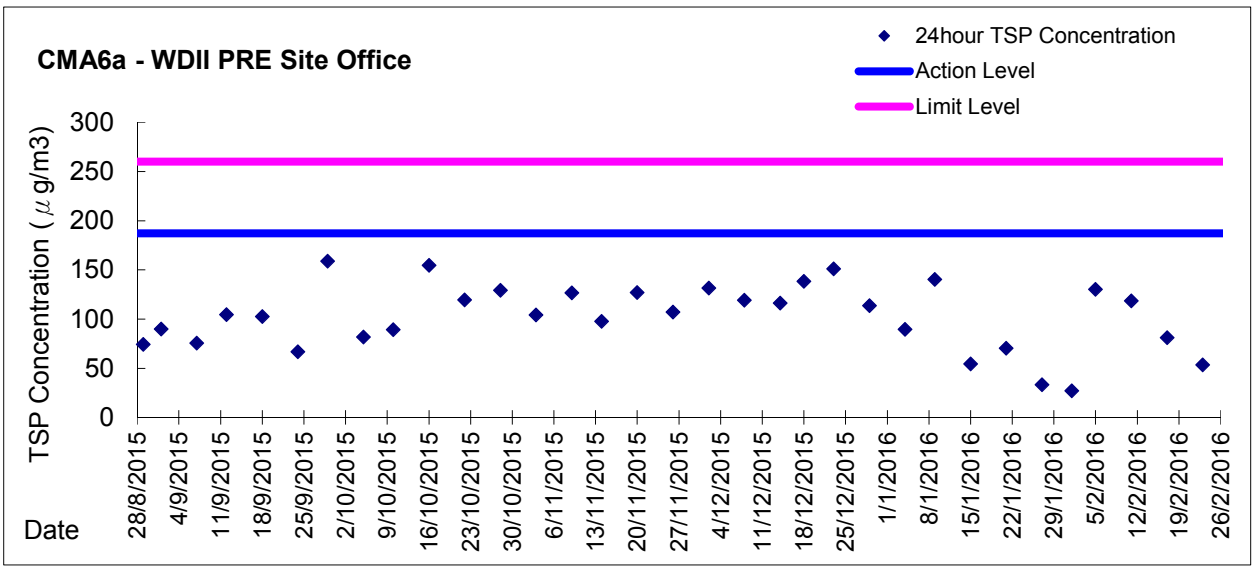




Graphic Presentation of 24 hour TSP Result







Appendix 5.4

Water Quality and Additional Dissolved Oxygen Monitoring Results and Graphical Presentations

Water Monitoring Result at C7 - Windsor House
Mid-Flood Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	10:45	Cloudy	Middle	-	15.90	15.90	15.85	8.27	8.27	8.32	30.99	30.99	31.00	99.5	98.5	97.5	8.16	8.09	8.00	7.77	7.64	7.67	3	3.00
	10:47		Middle	-	15.80	15.80		8.36	8.36		31.01	31.01		97.0	95.0		7.96	7.80		7.63	7.62		3	
29/1/2016	11:58	Rainy	Middle	-	17.30	17.30	17.30	8.02	8.02	8.14	29.89	29.89	29.90	98.2	97.8	96.6	7.88	7.84	7.74	8.62	8.55	8.56	2	2.50
	12:00		Middle	-	17.30	17.30		8.25	8.25		29.91	29.91		95.0	95.3		7.62	7.63		8.55	8.52		3	
1/2/2016	12:05	Rainy	Middle	-	15.90	15.90	15.90	8.37	8.37	8.38	30.80	30.80	30.80	84.8	84.0	83.6	6.96	6.86	6.85	9.06	9.06	9.06	3	3.50
	12:07		Middle	-	15.90	15.90		8.39	8.39		30.80	30.80		83.1	82.3		6.81	6.75		9.06	9.06		4	
3/2/2016	13:00	Fine	Middle	-	16.40	16.40	16.35	8.11	8.11	8.21	31.25	31.25	31.26	100.3	100.2	99.9	8.14	8.13	8.10	8.50	8.49	8.49	3	3.50
	13:02		Middle	-	16.30	16.30		8.30	8.30		31.26	31.26		100.0	99.0		8.11	8.03		8.49	8.49		4	
5/2/2016	-	Fine	Middle	-	-	-		-	-		-	-		-	-		-	-		-	-		-	
	-		Middle	-	-	-		-	-		-	-		-	-		-	-		-	-		-	
11/2/2016	9:41	Fine	Middle	-	17.10	17.10	17.15	8.31	8.31	8.33	30.66	30.66	30.66	89.0	88.6	88.6	7.13	7.09	7.09	8.74	8.64	8.67	<2	<2
	9:43		Middle	-	17.20	17.20		8.35	8.35		30.66	30.66		88.3	88.4		7.07	7.08		8.63	8.65		<2	
13/2/2016	11:22	Fine	Middle	-	18.60	18.60	18.70	8.37	8.37	8.37	30.14	30.14	30.13	89.0	89.0	87.9	6.95	6.94	6.86	8.21	8.23	8.21	<2	<2
	11:24		Middle	-	18.80	18.80		8.37	8.37		30.12	30.12		87.5	86.0		6.82	6.71		8.20	8.21		<2	
15/2/2016	11:52	Fine	Middle	-	16.70	16.70	16.70	8.34	8.34	8.36	29.87	29.87	29.88	93.2	93.8	93.2	7.57	7.62	7.57	6.92	6.93	6.92	4	3.50
	11:54		Middle	-	16.70	16.70		8.37	8.37		29.88	29.88		94.1	91.5		7.64	7.43		6.93	6.91		3	
17/2/2016	11:22	Fine	Middle	-	16.10	16.10	16.05	8.43	8.43	8.44	30.63	30.63	30.64	90.9	91.6	91.5	7.44	7.49	7.49	5.54	5.50	5.50	<2	<2
	11:24		Middle	-	16.00	16.00		8.45	8.45		30.65	30.65		91.8	91.7		7.51	7.50		5.48	5.47		<2	
19/2/2016	15:50	Cloudy	Middle	-	16.40	16.40	16.45	8.36	8.36	8.38	30.85	30.85	30.85	94.1	94.1	93.8	7.63	7.63	7.60	5.22	5.22	5.22	3	2.50
	15:52		Middle	-	16.50	16.50		8.40	8.40		30.85	30.85		93.6	93.2		7.59	7.56		5.22	5.21		2	
22/2/2016	14:21	Cloudy	Middle	-	16.90	16.90	16.95	8.44	8.44	8.46	30.48	30.48	30.48	91.0	93.5	93.0	7.33	7.52	7.48	2.53	2.70	2.68	2	2.00
	14:22		Middle	-	17.00	17.00		8.47	8.47		30.48	30.48		93.7	93.7		7.54	7.53		2.73	2.74		<2	
24/2/2016	17:02	Cloudy	Middle	-	15.60	15.60	15.60	8.51	8.51	8.52	30.53	30.53	30.53	75.0	74.8	74.8	6.19	6.18	6.18	2.16	2.00	2.00	<2	2.00
	17:03		Middle	-	15.60	15.60		8.52	8.52		30.53	30.53		74.8	74.7		6.18	6.17		1.95	1.90		2	
26/2/2016	10:28	Fine	Middle	-	16.30	16.30	16.30	8.48	8.48	8.49	30.44	30.44	30.45	87.2	86.4	85.6	7.11	7.04	6.97	2.75	2.75	2.76	<2	<2
	10:30		Middle	-	16.30	16.30		8.49	8.49		30.45	30.45		84.7	84.0		6.90	6.84		2.79	2.74		<2	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at C1 - HKCEC Extension
Mid-Flood Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	10:09	Cloudy	Middle	3.0	15.20	15.20	15.20	8.47	8.47	8.47	31.30	31.30	31.31	92.1	91.8	91.8	7.63	7.60	7.60	8.71	8.73	8.74	6	6.50
	10:11		Middle	3.0	15.20	15.20		8.47	8.47		31.31	31.31		91.2	91.9		7.56	7.62		8.75	8.76		7	
29/1/2016	11:12	Rainy	Middle	3.5	16.70	16.70	16.75	8.45	8.45	8.46	30.97	30.97	30.98	91.2	91.3	91.3	7.35	7.35	7.36	10.64	10.63	**10.59**	6	6.00
	11:14		Middle	3.5	16.80	16.80		8.46	8.46		30.98	30.98		91.1	91.6		7.34	7.38		10.55	10.53		6	
1/2/2016	10:52	Rainy	Middle	2.5	15.50	15.50	15.50	8.48	8.48	8.49	31.04	31.04	31.05	87.9	86.1	85.9	7.25	7.10	7.08	9.94	9.93	**9.95**	3	3.00
	10:54		Middle	2.5	15.50	15.50		8.49	8.49		31.06	31.06		85.0	84.4		7.01	6.97		9.95	9.98		3	
3/2/2016	16:20	Fine	Middle	2.5	15.50	15.50	15.50	8.54	8.54	8.55	31.51	31.51	31.51	90.0	89.2	89.3	7.40	7.33	7.35	9.32	9.32	9.28	4	3.50
	16:22		Middle	2.5	15.50	15.50		8.55	8.55		31.51	31.51		89.2	88.9		7.34	7.31		9.25	9.24		3	
5/2/2016	15:26	Fine	Middle	3.5	16.00	16.00	15.90	8.55	8.55	8.55	31.30	31.30	31.31	94.2	93.3	93.6	7.69	7.62	7.65	8.90	8.86	8.86	<2	<2
	15:28		Middle	3.5	15.80	15.80		8.55	8.55		31.32	31.32		93.1	93.8		7.61	7.67		8.84	8.83		<2	
11/2/2016	9:06	Fine	Middle	2.5	16.50	16.50	16.50	8.47	8.47	8.47	30.90	30.90	30.90	88.3	88.2	88.3	7.15	7.12	7.15	9.23	9.38	**9.33**	2	2.00
	9:08		Middle	2.5	16.50	16.50		8.47	8.47		30.89	30.89		88.5	88.2		7.17	7.14		9.32	9.39		2	
13/2/2016	10:38	Fine	Middle	2.5	18.00	18.00	18.05	8.44	8.44	8.44	30.30	30.30	30.30	85.8	85.6	85.5	6.77	6.75	6.74	8.81	8.82	8.81	4	4.50
	10:40		Middle	2.5	18.10	18.10		8.44	8.44		30.29	30.29		85.2	85.3		6.72	6.72		8.81	8.81		5	
15/2/2016	11:15	Fine	Middle	3.0	16.00	16.00	15.95	8.48	8.48	8.48	30.21	30.21	30.22	93.5	93.5	93.3	7.69	7.69	7.68	5.14	5.17	5.17	5	4.50
	11:17		Middle	3.0	15.90	15.90		8.48	8.48		30.22	30.22		93.5	92.8		7.69	7.63		5.18	5.18		4	
17/2/2016	14:59	Fine	Middle	2.5	15.70	15.70	15.70	8.51	8.51	8.52	31.10	31.10	31.11	87.1	86.4	86.1	7.16	7.10	7.07	7.99	8.00	8.01	3	3.50
	15:01		Middle	2.5	15.70	15.70		8.52	8.52		31.11	31.11		85.8	84.9		7.05	6.98		8.01	8.03		4	
19/2/2016	15:17	Cloudy	Middle	2.5	16.10	16.10	12.08	8.49	8.49	8.49	30.99	30.99	31.05	90.0	88.1	88.0	7.34	7.18	7.17	5.34	5.32	5.38	3	3.00
	15:19		Middle	2.5	0.00	16.10		8.49	8.49		31.10	31.10		87.3	86.4		7.12	7.04		5.47	5.40		3	
22/2/2016	13:50	Cloudy	Middle	3.0	15.90	15.90	15.90	8.56	8.56	8.57	30.84	30.84	30.84	98.3	99.0	98.9	8.06	8.12	8.11	3.53	3.38	3.53	3	4.00
	13:52		Middle	3.0	15.90	15.90		8.57	8.57		30.84	30.84		99.0	99.1		8.12	8.12		3.51	3.69		5	
24/2/2016	17:01	Cloudy	Middle	2.5	15.40	15.40	15.40	8.48	8.48	8.49	30.23	30.23	30.42	92.1	90.6	90.3	7.63	7.51	7.49	3.94	3.99	3.92	4	4.00
	17:03		Middle	2.5	15.40	15.40		8.49	8.49		30.61	30.61		89.4	89.2		7.41	7.39		3.87	3.87		4	
26/2/2016	9:46	Fine	Middle	2.5	15.40	15.40	15.45	8.56	8.56	8.57	30.61	30.61	30.64	91.7	91.0	90.1	7.59	7.53	7.46	4.83	4.82	4.83	6	6.50
	9:48		Middle	2.5	15.50	15.50		8.57	8.57		30.66	30.66		89.4	88.3		7.40	7.31		4.82	4.83		7	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at P1 - HKCEC Phase I
Mid-Flood Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	9:53	Cloudy	Middle	3.0	14.70	14.70	14.65	8.29	8.29	8.34	31.26	31.26	31.27	97.9	97.8	97.3	8.20	8.18	8.15	10.60	10.50	10.39	7	7.00
	9:55		Middle	3.0	14.60	14.60		8.38	8.38		31.28	31.28		97.0	96.5		8.13	8.09		10.29	10.15		7	
29/1/2016	10:56	Rainy	Middle	3.5	17.00	17.00	17.05	8.39	8.39	8.40	30.87	30.87	30.87	91.8	92.5	92.4	7.35	7.41	7.40	9.68	9.71	**9.71**	4	4.00
	10:58		Middle	3.5	17.10	17.10		8.41	8.41		30.87	30.87		92.7	92.4		7.42	7.40		9.72	9.72		4	
1/2/2016	10:36	Rainy	Middle	2.5	15.30	15.30	15.30	8.35	8.36	8.38	30.89	30.89	30.92	77.9	77.4	77.2	6.46	6.42	6.41	9.31	9.32	**9.32**	2	2.50
	10:38		Middle	2.5	15.30	15.30		8.40	8.40		30.95	30.95		77.0	76.6		6.39	6.36		9.32	9.32		3	
3/2/2016	16:04	Fine	Middle	2.5	15.60	15.60	15.60	8.38	8.38	8.42	31.49	31.49	31.48	92.3	91.1	90.8	7.58	7.48	7.45	8.78	8.77	8.79	3	3.00
	16:06		Middle	2.5	15.60	15.60		8.45	8.45		31.46	31.46		90.0	89.6		7.39	7.36		8.79	8.80		3	
5/2/2016	15:10	Fine	Middle	3.5	16.40	16.40	16.45	8.44	8.44	8.47	31.41	31.41	31.41	97.0	96.7	96.1	7.84	7.82	7.76	9.27	9.28	**9.29**	<2	<2
	15:12		Middle	3.5	16.50	16.50		8.49	8.49		31.40	31.40		94.7	95.9		7.65	7.74		9.31	9.31		<2	
11/2/2016	8:50	Fine	Middle	2.5	16.90	16.90	16.95	8.30	8.30	8.33	30.89	30.89	30.86	90.5	87.7	87.7	7.27	7.04	7.04	8.85	8.82	8.83	4	3.50
	8:52		Middle	2.5	17.00	17.00		8.36	8.36		30.82	30.82		86.8	85.7		6.96	6.88		8.82	8.83		3	
13/2/2016	10:22	Fine	Middle	2.5	19.10	19.10	19.20	8.34	8.34	8.36	30.21	30.21	30.12	89.4	88.3	84.5	6.91	6.82	6.52	8.12	8.14	8.14	2	2.00
	10:24		Middle	2.5	19.30	19.30		8.37	8.38		30.03	30.03		80.0	80.3		6.15	6.18		8.14	8.14		<2	
15/2/2016	10:55	Fine	Middle	3.0	15.60	15.60	15.55	8.40	8.40	8.42	30.26	30.26	30.27	92.6	93.5	93.2	7.67	7.75	7.73	4.85	4.87	4.86	4	3.00
	10:57		Middle	3.0	15.50	15.50		8.43	8.43		30.27	30.27		93.4	93.4		7.74	7.74		4.86	4.84		2	
17/2/2016	14:43	Fine	Middle	2.5	15.70	15.70	15.75	8.35	8.35	8.38	31.15	31.15	31.13	88.8	87.8	87.8	7.29	7.20	7.20	6.54	6.54	6.54	<2	3.00
	14:45		Middle	2.5	15.80	15.80		8.40	8.40		31.10	31.10		87.3	87.1		7.16	7.14		6.54	6.54		3	
19/2/2016	15:01	Cloudy	Middle	2.5	16.30	16.30	16.35	8.33	8.33	8.36	31.12	31.12	31.11	91.0	90.5	89.8	7.39	7.35	7.29	5.97	5.92	5.76	5	4.00
	15:03		Middle	2.5	16.40	16.40		8.39	8.39		31.10	31.10		89.5	88.2		7.24	7.16		5.85	5.29		3	
22/2/2016	13:35	Cloudy	Middle	3.0	16.20	16.20	16.35	8.44	8.44	8.46	30.89	30.89	30.89	102.6	101.7	101.9	8.33	8.26	8.27	5.99	5.97	5.96	2	2.50
	13:37		Middle	3.0	16.50	16.50		8.48	8.48		30.88	30.88		101.5	101.7		8.24	8.26		5.96	5.92		3	
24/2/2016	16:45	Cloudy	Middle	2.5	15.60	15.60	15.65	8.25	8.25	8.29	30.52	30.52	30.46	88.4	88.6	88.2	7.31	7.32	7.28	4.30	4.22	4.22	3	4.00
	16:47		Middle	2.5	15.70	15.70		8.32	8.32		30.39	30.39		88.3	87.6		7.28	7.21		4.18	4.17		5	
26/2/2016	9:30	Fine	Middle	2.5	15.40	15.40	15.45	8.41	8.41	8.44	30.72	30.72	30.70	95.1	93.9	93.2	7.88	7.78	7.72	3.05	3.01	3.05	<2	2.00
	9:32		Middle	2.5	15.50	15.50		8.47	8.47		30.68	30.68		92.4	91.4		7.65	7.57		3.02	3.13		2	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at P3 - APA
Mid-Flood Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	9:57	Cloudy	Middle	3.0	15.30	15.30	15.25	8.42	8.42	8.42	31.29	31.29	31.30	90.1	90.2	89.6	7.45	7.46	7.41	8.55	8.62	8.60	5	5.00
	9:59		Middle	3.0	15.20	15.20		8.42	8.42		31.31	31.31		89.3	88.7		7.39	7.34		8.55	8.66		5	
29/1/2016	11:00	Rainy	Middle	3.5	16.80	16.80	16.85	8.42	8.42	8.43	31.02	31.02	31.02	91.7	91.4	90.7	7.37	7.35	7.29	9.44	9.43	**9.42**	3	3.50
	11:02		Middle	3.5	16.90	16.90		8.43	8.43		31.02	31.02		90.4	89.4		7.26	7.19		9.41	9.41		4	
1/2/2016	10:40	Rainy	Middle	2.5	15.20	15.20	15.25	8.41	8.41	8.43	30.86	30.97	30.95	88.6	87.2	86.3	7.35	7.23	7.16	7.22	7.22	7.23	4	3.50
	10:42		Middle	2.5	15.30	15.30		8.45	8.45		30.98	30.98		85.1	84.4		7.05	7.00		7.22	7.26		3	
3/2/2016	16:08	Fine	Middle	2.5	15.60	15.60	15.60	8.47	8.47	8.48	31.35	31.35	31.42	91.8	90.1	89.6	7.55	7.40	7.36	8.07	8.12	8.10	<2	<2
	16:10		Middle	2.5	15.60	15.60		8.49	8.49		31.48	31.48		89.2	87.1		7.32	7.15		8.12	8.07		<2	
5/2/2016	15:14	Fine	Middle	3.5	16.10	16.10	16.10	8.50	8.50	8.51	31.33	31.33	31.33	94.9	95.2	94.1	7.73	7.75	7.66	6.84	6.83	6.83	<2	<2
	15:16		Middle	3.5	16.10	16.10		8.52	8.52		31.33	31.33		93.1	93.0		7.58	7.57		6.83	6.83		<2	
11/2/2016	8:54	Fine	Middle	2.5	16.70	16.70	16.65	8.38	8.39	8.39	30.73	30.73	30.77	89.1	87.8	88.0	7.21	7.10	7.11	8.46	8.44	8.45	2	2.00
	8:56		Middle	2.5	16.60	16.60		8.40	8.40		30.81	30.81		87.4	87.7		7.04	7.09		8.43	8.45		2	
13/2/2016	10:26	Fine	Middle	2.5	18.40	18.40	18.55	8.40	8.40	8.40	30.16	30.16	30.14	83.2	86.6	83.5	6.50	6.78	6.49	7.46	7.47	7.47	2	2.00
	10:28		Middle	2.5	18.70	18.70		8.40	8.40		30.11	30.11		83.6	80.7		6.37	6.30		7.47	7.48		2	
15/2/2016	11:00	Fine	Middle	3.0	15.60	15.60	15.60	8.44	8.44	8.45	30.22	30.22	30.23	91.2	92.1	92.2	7.55	7.61	7.63	5.61	5.63	5.63	5	4.50
	11:02		Middle	3.0	15.60	15.60		8.46	8.46		30.23	30.23		92.9	92.5		7.69	7.66		5.67	5.62		4	
17/2/2016	14:47	Fine	Middle	2.5	15.50	15.50	15.50	8.42	8.43	8.44	31.10	31.10	31.11	89.7	89.9	90.8	7.40	7.42	7.49	5.28	5.29	5.28	4	3.50
	14:49		Middle	2.5	15.50	15.50		8.45	8.45		31.12	31.12		91.7	91.7		7.56	7.56		5.29	5.27		3	
19/2/2016	15:05	Cloudy	Middle	2.5	16.10	16.10	16.15	8.42	8.42	8.43	31.11	31.11	31.11	86.1	85.8	86.4	7.01	6.99	7.03	5.63	5.55	5.60	2	3.00
	15:07		Middle	2.5	16.20	16.20		8.44	8.44		31.11	31.11		86.5	87.1		7.04	7.09		5.59	5.61		4	
22/2/2016	13:40	Cloudy	Middle	3.0	15.90	15.90	16.00	8.51	8.51	8.52	30.88	30.88	30.88	100.2	101.0	100.4	8.20	8.26	8.21	4.15	4.28	4.24	3	4.00
	13:42		Middle	3.0	16.10	16.10		8.53	8.53		30.87	30.87		100.5	99.9		8.21	8.16		4.28	4.25		5	
24/2/2016	16:49	Cloudy	Middle	2.5	15.30	15.30	15.30	8.36	8.36	8.38	30.69	30.69	30.69	88.6	88.5	88.6	7.37	7.35	7.36	5.01	4.87	4.75	4	4.00
	16:51		Middle	2.5	15.30	15.30		8.40	8.40		30.68	30.68		88.5	88.8		7.35	7.38		4.57	4.56		4	
26/2/2016	9:34	Fine	Middle	2.5	15.40	15.40	15.45	8.49	8.49	8.50	30.64	30.64	30.65	92.2	91.0	90.7	7.63	7.53	7.51	2.37	2.34	2.34	2	2.00
	9:36		Middle	2.5	15.50	15.50		8.51	8.51		30.65	30.65		90.2	89.5		7.47	7.41		2.34	2.32		2	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at P4 - SOC
Mid-Flood Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	10:01	Cloudy	Middle	3.0	15.20	15.20	15.15	8.44	8.44	8.45	31.32	31.32	31.33	94.4	94.5	94.1	7.82	7.83	7.79	12.38	12.40	12.40	7	6.50
	10:03		Middle	3.0	15.10	15.10		8.45	8.45		31.33	31.33		93.8	93.7		7.78	7.73		12.41	12.40		6	
29/1/2016	11:04	Rainy	Middle	3.5	16.80	16.80	16.85	8.44	8.44	8.44	30.99	30.99	30.99	91.7	91.4	91.2	7.37	7.35	7.33	10.38	10.37	**10.36**	3	3.50
	11:06		Middle	3.5	16.90	16.90		8.44	8.44		30.99	30.99		91.1	90.4		7.32	7.26		10.35	10.34		4	
1/2/2016	10:44	Rainy	Middle	2.5	15.50	15.50	15.50	8.46	8.46	8.47	30.96	30.96	30.96	83.8	82.4	82.2	6.92	6.81	6.79	7.36	7.36	7.36	4	4.00
	10:46		Middle	2.5	15.50	15.50		8.47	8.47		30.96	30.96		81.6	81.1		6.74	6.70		7.36	7.36		4	
3/2/2016	16:12	Fine	Middle	2.5	15.50	15.50	15.50	8.50	8.50	8.51	31.61	31.61	31.56	91.3	90.0	89.5	7.52	7.40	7.37	9.07	9.09	9.03	4	4.00
	16:14		Middle	2.5	15.50	15.50		8.51	8.51		31.50	31.50		88.7	88.0		7.30	7.25		8.98	8.97		4	
5/2/2016	15:18	Fine	Middle	3.5	15.70	15.70	15.70	8.53	8.53	8.54	31.31	31.31	31.32	94.0	93.5	94.1	7.71	7.67	7.72	7.44	7.43	7.44	<2	<2
	15:20		Middle	3.5	15.70	15.70		8.54	8.54		31.32	31.32		94.0	94.9		7.71	7.79		7.44	7.44		<2	
11/2/2016	8:58	Fine	Middle	2.5	16.40	16.40	16.45	8.42	8.42	8.43	30.87	30.87	30.86	85.6	84.3	84.3	6.94	6.83	6.83	8.70	8.77	8.79	3	3.00
	9:00		Middle	2.5	16.50	16.50		8.43	8.43		30.85	30.85		83.9	83.4		6.80	6.76		8.81	8.89		3	
13/2/2016	10:30	Fine	Middle	2.5	18.20	18.20	18.25	8.41	8.41	8.42	30.24	30.24	30.23	90.3	89.3	88.1	7.09	7.02	6.92	9.09	9.11	8.99	3	3.00
	10:32		Middle	2.5	18.30	18.30		8.42	8.42		30.22	30.22		88.0	84.9		6.89	6.67		8.91	8.83		3	
15/2/2016	11:05	Fine	Middle	3.0	15.80	15.80	15.80	8.46	8.46	8.47	30.17	30.17	30.19	94.2	93.6	94.0	7.76	7.71	7.75	4.81	4.83	4.84	5	5.00
	11:07		Middle	3.0	15.80	15.80		8.47	8.47		30.20	30.20		94.2	94.0		7.76	7.75		4.83	4.88		5	
17/2/2016	14:51	Fine	Middle	2.5	15.50	15.50	15.50	8.47	8.47	8.48	31.09	31.09	31.09	89.5	88.9	89.2	7.38	7.33	7.36	4.93	4.93	4.92	4	3.50
	14:53		Middle	2.5	15.50	15.50		8.48	8.48		31.09	31.09		89.2	89.2		7.36	7.36		4.93	4.90		3	
19/2/2016	15:09	Cloudy	Middle	2.5	16.20	16.20	16.20	8.46	8.46	8.47	31.08	31.08	31.08	88.0	87.3	86.8	7.17	7.11	7.07	6.16	6.14	6.09	3	3.00
	15:11		Middle	2.5	16.20	16.20		8.47	8.47		31.07	31.07		86.3	85.5		7.02	6.96		6.05	6.02		3	
22/2/2016	13:45	Cloudy	Middle	3.0	15.90	15.90	15.95	8.54	8.54	8.55	30.86	30.86	30.87	97.3	98.8	98.3	7.97	8.09	8.04	4.60	4.58	4.54	4	4.00
	13:47		Middle	3.0	16.00	16.00		8.55	8.55		30.87	30.87		98.4	98.6		8.05	8.06		4.56	4.40		4	
24/2/2016	16:53	Cloudy	Middle	2.5	15.30	15.30	15.30	8.42	8.42	8.43	30.68	30.68	30.69	91.6	90.9	90.5	7.61	7.55	7.52	4.81	4.22	4.41	4	4.50
	16:55		Middle	2.5	15.30	15.30		8.44	8.44		30.69	30.69		90.1	89.5		7.49	7.44		4.20	4.40		5	
26/2/2016	9:38	Fine	Middle	2.5	15.40	15.40	15.40	8.52	8.52	8.53	30.54	30.54	30.60	93.7	91.2	90.9	7.76	7.53	7.52	3.31	3.29	3.32	3	3.50
	9:40		Middle	2.5	15.40	15.40		8.53	8.53		30.65	30.65		90.0	88.7		7.45	7.35		3.33	3.35		4	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at P5 - WCT / RT / IT
Mid-Flood Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	10:05	Cloudy	Middle	3.0	15.20	15.20	15.20	8.46	8.46	8.47	31.30	31.30	31.31	90.6	90.0	90.0	7.51	7.46	7.46	10.86	10.90	10.88	8	7.50
	10:07		Middle	3.0	15.20	15.20		8.47	8.47		31.31	31.31		89.3	89.9		7.40	7.45		10.89	10.86		7	
29/1/2016	11:08	Rainy	Middle	3.5	16.70	16.70	16.75	8.45	8.45	8.45	31.03	31.03	31.03	91.5	90.7	90.7	7.37	7.30	7.30	10.45	10.42	**10.25**	5	5.00
	11:10		Middle	3.5	16.80	16.80		8.45	8.45		31.03	31.03		90.4	90.3		7.28	7.26		10.15	9.99		5	
1/2/2016	10:48	Rainy	Middle	2.5	15.50	15.50	15.50	8.47	8.46	8.47	30.98	30.98	31.00	86.3	84.8	84.4	7.13	7.01	6.97	8.62	8.62	8.62	4	4.00
	10:50		Middle	2.5	15.50	15.50		8.48	8.48		31.02	31.02		83.8	82.7		6.92	6.83		8.62	8.62		4	
3/2/2016	16:16	Fine	Middle	2.5	15.50	15.50	15.50	8.52	8.55	8.53	31.46	31.46	31.49	89.4	88.0	87.7	7.36	7.22	7.21	8.34	8.53	8.48	4	4.00
	16:18		Middle	2.5	15.50	15.50		8.53	8.53		31.52	31.52		86.9	86.4		7.15	7.11		8.52	8.52		4	
5/2/2016	15:22	Fine	Middle	3.5	15.70	15.70	15.73	8.54	8.54	8.55	31.30	31.30	31.31	93.2	92.8	93.4	7.64	7.61	7.65	8.07	8.10	8.10	<2	<2
	15:24		Middle	3.5	15.70	15.80		8.55	8.55		31.31	31.31		93.1	94.3		7.63	7.73		8.11	8.12		<2	
11/2/2016	9:02	Fine	Middle	2.5	16.40	16.40	16.45	8.44	8.44	8.45	30.79	30.79	30.84	90.5	88.9	88.6	7.34	7.22	7.23	8.80	8.82	8.87	4	3.00
	9:04		Middle	2.5	16.50	16.50		8.46	8.46		30.88	30.88		87.8	87.0		7.21	7.16		8.93	8.93		2	
13/2/2016	10:34	Fine	Middle	2.5	18.40	18.40	18.45	8.43	8.43	8.43	30.24	30.24	30.26	84.9	83.8	83.9	6.65	6.56	6.57	8.86	8.85	8.85	4	4.00
	10:36		Middle	2.5	18.50	18.50		8.43	8.43		30.27	30.27		83.5	83.4		6.53	6.53		8.85	8.85		4	
15/2/2016	11:10	Fine	Middle	3.0	15.90	15.90	15.90	8.47	8.47	8.47	30.13	30.13	30.14	90.8	92.4	92.1	7.47	7.60	7.59	4.73	4.77	4.77	5	6.00
	11:12		Middle	3.0	15.90	15.90		8.47	8.47		30.14	30.14		92.8	92.3		7.68	7.60		4.76	4.81		7	
17/2/2016	14:55	Fine	Middle	2.5	15.50	15.50	15.60	8.49	8.49	8.50	30.90	30.90	31.01	88.5	87.1	67.3	7.28	7.16	7.17	7.17	7.18	7.18	4	4.50
	14:57		Middle	2.5	15.70	15.70		8.50	8.50		31.12	31.12		86.8	6.6		7.14	7.10		7.19	7.19		5	
19/2/2016	15:13	Cloudy	Middle	2.5	16.20	16.20	16.15	8.48	8.48	8.48	30.67	30.67	30.88	90.7	90.6	90.4	7.34	7.38	7.35	5.13	5.08	5.16	4	3.00
	15:15		Middle	2.5	16.10	16.10		8.48	8.48		31.08	31.08		90.4	89.8		7.37	7.32		5.21	5.23		2	
22/2/2016	13:50	Cloudy	Middle	3.0	15.90	15.90	15.95	8.55	8.55	8.56	30.84	30.84	30.84	99.4	100.1	99.6	8.15	8.20	8.17	4.32	4.31	4.33	5	4.50
	13:52		Middle	3.0	16.00	16.00		8.56	8.56		30.84	30.84		99.5	99.5		8.16	8.15		4.30	4.38		4	
24/2/2016	16:57	Cloudy	Middle	2.5	15.20	15.20	15.30	8.45	8.45	8.47	30.49	30.54	30.45	90.3	90.5	90.5	7.48	7.50	7.50	5.98	6.11	6.07	5	4.50
	16:59		Middle	2.5	15.40	15.40		8.48	8.48		30.38	30.38		90.7	90.3		7.52	7.49		6.17	6.02		4	
26/2/2016	9:42	Fine	Middle	2.5	15.40	15.40	15.40	8.54	8.54	8.55	30.44	30.44	30.56	93.2	92.3	91.9	7.72	7.64	7.61	4.40	4.51	4.45	4	4.50
	9:44		Middle	2.5	15.40	15.40		8.55	8.55		30.67	30.67		91.3	90.6		7.56	7.50		4.40	4.48		5	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at RW21-P789 - Sun Hung Kai Centre
Mid-Flood Tide

Date	Time	Weater Condition	Sampling Depth (m)		Water Temperature (°C)			pH (-)			Salinity (ppt)			DO Saturation (%)			DO (mg/L)			Turbidity (NTU)			Suspended Solids (mg/L)	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	10:15	Cloudy	Middle	3.5	15.70	15.70	15.65	8.36	8.36	8.39	31.29	31.29	31.30	99.4	97.0	96.5	8.17	7.98	7.92	8.42	8.42	8.42	6	5.50
	10:17		Middle	3.5	15.60	15.60		8.42	8.42		31.30	31.30		95.6	94.0		7.80	7.73		8.42	8.42		5	
29/1/2016	11:19	Rainy	Middle	3.5	16.70	16.70	16.75	8.38	8.38	8.40	30.90	30.90	30.90	93.3	92.7	92.3	7.53	7.47	7.44	9.66	9.66	9.66	3	2.50
	11:21		Middle	3.5	16.80	16.80		8.42	8.42		30.89	30.89		91.9	91.1		7.41	7.34		9.66	9.66		2	
1/2/2016	11:00	Rainy	Middle	3.5	15.80	15.80	15.75	8.39	8.39	8.42	30.65	30.65	30.66	99.4	98.1	97.9	8.18	8.08	8.06	8.42	8.53	8.47	3	3.50
	11:02		Middle	3.5	15.70	15.70		8.44	8.44		30.66	30.66		97.3	96.6		8.01	7.95		8.50	8.43		4	
3/2/2016	16:42	Fine	Middle	3.5	15.80	15.80	15.80	8.37	8.37	8.42	31.47	31.47	31.47	96.9	94.9	94.1	7.92	7.72	7.68	9.56	9.54	9.55	3	3.50
	16:44		Middle	3.5	15.80	15.80		8.46	8.46		31.47	31.47		93.2	91.3		7.62	7.46		9.61	9.49		4	
5/2/2016	15:30	Fine	Middle	3.5	16.40	16.40	16.45	8.54	8.54	8.55	31.33	31.33	31.34	92.9	94.0	93.7	7.51	7.60	7.57	8.50	8.30	8.43	<2	≤2
	15:32		Middle	3.5	16.50	16.50		8.55	8.55		31.34	31.34		94.2	93.7		7.61	7.57		8.49	8.44		<2	
11/2/2016	9:19	Fine	Middle	3.5	16.40	16.40	16.55	8.41	8.41	8.44	30.99	30.99	30.94	92.4	90.9	89.5	7.45	7.31	7.22	9.14	9.13	9.13	2	2.50
	9:21		Middle	3.5	16.70	16.70		8.46	8.46		30.88	30.88		88.3	86.5		7.13	6.98		9.12	9.11		3	
13/2/2016	10:53	Fine	Middle	3.5	17.50	17.50	17.60	8.40	8.40	8.41	30.32	30.32	30.25	87.5	87.7	87.0	6.98	6.99	6.94	9.39	9.39	9.39	6	5.00
	10:55		Middle	3.5	17.70	17.70		8.41	8.41		30.18	30.18		87.1	85.7		6.94	6.83		9.39	9.39		4	
15/2/2016	11:25	Fine	Middle	3.5	16.20	16.20	16.15	8.41	8.41	8.43	30.24	30.24	30.25	97.8	97.7	97.9	8.00	8.00	8.01	7.31	7.34	7.33	4	4.50
	11:27		Middle	3.5	16.10	16.10		8.44	8.44		30.25	30.25		98.4	97.6		8.05	8.00		7.37	7.30		5	
17/2/2016	10:54	Fine	Middle	3.5	15.80	15.80	15.80	8.38	8.38	8.41	31.04	31.04	31.05	94.2	91.6	91.1	7.73	7.51	7.47	4.29	4.31	4.31	<2	2.00
	10:56		Middle	3.5	15.80	15.80		8.44	8.44		31.06	31.06		90.1	88.6		7.39	7.26		4.31	4.32		2	
19/2/2016	15:27	Cloudy	Middle	3.5	16.10	16.10	16.10	8.42	8.42	8.44	31.13	31.13	31.13	94.0	92.5	91.2	7.66	7.54	7.43	5.93	5.91	5.84	5	4.00
	15:29		Middle	3.5	16.10	16.10		8.46	8.46		31.13	31.13		90.4	87.9		7.36	7.16		5.75	5.75		3	
22/2/2016	14:00	Cloudy	Middle	3.5	16.60	16.60	16.40	8.43	8.43	8.46	31.16	31.16	31.08	105.8	102.8	103.5	8.62	8.37	8.43	3.79	3.83	3.82	3	3.00
	14:02		Middle	3.5	16.20	16.20		8.48	8.48		30.99	30.99		103.0	102.5		8.39	8.35		3.86	3.81		3	
24/2/2016	17:50	Cloudy	Middle	3.0	15.40	15.40	15.40	8.46	8.46	8.47	30.85	30.85	30.85	78.9	78.7	78.7	6.53	6.52	6.52	4.11	4.09	4.05	4	4.50
	17:51		Middle	3.0	15.40	15.40		8.47	8.47		30.85	30.85		78.7	78.6		6.52	6.51		3.99	4.02		5	
26/2/2016	9:58	Fine	Middle	3.5	15.70	15.70	15.70	8.48	8.48	8.50	30.69	30.69	30.69	91.2	90.5	89.6	7.52	7.46	7.39	5.43	5.39	5.38	3	3.50
	10:00		Middle	3.5	15.70	15.70		8.52	8.52		30.68	30.68		88.7	88.1		7.31	7.26		5.36	5.35		4	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at WSD19 - Sheung Wan
Mid-Flood Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	7:58	Cloudy	Middle	3.5	15.00	15.00	14.85	8.21	8.21	8.25	31.31	31.31	31.32	95.8	95.6	94.9	8.00	7.18	7.73	8.49	8.68	**8.36**	5	5.00
	8:00		Middle	3.5	14.70	14.70		8.29	8.29		31.33	31.33		94.3	93.8		7.88	7.84		8.14	8.14		5	
29/1/2016	9:35	Rainy	Middle	3.5	16.80	16.80	16.85	8.16	8.16	8.22	31.19	31.19	31.19	99.8	99.2	98.9	8.02	7.96	7.93	9.00	8.98	**8.99**	4	4.50
	9:37		Middle	3.5	16.90	16.90		8.28	8.28		31.18	31.18		98.5	98.1		7.94	7.81		8.98	8.98		5	
1/2/2016	9:51	Rainy	Middle	3.5	15.50	15.50	15.40	8.02	8.02	8.13	30.74	30.74	30.91	93.1	92.9	91.6	7.70	7.69	7.66	8.44	8.46	**8.44**	5	5.00
	9:53		Middle	3.5	15.30	15.30		8.23	8.23		31.08	31.08		91.5	89.0		7.58	7.67		8.44	8.43		5	
3/2/2016	14:29	Fine	Middle	3.5	15.90	15.90	15.90	8.29	8.29	8.34	31.32	31.32	31.38	97.3	97.0	96.9	7.96	7.93	7.93	8.81	8.78	**8.75**	6	5.50
	14:31		Middle	3.5	15.90	15.90		8.39	8.39		31.43	31.43		97.1	96.3		7.94	7.87		8.70	8.70		5	
5/2/2016	14:15	Fine	Middle	3.5	17.10	17.10	17.25	8.43	8.43	8.45	31.40	31.40	31.39	10.3.8	103.3	102.5	8.25	8.20	8.16	8.55	8.55	**8.54**	3	3.50
	14:17		Middle	3.5	17.40	17.40		8.47	8.47		31.37	31.37		102.4	101.7		8.13	8.07		8.56	8.51		4	
11/2/2016	8:04	Fine	Middle	3.5	16.90	16.90	16.95	8.35	8.35	8.37	30.90	30.90	30.90	82.4	81.9	81.7	6.62	6.58	6.56	8.86	8.86	**8.87**	3	3.00
	8:06		Middle	3.5	17.00	17.00		8.38	8.38		30.89	30.89		81.3	81.1		6.53	6.52		8.89	8.88		3	
13/2/2016	9:40	Fine	Middle	3.5	18.00	18.00	18.10	8.28	8.28	8.30	30.36	30.36	30.31	90.4	89.7	89.4	7.13	7.07	7.05	10.62	10.62	**10.61**	6	5.50
	9:42		Middle	3.5	18.20	18.20		8.32	8.32		30.25	30.25		88.9	88.5		7.01	6.97		10.61	10.58		5	
15/2/2016	10:14	Fine	Middle	3.5	15.30	15.30	15.25	8.39	8.39	8.41	30.37	30.37	30.37	107.3	105.5	104.4	8.94	8.78	8.74	8.56	8.55	**8.55**	5	4.50
	10:16		Middle	3.5	15.20	15.20		8.43	8.43		30.37	30.37		103.3	101.3		8.80	8.44		8.55	8.55		4	
17/2/2016	10:20	Fine	Middle	3.5	15.70	15.70	15.88	8.19	8.19	8.26	30.88	30.88	30.89	99.2	98.4	98.3	8.17	8.10	8.09	7.59	7.60	7.63	<2	2.00
	10:22		Middle	3.5	15.60	16.50		8.33	8.33		30.90	30.90		98.0	97.4		8.08	8.02		7.64	7.70		2	
19/2/2016	14:17	Cloudy	Middle	3.5	16.30	16.30	16.30	8.36	8.36	8.39	31.18	31.18	31.18	91.2	90.9	90.9	7.39	7.38	7.38	6.81	6.88	6.84	4	4.50
	14:19		Middle	3.5	16.30	16.30		8.41	8.41		31.17	31.17		90.7	90.8		7.36	7.37		6.83	6.82		5	
22/2/2016	10:40	Cloudy	Middle	3.5	16.20	16.20	16.25	8.13	8.13	8.21	31.00	31.00	31.00	102.3	101.3	101.6	8.32	8.24	8.26	5.06	5.01	5.01	5	5.00
	10:42		Middle	3.5	16.30	16.30		8.29	8.29		30.99	30.99		101.8	101.1		8.27	8.21		5.00	4.95		5	
24/2/2016	19:32	Cloudy	Middle	3.0	15.10	15.10	15.15	8.50	8.50	8.51	30.85	30.85	30.86	71.1	70.9	70.5	5.91	5.89	5.86	3.35	3.31	3.30	5	5.00
	19:33		Middle	3.0	15.20	15.20		8.52	8.52		30.86	30.86		70.1	70.0		5.83	5.82		3.25	3.29		5	
26/2/2016	8:20	Fine	Middle	3.5	15.50	15.50	15.50	8.33	8.33	8.36	30.68	30.68	30.68	99.0	97.0	96.9	8.18	8.02	8.01	3.78	3.78	3.80	7	6.50
	8:22		Middle	3.5	15.50	15.50		8.38	8.38		30.68	30.68		95.8	95.7		7.92	7.91		3.81	3.84		6	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at C7 - Windsor House
Mid-Ebb Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	2:20	Cloudy	Middle	-	13.60	13.60	13.55	8.54	8.54	8.55	31.41	31.41	31.41	79.1	79.7	79.6	6.79	6.84	6.83	2.04	2.00	2.00	<2	<2
	2:21		Middle	-	13.50	13.50		8.55	8.55		31.41	31.40		80.1	79.5		6.87	6.82		1.96	1.98		<2	
29/1/2016	2:35	Cloudy	Middle	-	16.50	16.50	16.50	8.44	8.44	8.45	31.12	31.12	31.13	81.1	82.2	81.6	6.55	6.64	6.59	2.35	2.29	2.34	<2	<2
	2:36		Middle	-	16.50	16.50		8.45	8.45		31.13	31.13		82.3	80.6		6.64	6.51		2.32	2.38		<2	
1/2/2016	16:00	Cloudy	Middle	-	16.10	16.10	16.00	8.35	8.35	8.38	30.75	30.75	30.76	95.7	95.6	95.6	7.84	7.83	7.83	9.23	9.24	**9.24**	5	4.50
	16:02		Middle	-	15.90	15.90		8.40	8.40		30.76	30.76		95.6	95.5		7.83	7.83		9.24	9.23		4	
3/2/2016	17:40	Cloudy	Middle	-	15.30	15.30	15.30	8.41	8.41	8.42	31.37	31.37	31.38	83.4	83.5	83.6	6.91	6.93	6.93	3.17	3.40	3.35	4	5.00
	17:41		Middle	-	15.30	15.30		8.42	8.42		31.38	31.38		83.8	83.7		6.94	6.94		3.50	3.33		6	
5/2/2016	0:17	Fine	Middle	-	15.60	15.60	15.55	8.43	8.43	8.44	31.13	31.13	31.13	83.0	83.8	83.7	6.85	6.92	6.91	2.26	2.20	2.19	<2	<2
	0:18		Middle	-	15.50	15.50		8.45	8.45		31.13	31.13		84.0	84.0		6.94	6.94		2.17	2.14		<2	
11/2/2016	14:45	Fine	Middle	-	17.90	17.90	17.95	8.20	8.20	8.24	30.57	30.57	30.57	91.2	90.2	89.7	7.20	7.12	7.08	8.38	8.35	8.43	<2	<2
	14:47		Middle	-	18.00	18.00		8.27	8.27		30.56	30.56		89.2	88.1		7.04	6.95		8.48	8.49		<2	
13/2/2016	16:13	Fine	Middle	-	19.00	19.00	19.05	8.33	8.33	8.34	30.08	30.08	30.07	85.5	83.5	83.5	6.63	6.47	6.47	8.07	8.00	7.97	<2	3.00
	16:15		Middle	-	19.10	19.10		8.35	8.35		30.05	30.05		82.8	82.1		6.42	6.37		7.90	7.90		3	
15/2/2016	16:17	Rainy	Middle	-	16.40	16.40	16.35	8.35	8.35	8.36	29.90	29.90	29.91	91.4	92.5	92.2	7.48	7.56	7.54	7.09	7.08	7.09	<2	2.00
	16:19		Middle	-	16.30	16.30		8.36	8.36		29.91	29.91		92.9	91.9		7.59	7.52		7.08	7.11		2	
17/2/2016	18:02	Cloudy	Middle	-	15.60	15.60	15.60	8.40	8.40	8.41	31.13	31.13	31.14	84.3	84.9	85.1	6.94	7.00	7.01	2.50	2.42	2.42	2	2.00
	18:03		Middle	-	15.60	15.60		8.42	8.42		31.14	31.14		85.4	85.7		7.03	7.06		2.39	2.37		2	
19/2/2016	20:29	Cloudy	Middle	-	16.10	16.10	16.10	8.42	8.42	8.43	31.16	31.16	31.17	75.7	75.8	75.8	6.18	6.18	6.18	2.38	2.40	2.37	3	3.00
	20:30		Middle	-	16.10	16.10		8.43	8.43		31.17	31.17		75.8	75.7		6.18	6.17		2.36	2.32		<2	
22/2/2016	15:40	Cloudy	Middle	-	16.70	16.70	16.70	8.49	8.49	8.50	30.53	30.53	30.53	95.7	94.7	94.8	7.74	7.65	7.66	4.94	4.93	4.93	4	3.50
	15:42		Middle	-	16.70	16.70		8.50	8.50		30.53	30.53		95.0	93.6		7.67	7.56		4.93	4.93		3	
24/2/2016	11:30	Fine	Middle	-	16.20	16.20	16.25	8.17	8.17	8.24	30.60	30.60	30.60	99.8	100.7	100.1	8.13	8.20	8.15	7.35	7.36	7.39	4	4.00
	11:32		Middle	-	16.30	16.30		8.30	8.30		30.60	30.60		99.4	100.4		8.09	8.17		7.42	7.43		4	
26/2/2016	14:20	Fine	Middle	-	16.60	16.60	16.60	8.47	8.47	8.49	30.32	30.32	30.32	103.0	102.9	102.6	8.36	8.34	8.32	2.24	2.28	2.30	2	2.00
	14:22		Middle	-	16.60	16.60		8.51	8.51		30.32	30.32		102.6	101.8		8.32	8.25		2.32	2.35		<2	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at C1 - HKCEC
Mid-Ebb Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	4:06	Cloudy	Middle	2.0	13.60	13.60	13.55	8.55	8.55	8.56	31.39	31.39	31.45	79.5	79.8	80.0	6.81	6.84	6.86	3.00	3.09	3.05	3	3.50
	4:07		Middle	2.0	13.50	13.50		8.56	8.56		31.51	31.50		80.2	80.3		6.88	6.89		3.06	3.04		4	
29/1/2016	4:06	Cloudy	Middle	2.5	16.40	16.40	16.40	8.53	8.53	8.53	31.11	31.11	31.11	82.4	82.6	82.1	6.68	6.69	6.65	2.46	2.41	2.42	2	2.00
	4:07		Middle	2.5	16.40	16.40		8.53	8.53		31.11	31.11		82.1	81.2		6.65	6.58		2.43	2.39		2	
1/2/2016	18:54	Cloudy	Middle	2.5	15.60	15.60	15.55	8.42	8.47	8.46	31.04	31.04	31.04	96.6	97.3	96.5	7.96	8.02	7.96	8.29	8.29	8.29	3	3.00
	18:56		Middle	2.5	15.50	15.50		8.47	8.47		31.04	31.04		97.0	95.1		8.00	7.84		8.28	8.29		3	
3/2/2016	21:52	Cloudy	Middle	2.5	15.30	15.30	12.70	8.60	8.60	8.61	31.66	31.66	31.67	85.3	85.5	85.4	7.05	7.07	7.06	2.40	2.38	2.42	4	4.00
	21:53		Middle	2.5	15.10	5.10		8.61	8.61		31.67	31.67		85.6	85.0		7.08	7.04		2.42	2.46		4	
5/2/2016	23:54	Fine	Middle	2.0	15.10	15.10	15.10	8.49	8.49	8.49	31.41	31.41	31.42	85.6	86.2	86.3	7.10	7.16	7.16	1.87	1.80	1.80	<2	<2
	23:55		Middle	2.0	15.10	15.10		8.50	8.49		31.42	31.42		86.7	86.6		7.20	7.18		1.79	1.74		<2	
11/2/2016	14:12	Fine	Middle	2.5	16.80	16.80	16.85	8.48	8.48	8.48	30.92	30.92	30.92	91.1	91.2	91.3	7.33	7.34	7.34	8.04	8.06	8.03	<2	<2
	14:14		Middle	2.5	16.90	16.90		8.48	8.48		30.91	30.91		91.4	91.4		7.35	7.34		8.00	8.00		<2	
13/2/2016	15:18	Fine	Middle	2.5	18.40	18.40	18.45	8.44	8.44	8.45	30.39	30.39	30.38	85.0	84.0	83.6	6.66	6.56	6.54	7.83	7.95	7.92	2	2.00
	15:20		Middle	2.5	18.50	18.50		8.45	8.45		30.36	30.36		83.1	82.1		6.51	6.42		7.93	7.98		<2	
15/2/2016	18:51	Rainy	Middle	3.0	17.60	17.60	17.35	8.39	8.39	8.43	30.95	30.95	30.96	99.7	99.0	98.4	8.31	8.25	8.20	6.97	6.98	6.98	2	2.50
	18:53		Middle	3.0	17.10	17.10		8.46	8.46		30.96	30.96		97.6	97.3		8.13	8.11		6.98	6.97		3	
17/2/2016	21:31	Cloudy	Middle	2.0	15.20	15.20	15.20	8.42	8.42	8.43	31.35	31.35	31.36	83.1	82.8	82.2	6.88	6.84	6.80	7.92	7.90	7.89	4	3.50
	21:32		Middle	2.0	15.20	15.20		8.44	8.44		31.36	31.36		82.2	80.7		6.80	6.68		7.87	7.85		3	
19/2/2016	23:05	Cloudy	Middle	2.0	15.70	15.70	15.70	8.49	8.49	8.50	31.17	31.17	31.18	60.6	60.4	59.2	4.98	4.96	4.87	3.11	3.22	3.15	2	2.50
	23:06		Middle	2.0	15.70	15.70		8.50	8.50		31.18	31.18		58.1	57.7		4.78	4.74		3.15	3.12		3	
22/2/2016	18:25	Cloudy	Middle	2.5	16.10	16.10	16.15	8.55	8.55	8.55	30.71	30.71	30.63	97.8	97.6	97.9	7.98	7.94	7.98	5.97	5.94	5.93	4	3.00
	18:27		Middle	2.5	16.20	16.20		8.55	8.55		30.73	30.37		97.8	98.2		7.98	8.01		5.91	5.90		2	
24/2/2016	14:40	Fine	Middle	2.5	15.30	15.30	15.40	8.56	8.56	8.56	30.60	30.60	30.61	97.2	97.4	97.1	8.04	8.05	8.03	3.64	3.64	3.57	6	6.00
	14:42		Middle	2.5	15.50	15.50		8.56	8.56		30.62	30.62		97.1	96.8		8.03	8.01		3.55	3.45		6	
26/2/2016	14:50	Fine	Middle	2.5	15.60	15.60	15.60	8.60	8.60	8.61	30.70	30.70	30.70	100.6	101.0	100.4	8.32	8.35	8.31	3.06	3.03	3.03	2	2.00
	14:52		Middle	2.5	15.60	15.60		8.61	8.61		30.70	30.70		100.0	100.1		8.32	8.26		3.01	3.01		2	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at P1 - HKCEC Phase I
Mid-Ebb Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	3:35	Cloudy	Middle	2.0	12.90	12.90	12.85	8.50	8.50	8.52	31.49	31.49	31.49	82.9	83.5	83.5	7.20	7.25	7.25	3.75	3.69	3.81	6	5.00
	3:36		Middle	2.0	12.80	12.80		8.53	8.53		31.49	31.49		83.7	83.7		7.27	7.27		3.80	3.98		4	
29/1/2016	3:42	Cloudy	Middle	2.5	16.30	16.30	16.30	8.52	8.52	8.52	31.17	31.17	31.17	81.3	81.5	81.4	6.59	6.61	6.60	3.06	2.93	2.94	3	3.00
	3:43		Middle	2.5	16.30	16.30		8.52	8.52		31.17	31.17		81.5	81.4		6.61	6.60		2.91	2.87		3	
1/2/2016	18:38	Cloudy	Middle	2.5	15.10	15.10	15.05	8.49	8.49	8.50	30.94	30.94	30.94	93.1	93.7	93.6	7.76	7.81	7.81	8.53	8.51	8.51	3	2.50
	18:40		Middle	2.5	15.00	15.00		8.50	8.50		30.94	30.94		93.5	94.2		7.79	7.86		8.50	8.50		2	
3/2/2016	21:30	Cloudy	Middle	2.5	15.10	15.10	15.05	8.55	8.55	8.61	31.67	31.67	31.68	82.7	84.5	84.1	6.86	7.01	6.97	2.18	2.16	2.06	2	2.50
	21:31		Middle	2.5	15.00	15.00		8.66	8.66		31.68	31.68		84.5	84.6		7.01	7.01		2.00	1.88		3	
5/2/2016	23:23	Fine	Middle	2.0	14.70	14.70	14.70	8.56	8.56	8.56	31.55	31.53	31.54	86.4	86.3	86.3	7.22	7.21	7.21	1.40	1.37	1.39	<2	<2
	23:24		Middle	2.0	14.70	14.70		8.56	8.56		31.53	31.53		86.3	86.1		7.21	7.20		1.38	1.42		<2	
11/2/2016	13:56	Fine	Middle	2.5	17.70	17.70	17.80	8.35	8.35	8.38	31.00	31.00	30.97	94.0	92.7	92.1	7.42	7.32	7.27	8.70	8.76	8.75	3	3.00
	13:58		Middle	2.5	17.90	17.90		8.41	8.41		30.93	30.93		91.1	90.6		7.19	7.14		8.76	8.76		3	
13/2/2016	15:02	Fine	Middle	2.5	19.20	19.20	19.30	8.33	8.33	8.36	30.54	30.54	30.47	92.2	91.3	90.3	7.10	7.02	6.95	8.40	8.34	8.33	2	2.50
	15:04		Middle	2.5	19.40	19.40		8.38	8.38		30.40	30.40		89.3	88.4		6.86	6.80		8.30	8.29		3	
15/2/2016	17:20	Rainy	Middle	3.0	15.30	15.30	15.20	8.20	8.20	8.34	30.65	30.65	30.66	101.3	100.7	98.9	8.43	8.39	8.24	8.29	8.29	8.29	4	4.50
	17:22		Middle	3.0	15.10	15.10		8.47	8.47		30.67	30.67		97.3	96.3		8.10	8.02		8.29	8.28		5	
17/2/2016	20:45	Cloudy	Middle	2.0	14.60	14.60	14.60	8.56	8.56	8.57	31.50	31.50	31.50	77.2	77.3	77.5	6.47	6.48	6.50	3.61	3.54	3.56	4	3.50
	20:46		Middle	2.0	14.60	14.60		8.57	8.57		31.49	31.49		77.6	77.9		6.51	6.53		3.50	3.57		3	
19/2/2016	22:35	Cloudy	Middle	2.0	15.60	15.60	15.60	8.54	8.54	8.54	31.25	31.28	31.27	61.1	59.0	59.1	5.04	4.85	4.86	4.50	4.01	4.20	2	3.00
	22:36		Middle	2.0	15.60	15.60		8.55	8.54		31.28	31.28		58.3	58.1		4.79	4.77		4.20	4.08		4	
22/2/2016	17:55	Cloudy	Middle	2.5	16.50	16.50	16.60	8.39	8.39	8.42	30.87	30.87	30.87	98.5	99.3	99.0	7.97	8.03	8.02	4.37	4.33	4.33	4	4.50
	17:57		Middle	2.5	16.70	16.70		8.45	8.45		30.87	30.87		99.1	99.0		8.08	8.00		4.31	4.30		5	
24/2/2016	14:20	Fine	Middle	2.5	15.50	15.50	15.55	8.44	8.44	8.47	30.69	30.69	30.69	98.1	98.2	98.1	8.10	8.11	8.10	3.78	3.74	3.73	4	4.50
	14:22		Middle	2.5	15.60	15.60		8.49	8.49		30.69	30.69		98.1	97.8		8.10	8.08		3.74	3.65		5	
26/2/2016	14:30	Fine	Middle	2.5	16.00	16.00	16.05	8.49	8.49	8.52	30.67	30.67	30.67	104.3	104.6	103.9	8.54	8.56	8.50	3.52	3.54	3.52	4	3.50
	14:32		Middle	2.5	16.10	16.10		8.54	8.54		30.67	30.67		103.7	102.9		8.47	8.42		3.53	3.50		3	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at P3 - APA
Mid-Ebb Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	3:43	Cloudy	Middle	2.0	13.20	13.20	13.15	8.58	8.58	8.59	31.49	31.49	31.48	83.7	83.8	83.4	7.23	7.24	7.21	2.89	2.91	2.84	4	4.00
	3:44		Middle	2.0	13.10	13.10		8.59	8.59		31.47	31.47		83.5	82.7		7.22	7.15		2.79	2.77		4	
29/1/2016	3:49	Cloudy	Middle	2.5	16.40	16.40	16.40	8.50	8.50	8.50	31.22	31.22	31.22	78.1	78.2	78.4	6.33	6.34	6.36	2.60	2.55	2.55	3	2.50
	3:50		Middle	2.5	16.40	16.40		8.50	8.50		31.22	31.22		78.5	78.9		6.36	6.39		2.57	2.47		2	
1/2/2016	18:42	Cloudy	Middle	2.5	15.10	15.10	15.05	8.50	8.50	8.51	31.05	31.05	31.05	93.6	94.8	94.6	7.80	7.80	7.86	8.82	8.81	8.80	3	2.50
	18:44		Middle	2.5	15.00	15.00		8.51	8.51		31.05	31.05		94.8	95.2		7.90	7.93		8.79	8.78		2	
3/2/2016	21:37	Cloudy	Middle	2.5	15.10	15.10	15.05	8.63	8.63	8.63	31.67	31.67	31.67	85.1	85.0	85.0	7.06	7.05	7.05	2.59	2.86	2.76	8	7.00
	21:38		Middle	2.5	15.00	15.00		8.63	8.63		31.67	31.67		84.9	85.0		7.04	7.05		2.84	2.74		6	
5/2/2016	23:30	Fine	Middle	2.0	14.60	14.60	14.55	8.61	8.61	8.62	31.54	31.54	31.54	86.8	87.1	87.3	7.27	7.30	7.31	1.86	1.79	1.77	<2	<2
	23:31		Middle	2.0	14.50	14.50		8.62	8.62		31.54	31.54		87.6	87.6		7.34	7.34		1.73	1.71		<2	
11/2/2016	14:00	Fine	Middle	2.5	17.40	17.40	17.40	8.43	8.43	8.44	30.73	30.73	30.82	93.3	92.2	92.9	7.44	7.35	7.40	8.07	8.01	7.99	2	2.00
	14:02		Middle	2.5	17.40	17.40		8.45	8.45		30.91	30.91		93.7	92.3		7.47	7.35		7.96	7.93		<2	
13/2/2016	15:06	Fine	Middle	2.5	19.50	19.50	19.65	8.39	8.39	8.40	30.40	30.40	30.39	77.7	77.5	78.1	5.96	5.94	5.99	8.35	8.32	8.33	<2	2.00
	15:08		Middle	2.5	19.80	19.80		8.40	8.40		30.37	30.37		78.0	79.0		5.98	6.06		8.31	8.32		2	
15/2/2016	17:25	Rainy	Middle	3.0	15.50	15.50	15.45	8.40	8.40	8.45	30.66	30.66	30.66	92.8	93.4	92.7	7.69	7.74	7.69	6.45	6.42	6.51	4	4.00
	17:27		Middle	3.0	15.40	15.40		8.50	8.50		30.66	30.66		92.3	92.4		7.65	7.66		6.50	6.68		4	
17/2/2016	20:51	Cloudy	Middle	2.0	14.70	14.70	14.70	8.59	8.59	8.59	31.51	31.51	31.51	77.4	77.7	78.0	6.47	6.48	6.52	2.97	2.99	3.09	3	3.50
	20:52		Middle	2.0	14.70	14.70		8.59	8.59		31.51	31.51		78.4	78.6		6.55	6.57		3.28	3.13		4	
19/2/2016	22:41	Cloudy	Middle	2.0	15.60	15.60	15.65	8.56	8.56	8.57	31.28	31.28	31.28	56.8	57.2	57.6	4.67	4.70	4.73	3.79	3.61	3.64	2	2.00
	22:42		Middle	2.0	15.70	15.70		8.57	8.57		31.28	31.28		57.8	58.4		4.75	4.79		3.57	3.59		2	
22/2/2016	18:00	Cloudy	Middle	2.5	16.20	16.20	16.25	8.48	8.48	8.50	30.85	30.85	30.85	99.0	99.2	99.3	8.06	8.08	8.08	4.29	4.29	4.29	3	2.50
	18:02		Middle	2.5	16.30	16.30		8.51	8.51		30.84	30.84		99.7	99.2		8.11	8.07		4.28	4.29		2	
24/2/2016	14:25	Fine	Middle	2.5	15.60	15.60	15.55	8.50	8.50	8.51	30.21	30.21	30.45	96.9	97.4	97.5	8.02	8.06	8.06	3.35	3.30	3.31	5	5.00
	14:27		Middle	2.5	15.50	15.50		8.52	8.52		30.68	30.68		97.6	98.1		8.06	8.11		3.30	3.30		5	
26/2/2016	14:35	Fine	Middle	2.5	15.80	15.80	190.78	8.56	8.56	8.57	30.68	30.68	30.68	102.6	102.5	103.9	8.45	8.44	8.45	2.91	2.95	2.90	2	2.00
	14:37		Middle	2.5	15.80	715.70		8.58	8.58		30.68	30.68		107.8	102.5		8.47	8.44		2.87	2.87		<2	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at P4 - SOC
Mid-Ebb Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	3:49	Cloudy	Middle	2.0	13.10	13.10	13.10	8.57	8.57	8.58	31.46	31.46	31.46	83.8	84.7	85.2	7.24	7.33	7.37	3.06	3.04	3.03	3	4.00
	3:50		Middle	2.0	13.10	13.10		8.58	8.58		31.46	31.46		85.7	86.7		7.41	7.50		3.01	3.02		5	
29/1/2016	3:54	Cloudy	Middle	2.5	16.40	16.40	16.40	8.46	8.46	8.48	30.57	30.57	30.64	79.4	80.2	80.0	6.45	6.52	6.50	2.76	2.74	2.71	<2	<2
	3:55		Middle	2.5	16.40	16.40		8.49	8.49		30.71	30.71		79.9	80.4		6.49	6.53		2.67	2.65		<2	
1/2/2016	18:46	Cloudy	Middle	2.5	15.30	15.30	15.25	8.51	8.51	8.52	31.15	31.15	31.16	92.7	92.6	92.8	7.68	7.67	7.69	8.84	8.83	8.84	5	4.50
	18:48		Middle	2.5	15.20	15.20		8.52	8.52		31.16	31.16		93.1	92.9		7.72	7.70		8.85	8.84		4	
3/2/2016	21:44	Cloudy	Middle	2.5	15.10	15.10	15.05	8.55	8.55	8.56	31.51	31.51	31.52	84.3	84.4	84.4	7.01	7.02	7.02	3.40	3.38	3.25	3	3.50
	21:45		Middle	2.5	15.00	15.00		8.57	8.57		31.53	31.53		84.4	84.5		7.02	7.03		3.13	3.09		4	
5/2/2016	23:39	Fine	Middle	2.0	14.80	14.80	14.80	8.36	8.36	8.38	31.36	31.36	31.38	86.5	86.6	86.5	7.23	7.24	7.23	2.57	2.63	2.65	<2	<2
	23:40		Middle	2.0	14.80	14.80		8.39	8.39		31.39	31.39		86.6	86.2		7.24	7.20		2.68	2.72		<2	
11/2/2016	14:04	Fine	Middle	2.5	17.10	17.10	17.10	8.46	8.46	8.47	31.12	31.12	31.03	91.6	91.4	90.5	7.34	7.32	7.25	8.29	8.22	8.19	3	3.50
	14:06		Middle	2.5	17.10	17.10		8.47	8.47		30.93	30.93		90.2	88.8		7.23	7.12		8.16	8.08		4	
13/2/2016	15:10	Fine	Middle	2.5	18.70	18.70	18.80	8.42	8.42	8.43	30.48	30.48	30.45	87.9	85.4	85.4	6.83	6.63	6.63	8.81	8.77	8.73	2	3.00
	15:12		Middle	2.5	18.90	18.90		8.43	8.43		30.41	30.41		84.6	83.7		6.57	6.50		8.70	8.63		4	
15/2/2016	17:30	Rainy	Middle	3.0	15.30	15.30	15.30	8.50	8.50	8.51	30.79	30.79	30.81	93.5	93.1	93.3	7.75	7.72	7.74	5.62	5.62	5.63	2	2.00
	17:32		Middle	3.0	15.30	15.30		8.51	8.51		30.82	30.82		93.2	93.2		7.75	7.73		5.63	5.63		<2	
17/2/2016	20:58	Cloudy	Middle	2.0	14.80	14.80	14.80	8.60	8.60	8.61	31.49	31.49	31.50	80.2	80.5	80.7	6.70	6.72	6.74	4.61	4.40	4.41	5	4.00
	20:59		Middle	2.0	14.80	14.80		8.61	8.61		31.50	31.50		80.8	81.2		6.75	6.78		4.36	4.28		3	
19/2/2016	22:47	Cloudy	Middle	2.0	15.70	15.70	15.70	8.58	8.58	8.58	31.29	31.29	31.29	75.2	75.6	76.1	6.18	6.21	6.25	3.95	3.98	3.94	4	3.50
	22:48		Middle	2.0	15.70	15.70		8.58	8.58		31.29	31.29		76.8	76.9		6.30	6.31		3.95	3.88		3	
22/2/2016	18:05	Cloudy	Middle	2.5	16.20	16.20	16.25	8.52	8.52	8.53	30.70	30.70	30.70	98.4	98.2	98.7	8.02	8.01	8.05	4.40	4.30	4.30	3	3.00
	18:07		Middle	2.5	16.30	16.30		8.53	8.53		30.70	30.70		99.1	99.2		8.07	8.08		4.26	4.24		3	
24/2/2016	14:30	Fine	Middle	2.5	15.40	15.40	15.40	8.53	8.53	8.54	30.67	30.67	30.67	97.7	97.7	97.4	8.10	8.09	8.08	5.69	5.50	5.59	4	4.50
	14:32		Middle	2.5	15.40	15.40		8.54	8.54		30.67	30.67		97.5	96.7		8.09	8.02		5.58	5.57		5	
26/2/2016	14:40	Fine	Middle	2.5	15.60	15.60	15.60	8.58	8.58	8.59	30.63	30.63	30.66	100.5	99.5	100.0	8.29	8.21	8.25	3.97	3.96	3.98	4	3.50
	14:42		Middle	2.5	15.60	15.60		8.59	8.59		30.69	30.69		100.6	99.5		8.30	8.21		3.99	3.99		3	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at P5 - WCT / RT / IT
Mid-Ebb Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	3:56	Cloudy	Middle	2.0	13.90	13.90	13.80	8.34	8.34	8.37	30.62	30.62	30.65	79.3	79.6	79.2	6.80	6.82	6.79	3.34	3.36	3.40	4	4.00
	3:57		Middle	2.0	13.70	13.70		8.40	8.40		30.68	30.68		79.5	78.5		6.82	6.73		3.43	3.48		4	
29/1/2016	3:58	Cloudy	Middle	2.5	16.40	16.40	16.40	8.53	8.53	8.52	31.07	31.07	31.08	79.1	78.9	79.4	6.41	6.39	6.43	2.51	2.44	2.45	<2	2.00
	3:59		Middle	2.5	16.40	16.40		8.53	8.50		31.08	31.08		79.6	79.8		6.45	6.47		2.40	2..37		2	
1/2/2016	18:50	Cloudy	Middle	2.5	15.20	15.20	15.30	8.52	8.52	8.53	31.18	31.18	31.11	93.8	93.5	93.5	7.75	7.73	7.73	8.41	8.45	8.43	2	2.00
	18:52		Middle	2.5	15.40	15.40		8.53	8.53		31.04	31.04		94.0	92.8		7.77	7.67		8.43	8.43		2	
3/2/2016	21:49	Cloudy	Middle	2.5	15.30	15.30	15.25	8.64	8.64	8.65	31.66	31.66	31.67	84.5	84.9	85.0	7.00	7.03	7.04	2.67	2.64	2.61	4	4.00
	21:50		Middle	2.5	15.20	15.20		8.65	8.65		31.67	31.67		85.2	85.4		7.06	7.05		2.58	2.53		4	
5/2/2016	23:46	Fine	Middle	2.0	14.90	14.90	14.90	8.59	8.59	8.60	31.52	31.52	31.52	86.3	86.7	86.6	7.18	7.21	7.20	1.87	1.89	1.82	<2	<2
	23:47		Middle	2.0	14.90	14.90		8.60	8.60		31.52	31.52		86.8	86.4		7.20	7.19		1.78	1.74		<2	
11/2/2016	14:08	Fine	Middle	2.5	16.90	16.90	16.90	8.47	8.47	8.48	30.92	30.92	30.92	89.2	89.1	88.7	7.18	7.16	7.13	8.49	8.45	8.58	3	2.50
	14:10		Middle	2.5	16.90	16.90		8.48	8.48		30.91	30.91		88.4	88.1		7.11	7.08		8.82	8.55		2	
13/2/2016	15:14	Fine	Middle	2.5	18.10	18.10	18.20	8.44	8.44	8.44	30.40	30.40	30.40	88.2	89.9	86.5	6.93	7.05	6.79	8.81	8.80	8.80	2	2.00
	15:16		Middle	2.5	18.30	18.30		8.44	8.44		30.40	30.40		84.7	83.2		6.66	6.52		8.79	8.78		2	
15/2/2016	17:35	Rainy	Middle	3.0	15.60	15.60	15.55	8.51	8.51	8.51	30.68	30.68	30.68	90.8	89.5	89.5	7.48	7.39	7.39	5.75	5.75	5.79	2	2.00
	17:37		Middle	3.0	15.50	15.50		8.51	8.51		30.68	30.68		89.0	88.7		7.35	7.33		5.81	5.83		2	
17/2/2016	21:07	Cloudy	Middle	2.0	15.10	15.10	15.10	8.61	8.61	8.61	31.49	31.49	31.50	81.8	82.0	82.1	6.80	6.80	6.86	3.01	2.70	2.83	3	4.00
	21:08		Middle	2.0	15.10	15.10		8.61	8.61		31.50	31.50		82.1	82.3		6.92	6.93		2.74	2.85		5	
19/2/2016	22:57	Cloudy	Middle	2.0	15.70	15.70	15.70	8.58	8.58	8.58	31.29	31.29	31.29	64.5	64.8	65.5	5.30	5.32	5.38	3.59	3.36	3.39	3	3.00
	22:58		Middle	2.0	15.70	15.70		8.58	8.58		31.29	31.29		66.2	66.4		5.44	5.45		3.31	3.28		3	
22/2/2016	18:10	Cloudy	Middle	2.5	16.10	16.10	16.15	8.54	8.54	8.55	30.70	30.70	30.71	96.7	98.1	97.4	7.60	8.01	7.88	3.14	3.10	3.17	3	3.50
	18:12		Middle	2.5	16.20	16.20		8.55	8.55		30.71	30.71		97.4	97.3		7.95	7.94		3.20	3.24		4	
24/2/2016	14:35	Fine	Middle	2.5	15.20	15.20	15.30	8.54	8.54	8.55	30.65	30.65	30.66	97.0	97.3	96.9	8.05	8.07	8.04	4.36	4.31	4.28	4	4.50
	14:37		Middle	2.5	15.40	15.40		8.55	8.55		30.66	30.66		96.9	96.2		8.04	7.98		4.25	4.21		5	
26/2/2016	14:45	Fine	Middle	2.5	15.60	15.60	15.60	8.59	8.59	8.59	30.48	30.48	30.59	99.6	99.9	100.1	8.22	8..24	8.26	3.35	3.45	3.44	5	4.50
	14:47		Middle	2.5	15.60	15.60		8.59	8.59		30.70	30.70		100.3	100.6		8.26	8.29		3.49	3.48		4	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at RW21-P789 - Sun Hung Kai Centre
Mid-Ebb Tide

Date	Time	Weater Condition	Sampling Depth (m)		Water Temperature (°C)			pH (-)			Salinity (ppt)			DO Saturation (%)			DO (mg/L)			Turbidity (NTU)			Suspended Solids (mg/L)	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	3:06	Cloudy	Middle	3.0	13.80	13.70	13.73	8.48	8.48	8.48	31.44	31.44	31.45	78.6	78.9	78.9	6.72	6.75	6.75	2.34	2.29	2.30	<2	2.00
	3:07		Middle	3.0	13.70	13.70		8.48	8.48		31.46	31.46		79.1	78.9		6.76	6.75		2.31	2.27		2	
29/1/2016	3:07	Cloudy	Middle	3.5	16.50	16.50	16.50	8.41	8.41	8.42	29.20	29.20	29.20	81.6	82.5	81.9	6.67	6.75	6.70	3.56	3.54	3.52	<2	<u>≤2</u>
	3:08		Middle	3.5	16.50	16.50		8.43	8.43		29.20	29.20		82.3	81.2		6.73	6.64		3.52	3.47		<2	
1/2/2016	15:45	Cloudy	Middle	3.5	15.50	15.50	15.50	8.34	8.34	8.38	30.39	30.39	30.42	78.6	78.2	78.5	6.51	6.48	6.50	8.99	8.98	<u>8.98</u>	3	2.50
	15:47		Middle	3.5	15.50	15.50		8.41	8.41		30.45	30.45		78.2	78.9		6.48	6.54		8.98	8.98		2	
3/2/2016	18:20	Cloudy	Middle	3.5	15.10	15.10	15.05	8.21	8.21	8.22	31.29	31.29	31.31	84.1	84.3	84.5	7.01	7.03	7.04	3.47	3.49	3.50	5	5.00
	18:21		Middle	3.5	15.00	15.00		8.23	8.23		31.32	31.32		84.9	84.8		7.06	7.07		3.51	3.54		5	
5/2/2016	21:15	Fine	Middle	3.5	15.50	15.50	15.50	8.19	8.19	8.22	31.34	31.36	31.36	87.7	88.1	87.7	7.23	7.26	7.23	1.28	1.21	1.25	<2	<u>≤2</u>
	21:16		Middle	3.5	15.50	15.50		8.25	8.25		31.37	31.37		87.7	87.3		7.23	7.20		1.25	1.26		<2	
11/2/2016	14:21	Fine	Middle	3.5	16.90	16.90	17.00	8.46	8.46	8.45	30.94	30.94	30.91	89.1	89.6	88.5	7.15	7.18	7.09	8.64	8.69	<u>8.62</u>	3	2.50
	14:23		Middle	3.5	17.10	17.10		8.46	8.43		30.87	30.87		88.2	86.9		7.07	6.96		8.55	8.61		2	
13/2/2016	15:28	Fine	Middle	3.5	17.60	17.60	17.65	8.36	8.37	8.38	30.56	30.56	30.53	91.8	90.3	89.7	7.28	7.17	7.12	7.13	7.16	7.04	2	2.00
	15:30		Middle	3.5	17.70	17.70		8.40	8.40		30.49	30.49		88.9	87.8		7.05	6.97		7.00	6.85		2	
15/2/2016	15:50	Rainy	Middle	3.5	16.20	16.20	16.15	8.40	8.40	8.42	30.47	30.47	30.48	89.9	92.3	91.6	7.35	7.55	7.49	7.60	7.75	7.72	4	4.50
	15:52		Middle	3.5	16.10	16.10		8.43	8.43		30.48	30.48		92.1	92.2		7.53	7.54		7.76	7.77		5	
17/2/2016	18:24	Cloudy	Middle	3.5	15.40	15.40	15.35	8.23	8.23	8.23	31.43	31.43	31.45	88.1	87.9	87.7	7.29	7.27	7.25	3.69	3.72	3.66	4	4.00
	18:25		Middle	3.5	15.30	15.30		8.23	8.23		31.47	31.47		87.5	87.1		7.24	7.20		3.66	3.57		4	
19/2/2016	21:00	Cloudy	Middle	3.5	15.90	15.90	15.90	8.29	8.29	8.31	31.25	31.25	31.25	77.5	77.3	77.5	6.34	6.33	6.34	3.24	3.26	3.29	4	3.50
	21:01		Middle	3.5	15.90	15.90		8.32	8.32		31.25	31.25		77.5	77.6		6.34	6.35		3.31	3.34		3	
22/2/2016	15:50	Cloudy	Middle	3.0	16.10	16.10	16.15	8.48	8.48	8.49	30.69	30.69	30.70	99.4	99.5	99.6	8.11	8.11	8.12	5.11	5.08	5.07	4	4.50
	15:52		Middle	3.0	16.20	16.20		8.50	8.50		30.70	30.70		99.8	99.6		8.14	8.12		5.07	5.00		5	
24/2/2016	14:56	Fine	Middle	3.5	15.60	15.60	15.60	8.47	8.47	8.49	30.58	30.58	30.58	96.9	96.5	95.8	8.00	7.95	7.90	5.92	5.69	5.74	7	6.00
	14:58		Middle	3.5	15.60	15.60		8.52	8.50		30.58	30.58		95.3	94.3		7.87	7.79		5.70	5.66		5	
26/2/2016	13:52	Fine	Middle	3.5	16.30	16.30	16.30	8.42	8.42	8.45	30.83	30.83	30.80	96.7	96.0	95.7	7.87	7.81	7.78	4.50	4.55	4.40	6	5.00
	13:54		Middle	3.5	16.30	16.30		8.47	8.47		30.77	30.77		95.2	94.8		7.74	7.71		4.32	4.21		4	

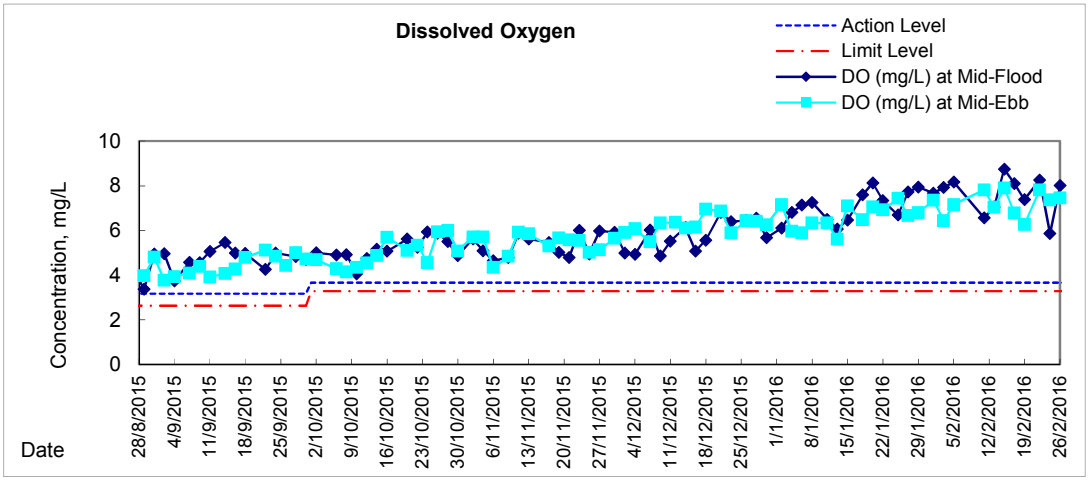
Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

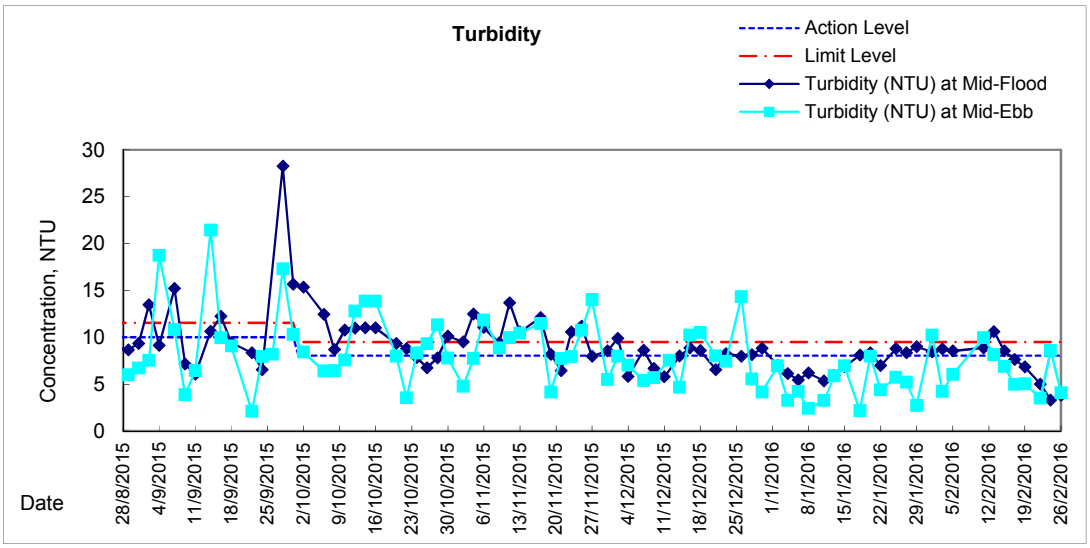
Water Monitoring Result at WSD19 - Sheung Wan
Mid-Ebb Tide

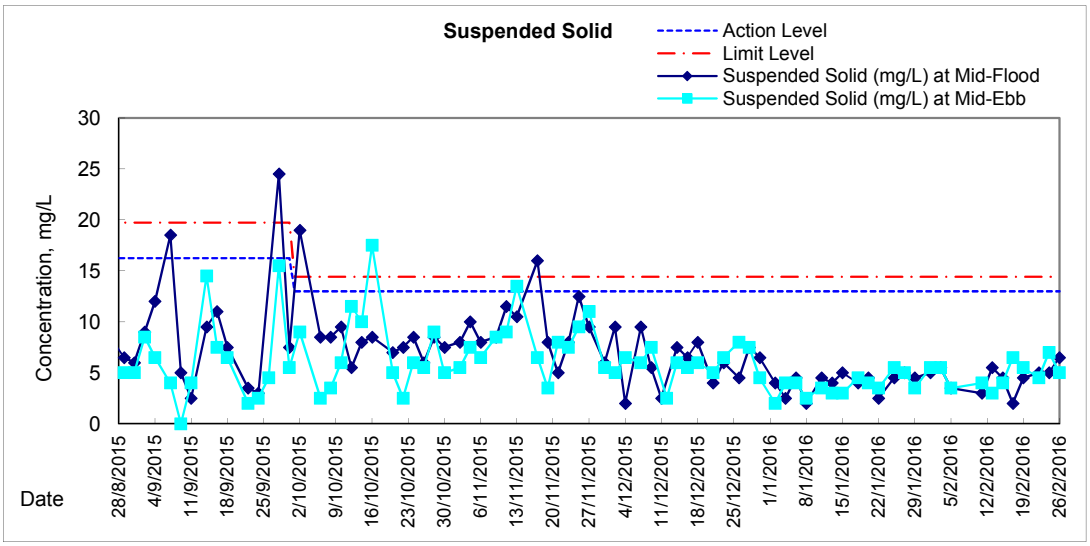
Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO			Turbidity			Suspended Solids	
			m		°C			-			ppt			%			mg/L			NTU			mg/L	
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value		Average	Value	Average
27/1/2016	1:17	Cloudy	Middle	3.0	14.30	14.30	14.25	8.41	8.41	8.43	31.26	31.26	31.26	79.2	78.9	78.8	6.70	6.68	6.67	5.11	5.14	5.21	4	5.00
	1:18		Middle	3.0	14.20	14.20		8.44	8.44		31.26	31.26		78.6	78.4		6.65	6.64		5.27	5.30		6	
29/1/2016	4:25	Cloudy	Middle	3.0	16.50	16.50	16.50	8.26	8.26	8.30	30.74	30.75	30.79	83.1	83.4	83.7	6.74	6.77	6.79	2.74	2.76	2.72	4	3.50
	4:26		Middle	3.0	16.50	16.50		8.33	8.33		30.84	30.84		83.9	84.2		6.81	6.83		2.71	2.68		3	
1/2/2016	16:40	Cloudy	Middle	3.5	15.60	15.60	15.55	8.27	8.27	8.32	30.78	30.78	30.80	88.9	89.3	89.1	7.34	7.37	7.35	10.25	10.24	**10.23**	6	5.50
	16:42		Middle	3.5	15.50	15.50		8.36	8.36		30.82	30.82		89.3	88.8		7.37	7.33		10.22	10.22		5	
3/2/2016	19:50	Cloudy	Middle	3.0	14.80	14.80	14.75	8.46	8.46	8.47	31.45	31.45	31.47	77.0	76.9	76.8	6.45	6.44	6.44	4.20	4.17	4.22	5	5.50
	19:51		Middle	3.0	14.70	14.70		8.48	8.48		31.49	31.49		76.7	76.6		6.43	6.42		4.28	4.22		6	
5/2/2016	22:30	Fine	Middle	3.0	14.80	14.80	14.80	8.34	8.34	8.35	31.36	31.36	31.37	85.7	85.6	85.8	7.15	7.13	7.16	6.18	6.13	6.04	4	3.50
	22:31		Middle	3.0	14.80	14.80		8.36	8.36		31.38	31.38		86.1	85.8		7.18	7.16		5.97	5.89		3	
11/2/2016	13:10	Fine	Middle	3.5	17.50	17.50	17.65	8.36	8.36	8.38	30.80	30.80	30.80	98.6	99.6	98.7	7.81	7.88	7.81	9.94	9.97	**9.97**	3	4.00
	13:12		Middle	3.5	17.80	17.80		8.39	8.39		30.79	30.79		99.0	97.6		7.84	7.72		9.99	9.99		5	
13/2/2016	14:27	Fine	Middle	3.5	19.80	19.80	19.80	8.43	8.43	8.43	30.27	30.27	30.23	91.7	92.0	91.2	7.07	7.10	7.03	8.12	8.12	**8.13**	3	3.00
	14:29		Middle	3.5	19.80	19.80		8.43	8.43		30.19	30.19		91.1	90.1		7.02	6.94		8.14	8.14		3	
15/2/2016	16:35	Rainy	Middle	3.5	15.70	15.70	15.65	8.41	8.41	8.43	30.59	30.59	30.60	95.6	95.8	95.7	7.89	7.91	7.90	6.83	6.87	6.88	3	4.00
	16:37		Middle	3.5	15.60	15.60		8.44	8.44		30.60	30.60		96.0	95.2		7.93	7.87		6.90	6.92		5	
17/2/2016	19:42	Cloudy	Middle	3.0	15.20	15.20	15.20	8.48	8.48	8.49	31.24	31.24	31.25	81.7	81.3	81.7	6.78	6.75	6.78	5.09	5.14	4.99	7	6.50
	19:43		Middle	3.0	15.20	15.20		8.49	8.49		31.26	31.26		81.8	81.8		6.79	6.79		4.87	4.85		6	
19/2/2016	0:16	Cloudy	Middle	2.5	15.70	15.70	15.70	8.54	8.54	8.54	30.95	30.95	30.95	75.9	76.0	76.2	6.24	6.25	6.26	5.11	5.08	5.03	5	5.50
	0:17		Middle	2.5	15.70	15.70		8.54	8.54		30.95	30.95		76.3	76.4		6.27	6.28		5.02	4.91		6	
22/2/2016	16:52	Cloudy	Middle	3.0	16.30	16.30	16.35	8.42	8.42	8.45	30.67	30.67	30.68	96.3	95.8	96.1	7.83	7.79	7.82	3.51	3.51	3.52	4	4.50
	16:54		Middle	3.0	16.40	16.40		8.47	8.47		30.68	30.68		96.3	96.0		7.83	7.81		3.52	3.53		5	
24/2/2016	13:45	Fine	Middle	3.5	15.90	15.90	15.95	8.26	8.26	8.30	30.75	30.75	30.72	90.9	90.2	89.9	7.45	7.39	7.36	8.56	8.55	**8.59**	7	7.00
	13:47		Middle	3.5	16.00	16.00		8.34	8.34		30.69	30.69		89.4	88.9		7.32	7.28		8.61	8.62		7	
26/2/2016	12:45	Fine	Middle	3.5	16.50	16.50	16.60	8.31	8.31	8.36	30.77	30.77	30.75	91.6	92.3	92.6	7.34	7.46	7.45	4.15	4.15	4.10	4	5.00
	12:47		Middle	3.5	16.70	16.70		8.41	8.41		30.72	30.72		93.6	92.8		7.52	7.47		4.03	4.05		6	

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

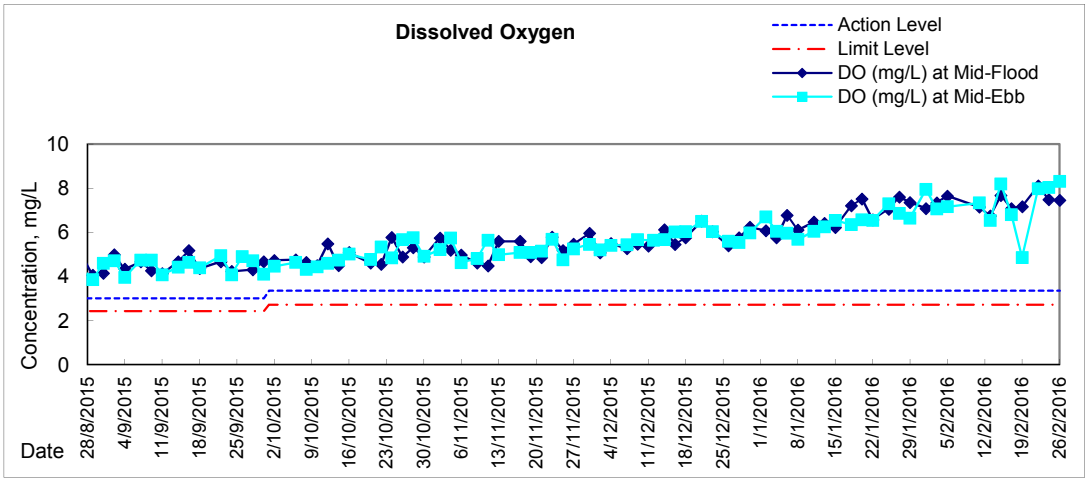
Graphic Presentation of Water Quality Result of WSD19 - Sheung Wan

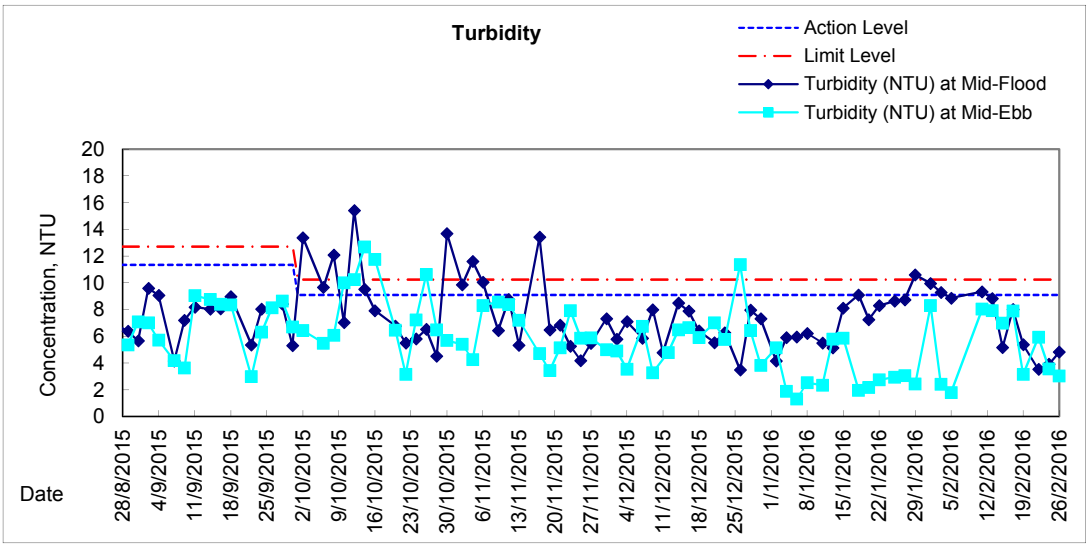


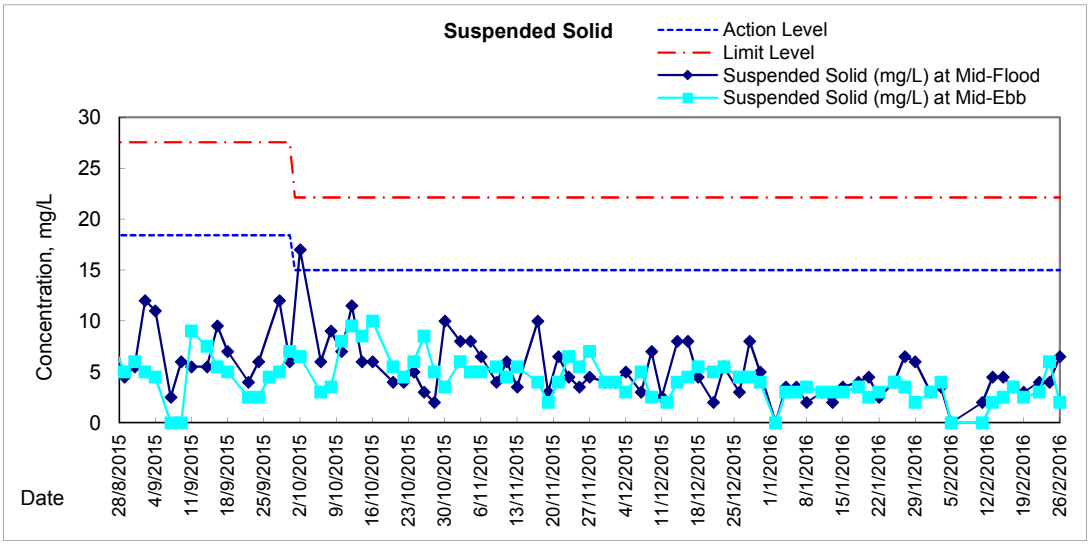




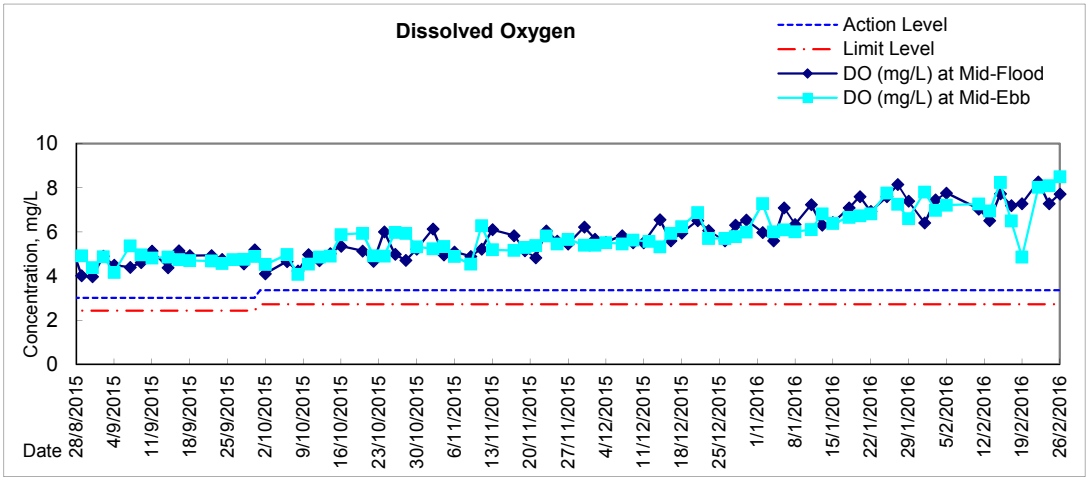
Graphic Presentation of Water Quality Result of C1 - HKCEC

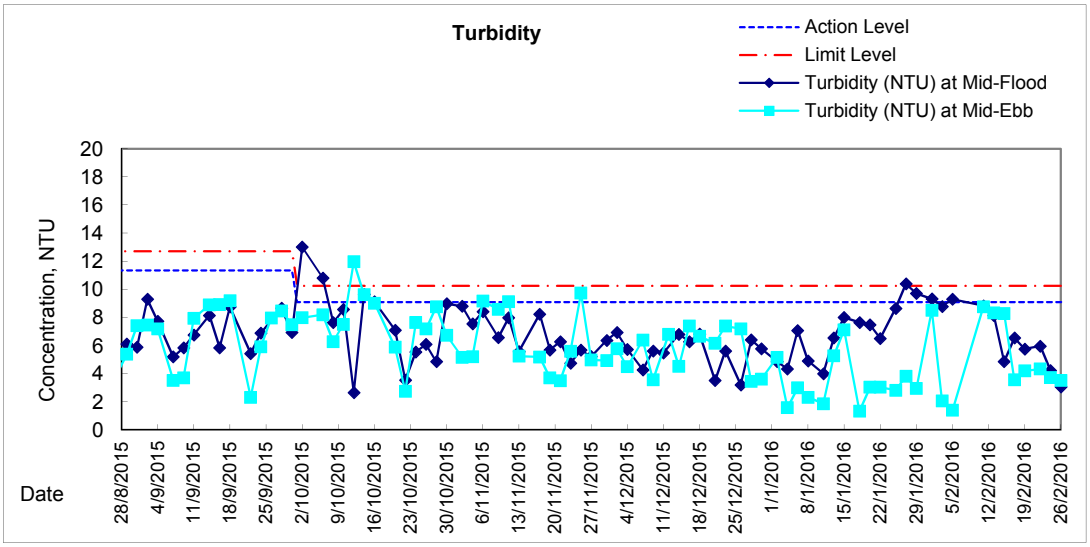


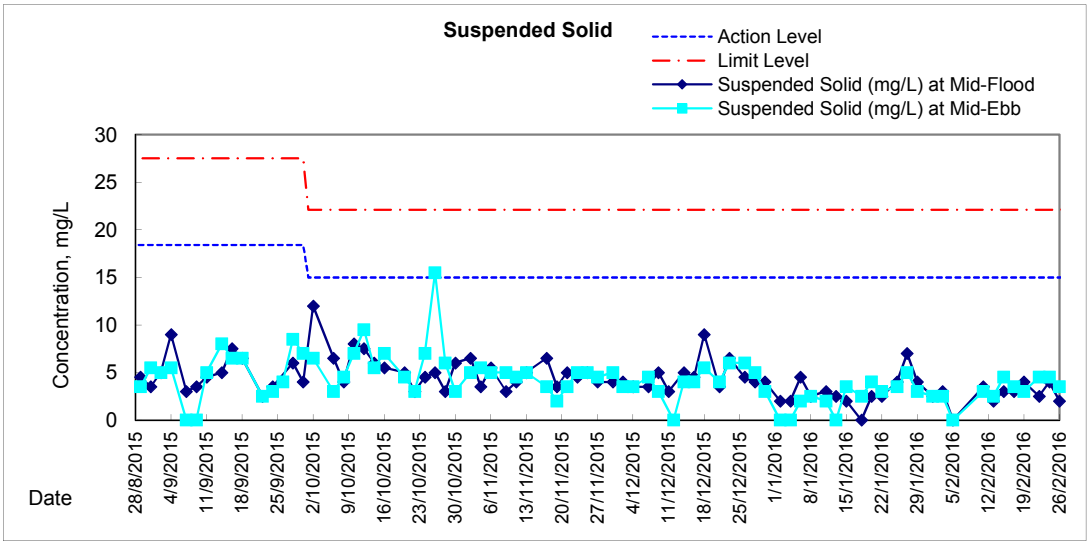




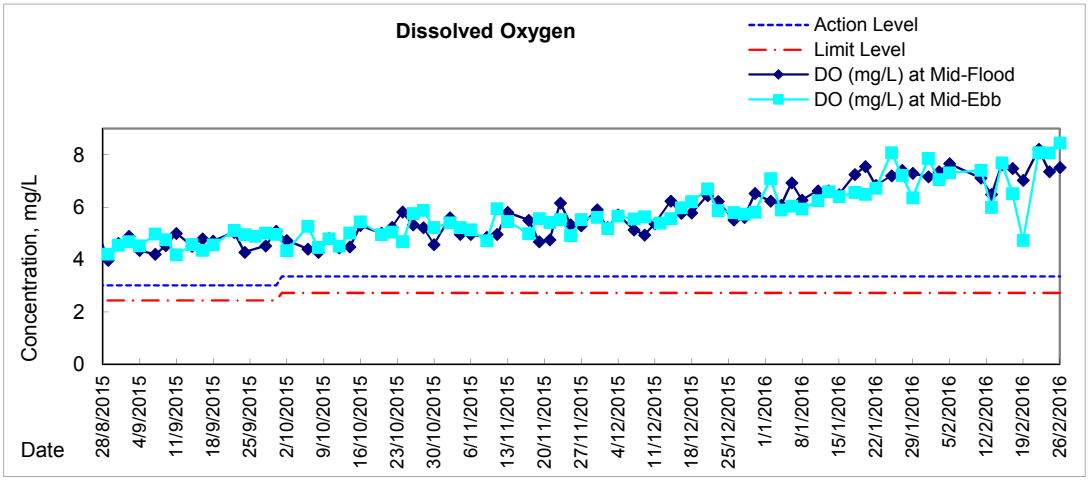
Graphic Presentation of Water Quality Result of P1 - HKCEC Phase I

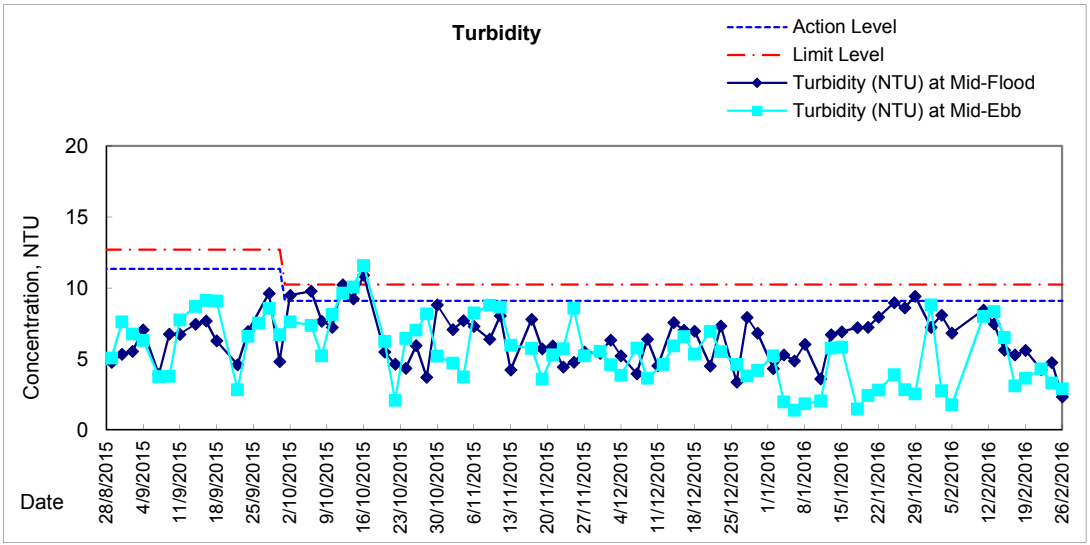


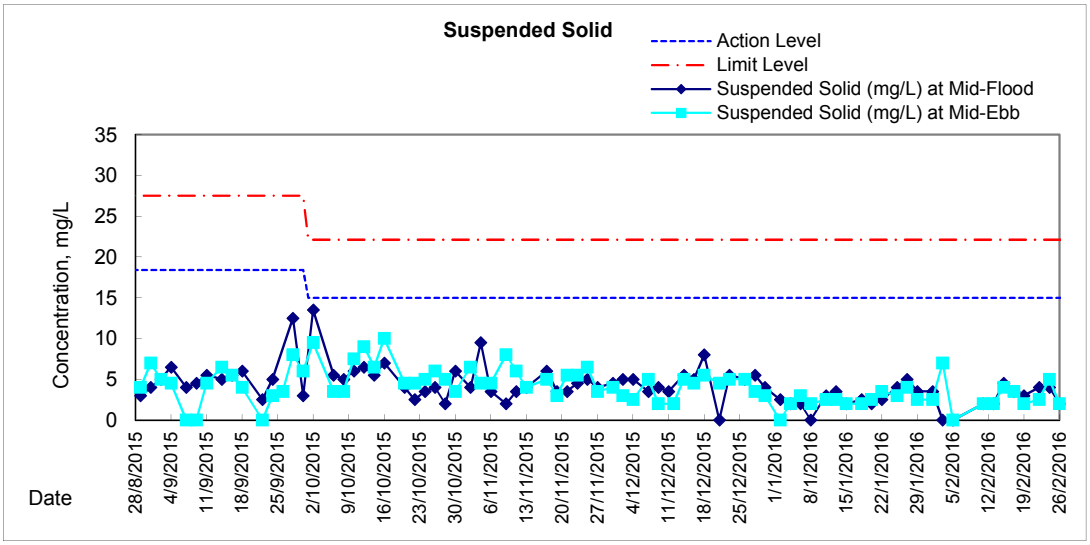




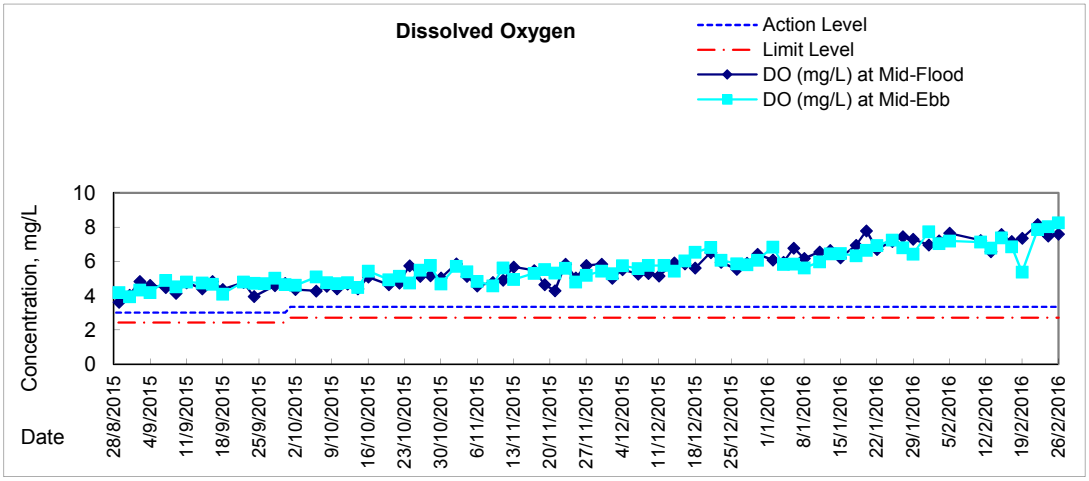
Graphic Presentation of Water Quality Result of P3 - APA

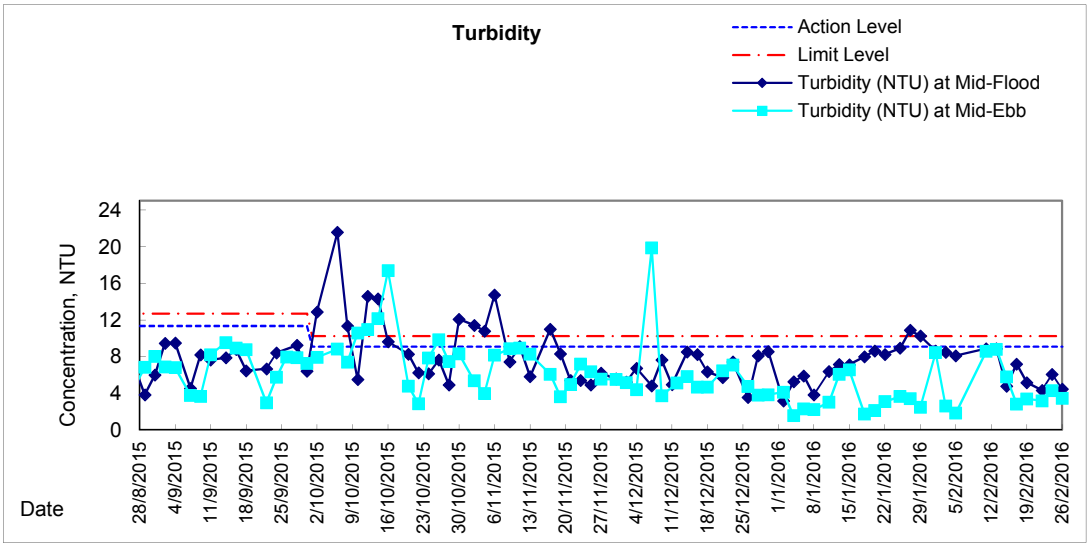


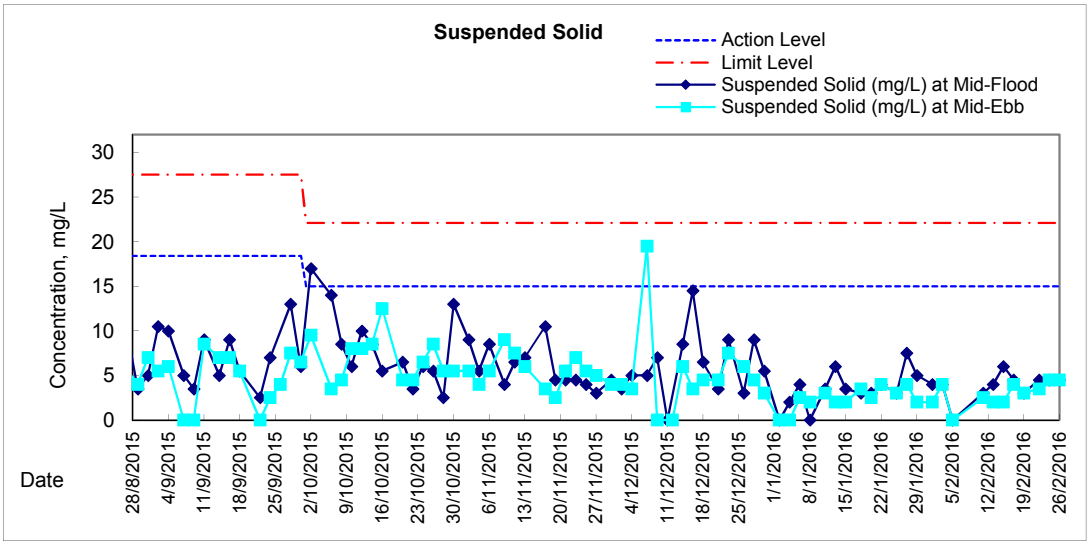




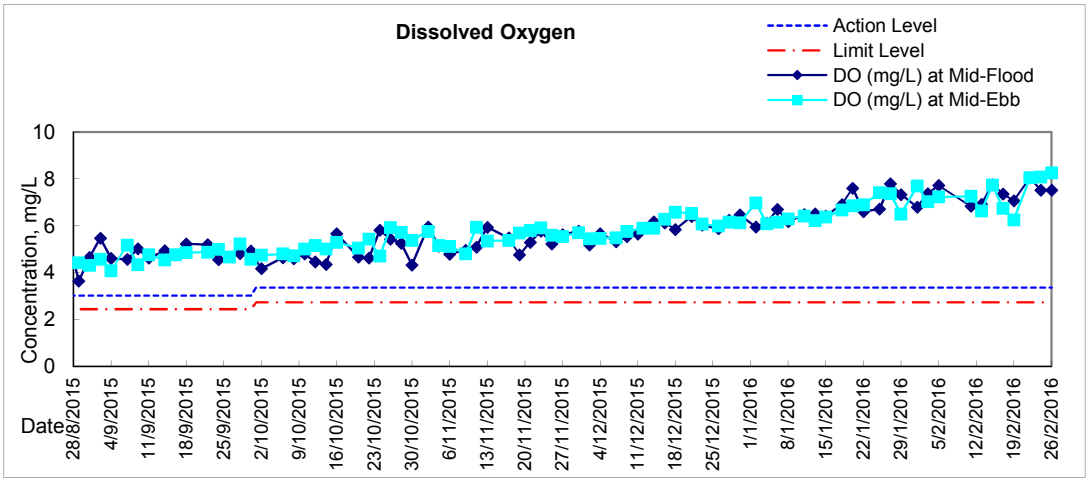
Graphic Presentation of Water Quality Result of P5 - WCT / RT / IT

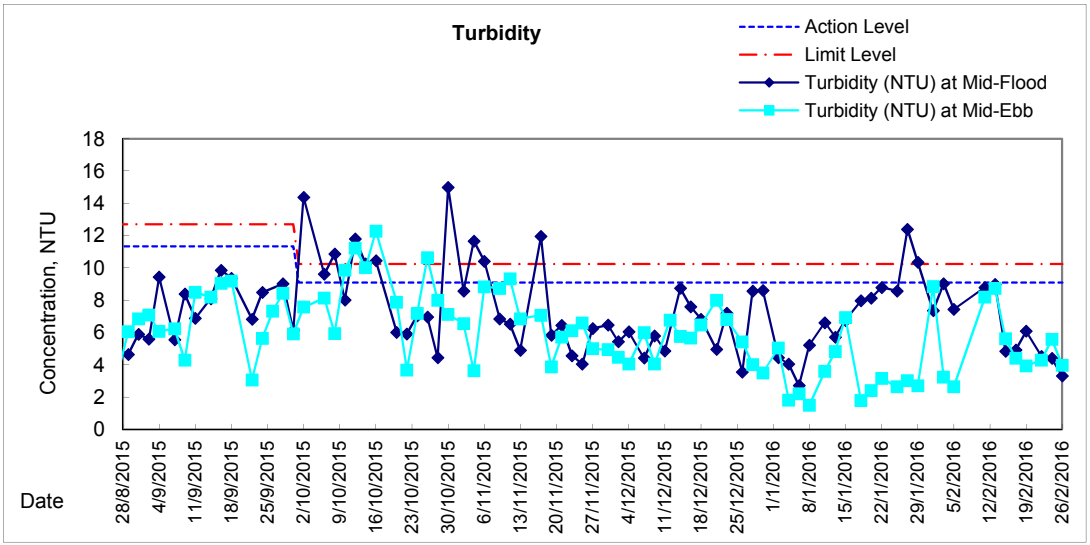


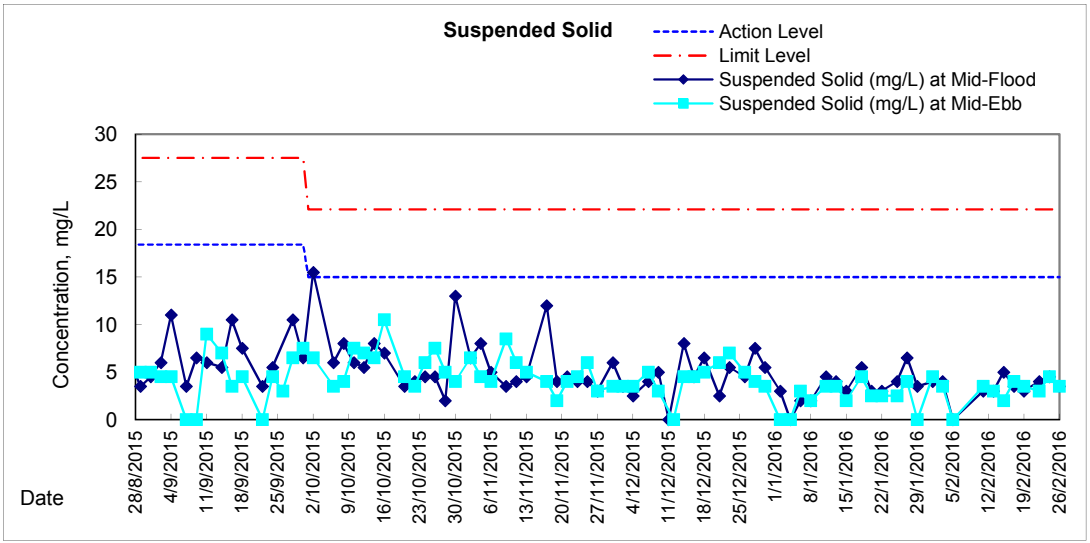




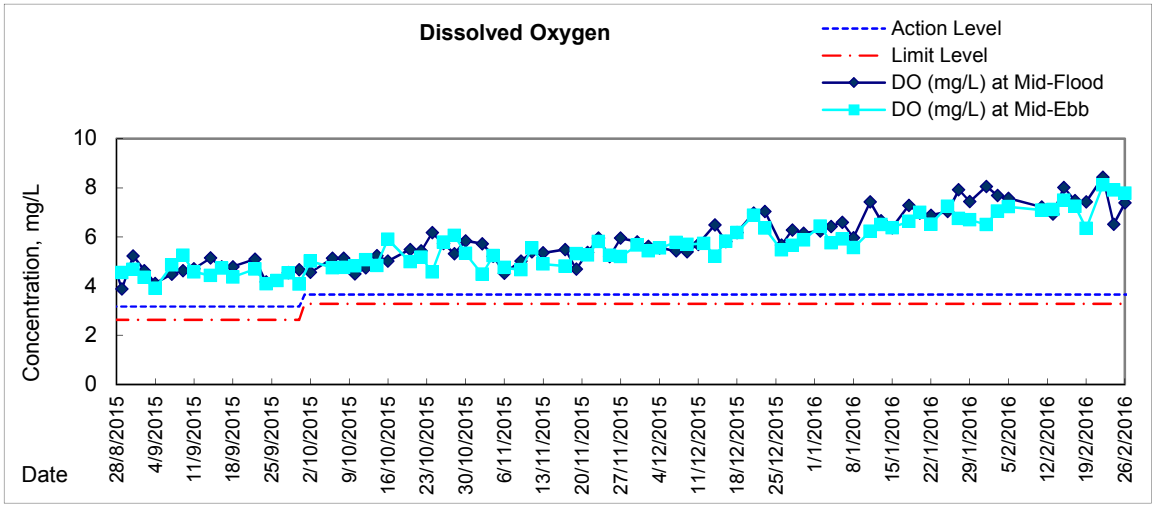
Graphic Presentation of Water Quality Result of P4 - SOC

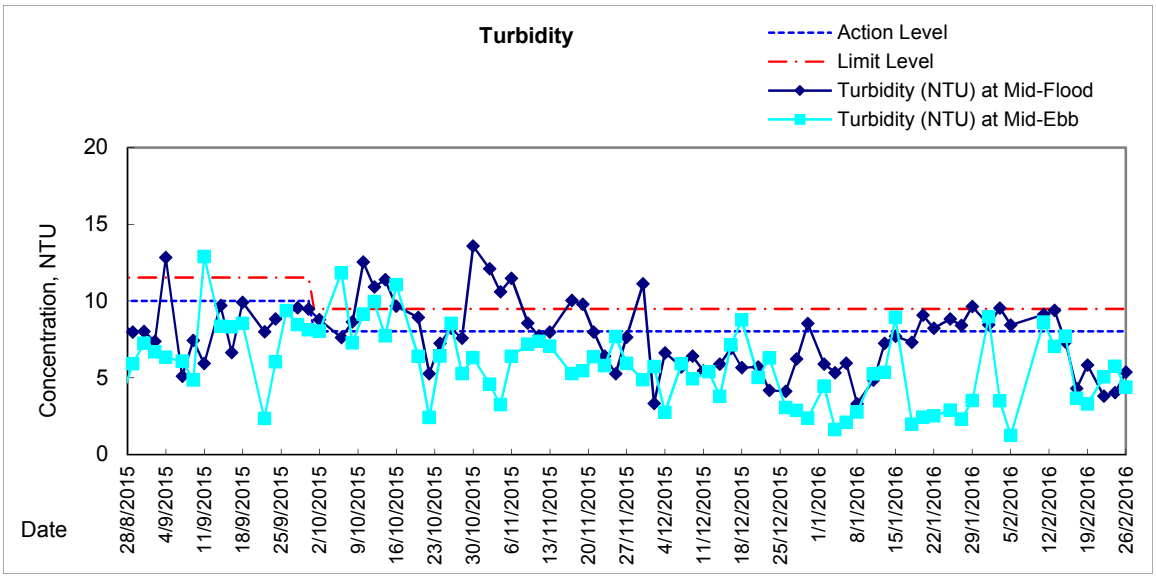


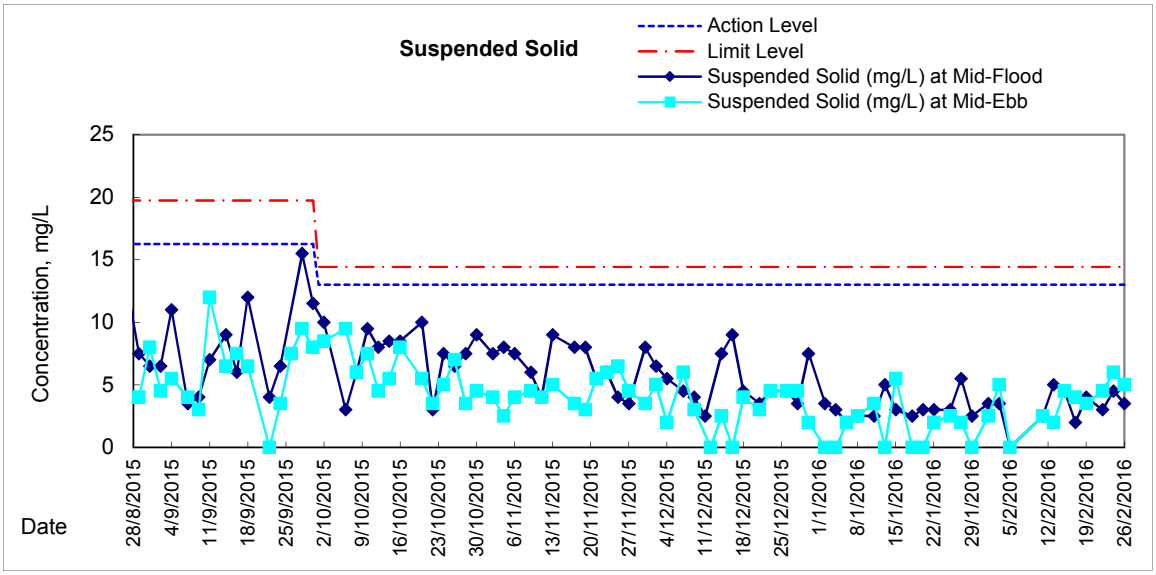




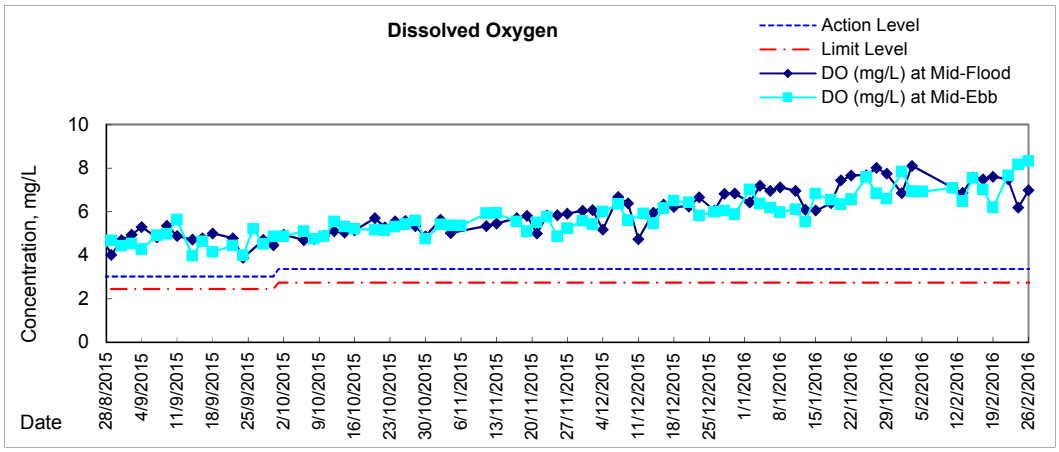
Graphic Presentation of Water Quality Result of RW21-P789 - GEC/CRC/SHK

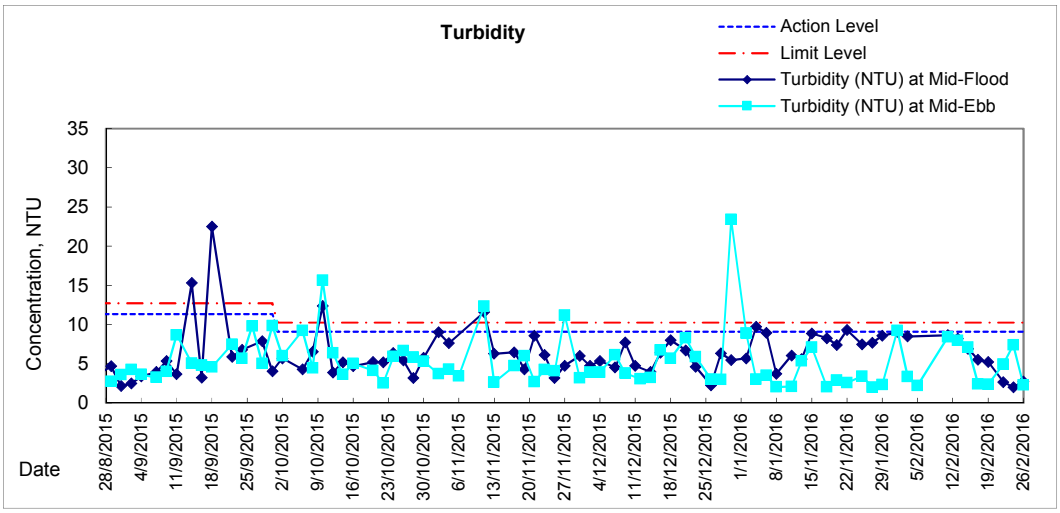


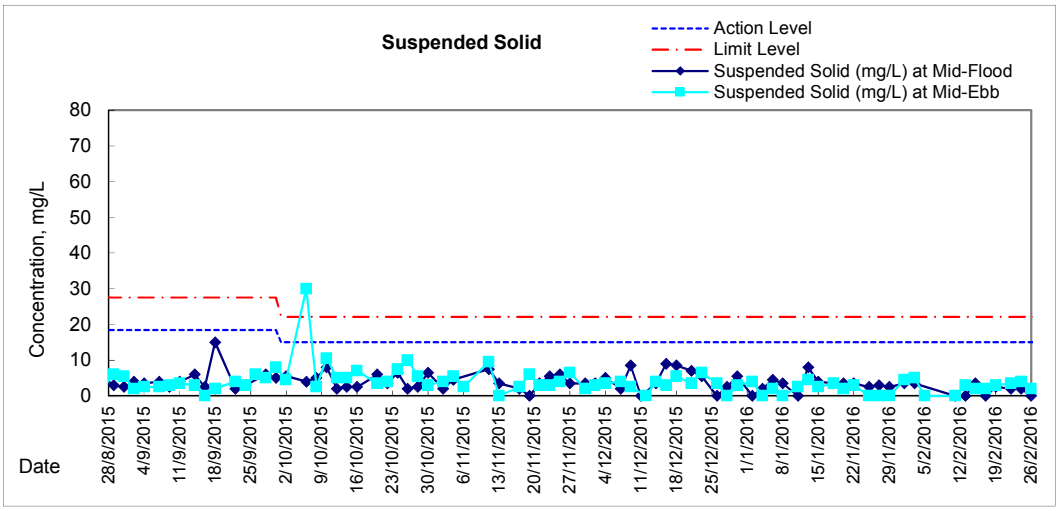




Graphic Presentation of Water Quality Result of C7 - Windsor House







Water Monitoring Result at C6 - Excelsior Hotel
Mid-Flood Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
			m		°C			-			ppt			%			mg/L		
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average
27/1/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:00		Middle	1.5	15.80	15.80	15.8	8.43	8.43	8.4	30.61	30.61	30.6	94.6	94.0	94.3	7.79	7.74	7.77
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29/1/2016	-	Rainy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12:05		Middle	1.5	17.20	17.20	17.2	8.37	8.37	8.4	24.87	24.87	24.9	88.8	88.1	88.5	7.36	7.31	7.34
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2/2016	-	Rainy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:30		Middle	1.5	15.90	15.90	15.9	8.24	8.24	8.2	29.63	29.63	29.6	92.1	90.0	91.1	7.60	7.47	7.54
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/2/2016	13:15	Fine	Surface	1.0	16.00	16.00	16.0	8.38	8.38	8.4	29.94	29.94	29.9	92.7	92.7	92.7	7.63	7.63	7.63
	-		Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13:17		Bottom	3.0	15.90	15.90	15.9	8.42	8.42	8.4	29.95	29.95	30.0	95.0	94.8	94.9	7.84	7.82	7.83
5/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:56		Middle	1.0	16.70	16.70	16.7	8.45	8.45	8.5	30.13	30.13	30.1	97.1	97.8	97.5	7.85	7.90	7.88
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:40		Middle	1.5	18.70	18.70	18.7	8.21	8.21	8.2	28.83	28.83	28.8	93.3	90.3	91.8	7.58	7.33	7.46
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:17		Middle	1.0	18.30	18.30	18.3	8.23	8.23	8.2	29.53	29.53	29.5	101.5	99.3	100.4	7.98	7.80	7.89
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:48		Middle	1.0	16.30	16.30	16.3	8.29	8.29	8.3	28.07	28.07	28.1	99.3	96.7	98.0	8.13	8.00	8.07
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:15		Middle	1.0	15.90	15.90	15.9	8.29	8.29	8.3	29.77	29.77	29.8	98.9	98.7	98.8	8.17	8.15	8.16
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:55		Middle	1.5	16.10	16.10	16.1	8.44	8.44	8.4	30.38	30.38	30.4	90.6	91.2	90.9	7.41	7.46	7.44
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:20		Middle	1.5	17.00	17.00	17.0	8.33	8.33	8.3	27.98	27.98	28.0	97.1	95.3	96.2	7.93	7.78	7.86
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	17:15		Middle	1.0	15.70	15.70	15.7	8.43	8.43	8.4	28.82	28.82	28.8	65.6	65.9	65.8	5.47	5.50	5.49
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26/2/2016	10:26	Fine	Surface	1.0	15.90	15.90	15.9	8.45	8.45	8.5	27.05	27.05	27.1	88.5	86.9	87.7	7.43	7.29	7.36
	-		Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10:28		Bottom	3.0	15.90	15.90	15.9	8.45	8.45	8.5	29.34	29.34	29.3	92.6	92.0	92.3	7.67	7.62	7.65

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at Ex-WPCWA SW - South-western corners of ex-Public Cargo Works Area
Mid-Flood Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
			m		°C			-			ppt			%			mg/L		
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average
27/1/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10:25		Middle	1.5	16.30	16.30	16.3	8.38	8.38	8.4	24.57	24.57	24.6	71.5	70.2	70.9	6.06	5.95	6.01
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29/1/2016	-	Rainy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:35		Middle	1.5	17.40	17.40	17.4	8.65	8.65	8.7	11.83	11.83	11.8	80.7	80.9	80.8	7.20	7.23	7.22
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2/2016	-	Rainy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:15		Middle	1.0	16.50	16.50	16.5	8.45	8.45	8.5	23.21	23.21	23.2	66.4	66.1	66.3	5.64	5.62	5.63
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:50		Middle	1.5	16.00	16.00	16.0	8.41	8.41	8.4	30.66	30.66	30.7	99.8	98.4	99.1	8.18	8.07	8.13
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:40		Middle	1.0	16.60	16.60	16.6	8.51	8.51	8.5	29.77	29.77	29.8	90.0	89.1	89.6	7.30	7.23	7.27
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9:27		Middle	1.0	17.60	17.60	17.6	8.47	8.47	8.5	19.10	19.10	19.1	59.5	57.3	58.4	5.06	4.87	4.97
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:02		Middle	1.0	18.10	18.10	18.1	8.40	8.40	8.4	23.74	23.74	23.7	67.6	67.2	67.4	5.53	5.50	5.52
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:32		Middle	1.0	16.80	16.80	16.8	8.43	8.43	8.4	25.22	25.22	25.2	66.3	65.4	65.9	5.53	5.45	5.49
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:02		Middle	1.0	16.50	16.50	16.5	8.48	8.48	8.5	24.47	24.47	24.5	68.5	68.2	68.4	5.77	5.75	5.76
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:36		Middle	1.0	16.60	16.60	16.6	8.45	8.45	8.5	26.50	26.50	26.5	70.7	70.8	70.8	5.87	5.88	5.88
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:15		Middle	1.0	16.90	16.90	16.9	8.56	8.56	8.6	22.74	22.74	22.7	64.1	64.1	64.1	5.41	5.41	5.41
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:10		Middle	1.0	16.20	16.20	16.2	8.61	8.61	8.6	21.59	21.59	21.6	68.3	67.7	68.0	5.89	5.78	5.84
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10:11		Middle	1.0	15.70	15.70	15.7	8.45	8.45	8.5	30.06	30.06	30.1	95.6	94.7	95.2	7.89	7.82	7.86
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

Water Monitoring Result at C6 - Excelsior Hotel
Mid-Ebb Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
			m		°C			-			ppt			%			mg/L		
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average
27/1/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2:42		Middle	1.0	13.70	13.70	13.7	8.43	8.43	8.4	24.16	24.16	24.2	60.3	61.0	60.7	5.41	5.47	5.44
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29/1/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2:52		Middle	1.5	16.60	16.60	16.6	8.63	8.63	8.6	21.09	21.09	21.1	74.2	74.4	74.3	6.37	6.38	6.38
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2/2016	-	Cloudy	Surface	1.0	16.50	16.50	16.5	8.52	8.52	8.5	23.44	23.44	23.4	87.4	87.5	87.5	7.59	7.59	7.59
	16:03		Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		Bottom	3.0	15.50	15.50	15.5	8.46	8.46	8.5	26.68	26.68	26.7	91.2	91.2	91.2	7.69	7.69	7.69
3/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	17:53		Middle	1.5	15.50	15.50	15.5	8.36	8.36	8.4	31.83	31.83	31.8	77.9	79.7	78.8	6.44	6.64	6.54
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0:35		Middle	1.0	15.30	15.30	15.3	8.54	8.54	8.5	24.75	24.75	24.8	75.6	73.9	74.8	6.51	6.36	6.44
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:44		Middle	1.0	17.70	17.70	17.7	8.07	8.07	8.1	27.83	27.83	27.8	92.0	91.3	91.7	7.39	7.34	7.37
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:52		Middle	1.5	18.30	18.30	18.3	8.26	8.26	8.3	28.91	28.91	28.9	93.5	90.4	92.0	7.37	7.13	7.25
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/2/2016	-	Rainy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:15		Middle	1.0	16.80	16.80	16.8	8.29	8.29	8.3	27.82	27.82	27.8	98.4	97.1	97.8	8.20	8.09	8.15
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:09		Middle	1.5	15.50	15.50	15.5	8.40	8.40	8.4	29.55	29.55	29.6	78.4	79.2	78.8	6.54	6.60	6.57
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20:40		Middle	1.5	16.20	16.20	16.2	8.27	8.27	8.3	29.54	29.54	29.5	69.7	70.1	69.9	5.72	5.75	5.74
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:30		Middle	1.0	16.30	16.30	16.3	8.44	8.44	8.4	29.66	29.66	29.7	92.8	92.2	92.5	7.59	7.54	7.57
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24/2/2016	11:35	Fine	Surface	1.0	15.90	15.90	15.9	8.36	8.36	8.4	29.23	29.23	29.2	92.3	92.5	92.4	7.64	7.65	7.65
	-		Middle	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11:37		Bottom	3.0	15.80	15.80	15.8	8.40	8.40	8.4	29.60	29.60	29.6	94.6	93.6	94.1	7.82	7.73	7.78
26/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:15		Middle	1.5	16.60	16.60	16.6	8.41	8.41	8.4	28.38	28.38	28.4	106.0	103.4	104.7	8.77	8.55	8.66
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

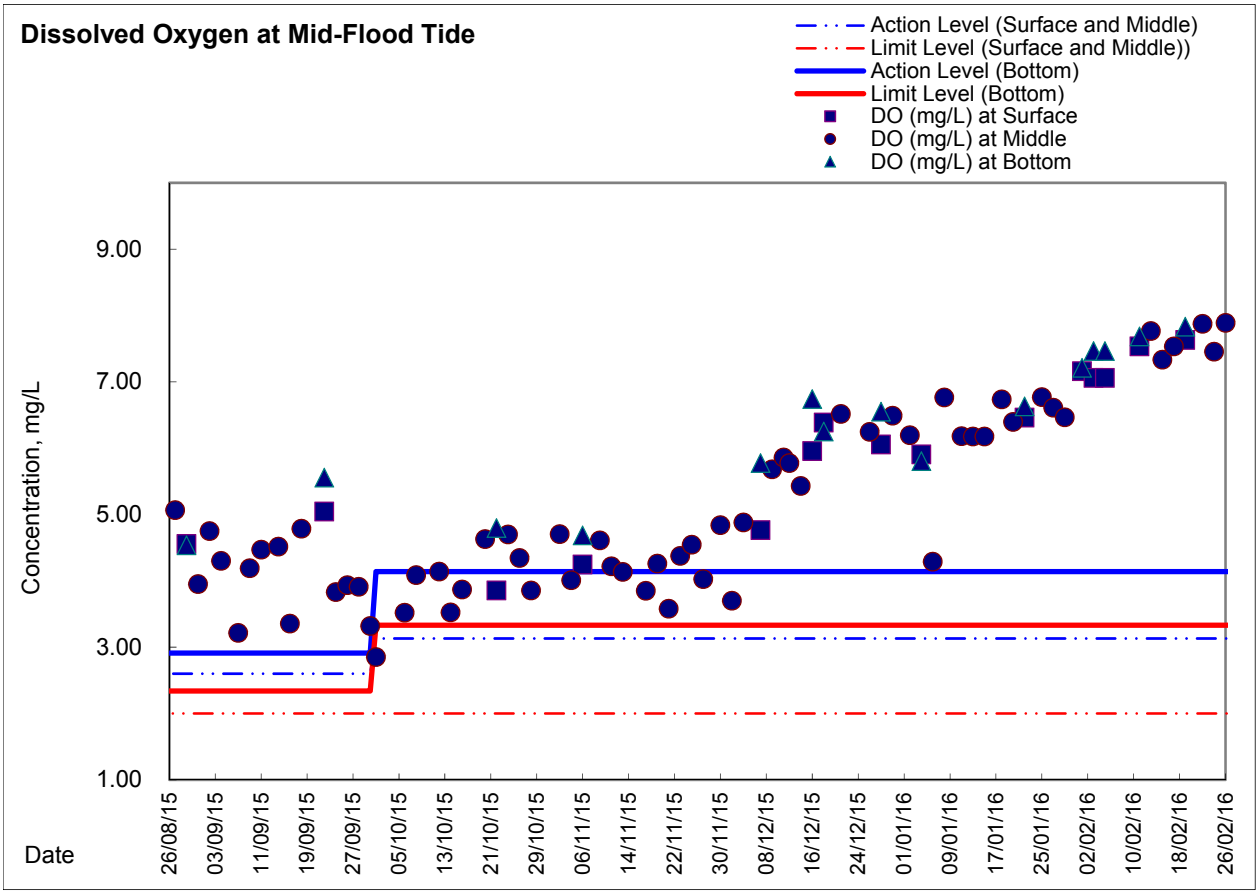
Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

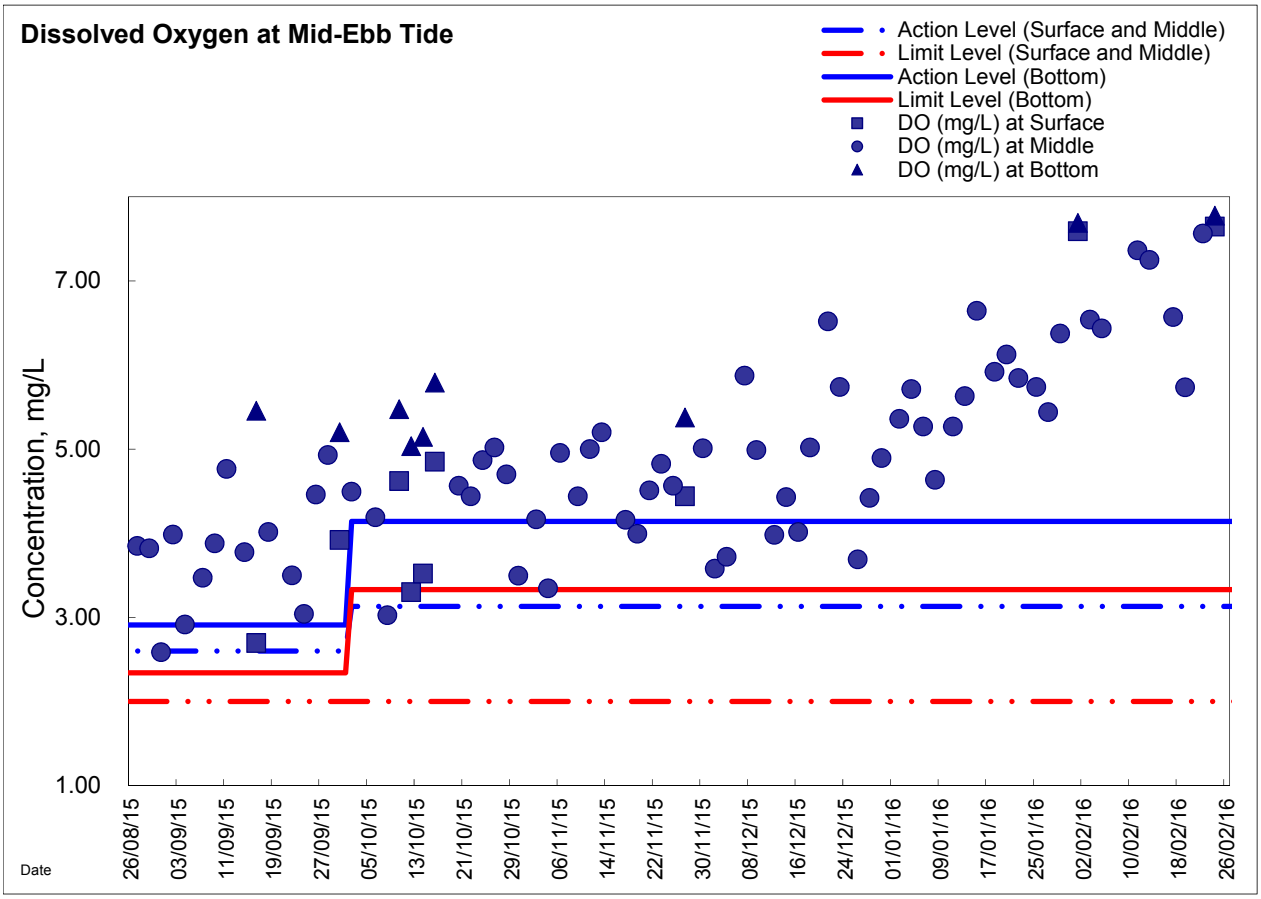
Water Monitoring Result at Ex-WPCWA SW - South-western corners of ex-Public Cargo Works Area
Mid-Ebb Tide

Date	Time	Weater Condition	Sampling Depth		Water Temperature			pH			Salinity			DO Saturation			DO		
			m		°C			-			ppt			%			mg/L		
					Value		Average	Value		Average	Value		Average	Value		Average	Value		Average
27/1/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3:20		Middle	1.0	13.90	13.90	13.9	8.41	8.41	8.4	24.26	24.26	24.3	53.9	56.4	55.2	4.84	5.07	4.96
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29/1/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3:30		Middle	1.5	16.70	16.70	16.7	8.63	8.63	8.6	21.31	21.31	21.3	76.7	76.4	76.6	6.56	6.53	6.55
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:55		Middle	1.0	16.60	16.60	16.6	8.56	8.56	8.6	18.04	18.04	18.0	69.6	69.0	69.3	6.10	6.04	6.07
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:30		Middle	1.5	15.90	15.90	15.9	8.55	8.55	8.6	21.69	21.69	21.7	67.1	64.1	65.6	5.85	5.56	5.71
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21:38		Middle	1.5	15.80	15.80	15.8	8.45	8.46	8.5	25.37	25.37	25.4	64.5	63.4	64.0	5.47	5.38	5.43
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:29		Middle	1.0	18.60	18.60	18.6	8.58	8.58	8.6	14.12	14.12	14.1	36.0	35.5	35.8	3.09	3.04	3.07
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:38		Middle	1.0	18.30	18.30	18.3	8.42	8.42	8.4	24.17	24.17	24.2	61.6	61.2	61.4	5.01	4.97	4.99
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/2/2016	-	Rainy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:59		Middle	1.0	16.60	16.60	16.6	8.38	8.38	8.4	24.27	24.27	24.3	77.6	75.6	76.6	6.53	6.34	6.44
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18:39		Middle	1.5	15.80	15.80	15.8	8.46	8.46	8.5	26.79	26.79	26.8	74.1	75.9	75.0	6.21	6.39	6.30
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21:15		Middle	1.5	16.80	16.80	16.8	8.48	8.47	8.5	21.34	21.34	21.3	67.0	63.2	65.1	5.69	5.32	5.51
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22/2/2016	-	Cloudy	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16:00		Middle	1.0	16.60	16.60	16.6	8.47	8.47	8.5	25.43	25.43	25.4	77.2	77.6	77.4	6.45	6.48	6.47
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15:05		Middle	1.5	17.20	17.20	17.2	8.50	8.50	8.5	14.97	14.97	15.0	40.2	38.4	39.3	3.54	3.38	3.46
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26/2/2016	-	Fine	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14:05		Middle	1.0	16.10	16.10	16.1	8.48	8.48	8.5	29.95	29.95	30.0	96.0	95.1	95.6	7.87	7.79	7.83
	-		Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

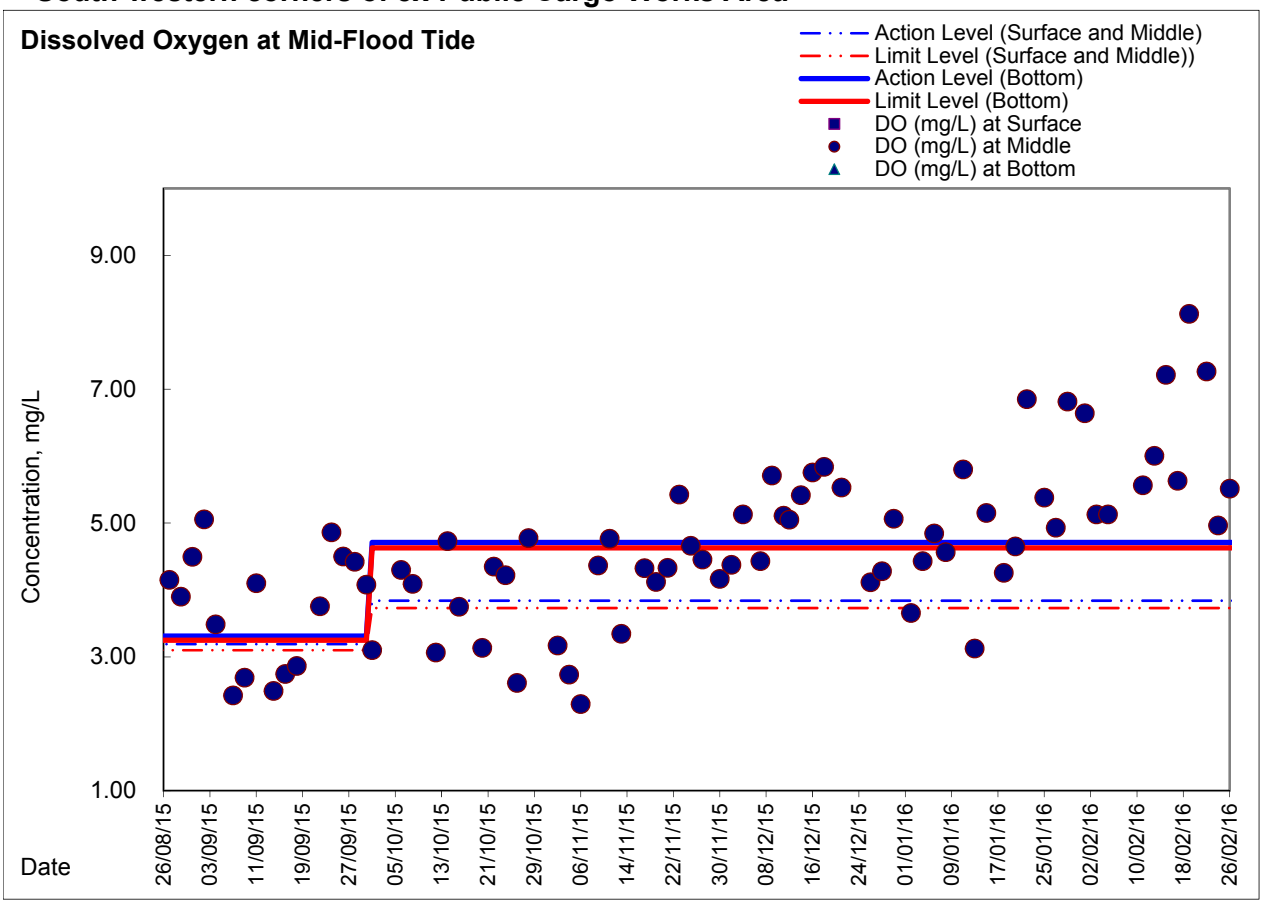
Remarks:
Single underline denotes exceedance over Action Level.
Double underline denotes exceedance over Limit Level.

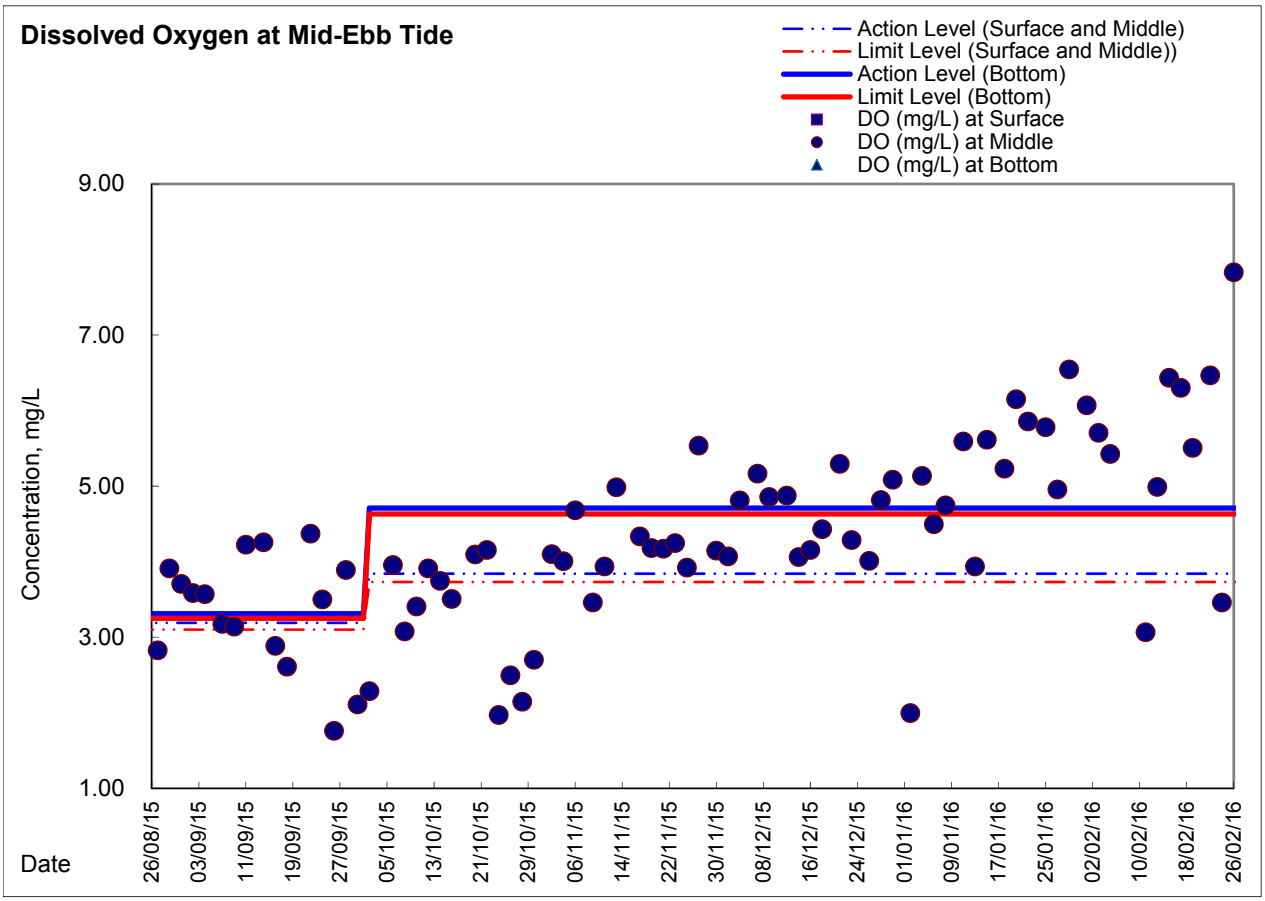
Graphic Presentation of Enhanced Water Monitoring Results (DO) at C6 - Excelsior Hotel





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





Appendix 6.1

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 6.2

Summary for Notification of Exceedance

Ref. No.	Date	Time	Location	Construction Noise Level	Unit	Action Level	Limit Level	Follow-up action	
X_16N007	16-Feb-16	10:54	M1a-Habour Road Sports Centre	78	Leq(30-min)	when one documented complaint was received.	75	Possible reason: Action taken / to be taken: Remarks / Other Obs:	Piling works at Ex- Wan Chai Swimming Pool (adjacent to Habour Road Sports Centre) under non WDII-CWB Contractor. Repeat measurement to confirm result and reviewed the trend of noise measurement. Analysis of contractor's working procedure. Bored pile, diaphragm wall construction and ground investigation at Portion 5 were conducted under Contract HK/2009/02 around the concerned location during the time of measurement while piling works at Ex- Wan Chai Swimming Pool (adjacent to Habour Road Sports Centre immediately opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring. As such, the exceedance was considered as non-Project related.
X_16N008	16-Feb-16	10:54	M1a-Habour Road Sports Centre	78	Leq(30-min)	when one documented complaint was received.	75	Possible reason: Action taken / to be taken: Remarks / Other Obs:	Piling works at Ex- Wan Chai Swimming Pool (adjacent to Habour Road Sports Centre) under non WDII-CWB Contractor. Repeat measurement to confirm result and reviewed the trend of noise measurement. Analysis of contractor's working procedure. Despite breaking works was conducted under Contract HK/2009/01 at Area 8 (West of Wan Chai Ferry Pier) during the time of measurement, mitigtaion measures including the use of acoustic screen was provided. In addition, piling works at Ex- Wan Chai Swimming Pool (adjacent to Habour Road Sports Centre immediately opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring. As such, the exceedance was considered as non-Project related.
X_16N0010	23-Feb-16	10:34	M1a-Habour Road Sports Centre	82	Leq(30-min)	when one documented complaint was received.	75	Possible reason: Action taken / to be taken: Remarks / Other Obs:	Operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Habour Road Sports Centre) under non WDII-CWB Contractor. Repeat measurement to confirm result and reviewed the trend of noise measurement. Analysis of contractor's working procedure. Bored pile, diaphragm wall construction and ground investigation at Portion 5 were conducted under Contract HK/2009/02 around the concerned location during the time of measurement while operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Habour Road Sports Centre immediately opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring. As such, the exceedance was considered as non-Project related.
X_16N011	23-Feb-16	10:34	M1a-Habour Road Sports Centre	82	Leq(30-min)	when one documented complaint was received.	75	Possible reason: Action taken / to be taken: Remarks / Other Obs:	Operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Habour Road Sports Centre) under non WDII-CWB Contractor. Repeat measurement to confirm result and reviewed the trend of noise measurement. Analysis of contractor's working procedure. Despite breaking works was conducted under Contract HK/2009/01 at Area 8 (West of Wan Chai Ferry Pier) during the time of measurement, mitigtaion measures including the use of acoustic screen was provided. In addition, operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Habour Road Sports Centre immediately opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring. As such, the exceedance was considered as non-Project related.

Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_16C004	27-Jan-16	Mid-flood	P5	DO(mg/l)	7.46	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	10.88	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	7.50	15.00	22.13	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P5 monitoring station. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16C005	27-Jan-16	Mid-flood	P4	DO(mg/l)	7.79	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	12.40	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	6.50	15.00	22.13	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P4 monitoring station. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16C006	27-Jan-16	Mid-flood	P1	DO(mg/l)	8.15	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	10.39	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	7.00	15.00	22.13	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P1 monitoring station. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16C007	29-Jan-16	Mid-flood	C1	DO(mg/l)	7.36	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	10.59	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	6.00	15.00	22.13	Remarks/ Other Obs:	No marine construction activities was conducted under Contract HK/2009/01 on the monitoring date. No marine construction activity was conducted under Contract HK/2009/02 on the monitoring date. In view of no marine construction activity was conducted , it was considered that the exceedance was not project related.

Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_16C008	29-Jan-16	Mid-flood	P1	DO(mg/l)	7.40	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	9.71	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	4.00	15.00	22.13	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P1 monitoring station. In view of the above, it was considered that the exceedance was not project related.
X_16C009	29-Jan-16	Mid-flood	P3	DO(mg/l)	7.29	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	9.42	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	3.50	15.00	22.13	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P3 monitoring station. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16C010	29-Jan-16	Mid-flood	P4	DO(mg/l)	7.33	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	10.36	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	3.50	15.00	22.13	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P4 monitoring station. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16C011	29-Jan-16	Mid-flood	P5	DO(mg/l)	7.30	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	10.25	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	5.00	15.00	22.13	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P5 monitoring station. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_16C012	1-Feb-16	Mid-flood	C1	DO(mg/l)	7.08	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	9.95	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	3.00	15.00	22.13	Remarks/ Other Obs:	No marine construction activities was conducted under Contract HK/2009/01 on the monitoring date. Despite placing berm block was conducted under Contract HK/2009/02 on the monitoring date, contractor mitigation measures including the use of silt curtain was in place. In view of above and no exceedance was recorded on the subsequent monitoring , it was considered that the exceedance was not project related.
X_16C013	1-Feb-16	Mid-flood	P1	DO(mg/l)	6.41	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	9.32	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	2.50	15.00	22.13	Remarks/ Other Obs:	Despite trimming of grade 400 rock mound was conducted under Contract HK/2012/08 near Zone D on monitoring date, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P1 monitoring station. In view of above and no exceedance was recorded on the subsequent monitoring, it was considered the exceedance was not project related.
X_16C014	1-Feb-16	Mid-ebb	C7	DO(mg/l)	7.83	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	9.24	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	4.50	15.00	22.13	Remarks/ Other Obs:	No marine construction activities was conducted under HY/2009/15 at Causeway Bay Typhoon Shelter on the monitoring date. No marine construction activity was conducted under HY/2010/08 on the monitoring date, and the installed silt screen was in place. In view of no marine construction activity was conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_16C015	3-Feb-16	Mid-flood	C1	DO(mg/l)	7.35	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	9.28	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	3.50	15.00	22.13	Remarks/ Other Obs:	No marine construction activities was conducted under Contract HK/2009/01 on the monitoring date. No marine construction activity was conducted under Contract HK/2009/02 on the monitoring date. In view of no marine construction activity was conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16C016	5-Feb-16	Mid-flood	P1	DO(mg/l)	7.76	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	9.29	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	<2	15.00	22.13	Remarks/ Other Obs:	Despite placing of levelling stone was conducted under Contract HK/2012/08 on the monitoring date, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P1 monitoring station. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16C017	11-Feb-16	Mid-flood	C1	DO(mg/l)	7.15	3.36	2.73	Possible reason:	Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.
				Turbidity	9.33	9.10	10.25	Action taken/ to be taken:	Immediate repeated in-situ measurement had conducted to confirm the exceedances. Checking with contractor works and review previous monitoring data.
				SS	2.00	15.00	22.13	Remarks/ Other Obs:	No marine construction activities was conducted under Contract HK/2009/01 on the monitoring date. No marine construction activity was conducted under Contract HK/2009/02 on the monitoring date. In view of no marine construction activity was conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_16W011	27-Feb-16	Mid-flood	RW21-P789	DO(mg/l)	7.92	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.42	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	5.50	13.00	14.43	Remarks/ Other Obs:	No marine construction activity was conducted under Contract HK/2009/02 on the monitoring date. The installed silt screen was generally in order. In view of the no marine activity conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16W012	27-Feb-16	Mid-flood	WSD19	DO(mg/l)	7.73	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.36	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	5.00	13.00	14.43	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16W013	29-Jan-16	Mid-flood	WSD19	DO(mg/l)	7.93	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.99	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	4.50	13.00	14.43	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above, it was considered that the exceedance was not project related.
X_16W014	29-Jan-16	Mid-flood	RW21-P789	DO(mg/l)	7.44	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	9.66	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	2.50	13.00	14.43	Remarks/ Other Obs:	No marine construction activity was conducted under Contract HK/2009/02 on the monitoring date. The installed silt screen was generally in order. In view of the no marine activity conducted, it was considered that the exceedance was not project related.

Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_16W015	1-Feb-16	Mid-flood	WSD19	DO(mg/l)	7.66	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	844	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	5.00	13.00	14.43	Remarks/ Other Obs:	Despite trimming of grade 400 rock mound was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above, it was considered that the exceedance was not project related.
X_16W016	1-Feb-16	Mid-flood	RW21-P789	DO(mg/l)	8.06	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.47	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	3.50	13.00	14.43	Remarks/ Other Obs:	Despite placing berm block was conducted under Contract HK/2009/02 on the monitoring date, contractor mitigation measures including the use of silt curtain was in place. The installed silt screen was generally in order. The construction area was located at the downstream of RW21-P789 monitoring station. In view of the above, it was considered that the exceedance was not project related.
X_16W017	1-Feb-16	Mid-ebb	WSD19	DO(mg/l)	7.35	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	10.23	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	5.50	13.00	14.43	Remarks/ Other Obs:	Despite trimming of grade 400 rock mound was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was generally in place. The construction area was located at downstream of WSD19 monitoring station. In view of the above, it was considered that the exceedance was not project related.
X_16W018	1-Feb-16	Mid-ebb	RW21-P789	DO(mg/l)	6.5	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.98	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	2.50	13.00	14.43	Remarks/ Other Obs:	Despite placing berm block was conducted under Contract HK/2009/02 on the monitoring date, contractor mitigation measures including the use of silt curtain was in place. The installed silt screen was generally in order. In view of the above, it was considered that the exceedance was not project related.

Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_16W019	3-Feb-16	Mid-flood	WSD19	DO(mg/l)	7.93	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.75	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	5.50	13.00	14.43	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16W020	3-Feb-16	Mid-flood	RW21-P789	DO(mg/l)	7.68	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	9.55	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	3.50	13.00	14.43	Remarks/ Other Obs:	No marine construction activity was conducted under Contract HK/2009/02 on the monitoring date. The installed silt screen was generally in order. In view of the no marine activity conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16W021	5-Feb-16	Mid-flood	WSD19	DO(mg/l)	8.16	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.54	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	3.50	13.00	14.43	Remarks/ Other Obs:	Despite placing of levelling stones was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16W022	5-Feb-16	Mid-flood	RW21-P789	DO(mg/l)	7.57	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.43	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	<2.00	13.00	14.43	Remarks/ Other Obs:	No marine construction activity was conducted under Contract HK/2009/02 on the monitoring date. The installed silt screen was generally in order. In view of the no marine activity conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_16W023	11-Feb-16	Mid-flood	WSD19	DO(mg/l)	6.56	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.87	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	3.00	13.00	14.43	Remarks/ Other Obs:	No marine construction activity was conducted under Contract HK/2012/08 on the monitoring date. In view of no marine activity conducted , it was considered that the exceedance was not project related.
X_16W024	11-Feb-16	Mid-flood	RW21-P789	DO(mg/l)	7.22	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	9.13	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	2.50	13.00	14.43	Remarks/ Other Obs:	No marine construction activity was conducted under Contract HK/2009/02 on the monitoring date. The installed silt screen was generally in order. In view of the no marine activity conducted, it was considered that the exceedance was not project related.
X_16W025	11-Feb-16	Mid-ebb	WSD19	DO(mg/l)	7.81	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	9.97	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	4.00	13.00	14.43	Remarks/ Other Obs:	No marine construction activity was conducted under Contract HK/2012/08 on the monitoring date. In view of no marine activity conducted , it was considered that the exceedance was not project related.
X_16W026	11-Feb-16	Mid-ebb	RW21-P789	DO(mg/l)	7.09	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.62	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	2.50	13.00	14.43	Remarks/ Other Obs:	No marine construction activity was conducted under Contract HK/2009/02 on the monitoring date. The installed silt screen was generally in order. In view of the no marine activity conducted, it was considered that the exceedance was not project related.
X_16W027	13-Feb-16	Mid-flood	WSD19	DO(mg/l)	7.05	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	10.61	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	5.50	13.00	14.43	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above, it was considered that the exceedance was not project related.

Ref no.	Date	Tidal	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_16W028	13-Feb-16	Mid-flood	RW21-P789	DO(mg/l)	6.94	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	9.39	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	5.00	13.00	14.43	Remarks/ Other Obs:	No marine construction activity was conducted under Contract HK/2009/02 on the monitoring date. The installed silt screen was generally in order. In view of the no marine activity conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16W029	13-Feb-16	Mid-ebb	WSD19	DO(mg/l)	7.03	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.13	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	3.00	13.00	14.43	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was generally in place. The construction area was located at downstream of WSD19 monitoring station. In view of the above, it was considered that the exceedance was not project related.
X_16W030	15-Feb-16	Mid-flood	WSD19	DO(mg/l)	8.74	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.55	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	4.50	13.00	14.43	Remarks/ Other Obs:	Despite installation of seawall blocks was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
X_16W031	24-Feb-16	Mid-ebb	WSD19	DO(mg/l)	7.36	3.66	3.28	Possible reason:	Natural variation or changes of water quality in the vicinity of water quality monitoring station.
				Turbidity	8.59	8.04	9.49	Action taken/ to be taken:	Immediate repeated in-situ measurement to confirm the exceedances. Checking with Contractor works and review previous monitoring data.
				SS	7.00	13.00	14.43	Remarks/ Other Obs:	Despite trimming of grade 400 rock mound was conducted under Contract HK/2012/08 near Zone D on the monitoring date, contractor mitigation measures including the use of localized silt curtain was generally in place. The construction area was located at downstream of WSD19 monitoring station. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

Ref no.	Date	Tidal	Location	Depth	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up action	
X_16D003	11-Feb-16	Mid-ebb	Ex-WPCWA SW	Middle	DO(mg/l)	3.07	3.84	3.73	Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works and review previous monitoring data.
									Remarks/ Other Obs:	No marine activity was conducted at TPCWAE on the monitoring date, while upstream discharge from nearby culvert was noted. In view of no marine activity was conducted and no exceedance was recorded on the subsequent monitoring, the exceedance was considered not related to the Project works.
X_16D004	24-Feb-16	Mid-ebb	Ex-WPCWA SW	Middle	DO(mg/l)	3.46	3.84	3.73	Possible reason:	Possible in relation to the upstream organic discharge.
									Action taken/ to be taken:	Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works and review previous monitoring data.
									Remarks/ Other Obs:	No marine activity was conducted at TPCWAE on the monitoring date, while upstream discharge from nearby culvert was noted. In view of no marine activity was conducted and no exceedance was recorded on the subsequent monitoring, the exceedance was considered not related to the Project works.

Appendix 9.1

Complaint 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

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					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

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				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

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					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

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					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.	Waiting RSS respond
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	Keep in view for three months from the date of complaint recevied

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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	Interim Report was submitted to EPD on 20 June 2014.

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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

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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.	

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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.

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
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/00001 725-15) 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

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					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

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
		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	

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					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.

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					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/0002 2385-15 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.

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
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
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.

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.	
151117	Not specified	EPD complaint received by ET on 17 Novmeber 2015	Causeway Bay Typhoon Shelter	Improper handling or bentonite and marine sediment generated from construction works and contaminated discharge from water treatment plant into Victoria Habour	A public complaint regarding illegal disposal of construction waste referred by EPD was received by ET on 17 November 2015. The complainant reported that over 10,000 m3 of bentonite after usage for construction of diaphragm wall was disposed of at Victoria Habour. The Contractor recently deployed mobile crane to transfer the bentonite from mud pit on to works barge. The bentonite was then mixed with soil and transported to the Public Fill. During the course, seepage of slurry through grab generated drop off to marine waters and the soil mixing generated dust impact to nearby yacht club, typhoon shelter and affect nearby public and boats. Disposal of dredged marine sediment was not carried out in accordance with the Management of Dredged/Excavated Sediment. Instead the marine sediment was covered by sand and soil and transported to the Public Fill. White or greyish effluent was discharged directly into Victoria Habour marine waters from wastewater treatment plant on construction site.	Interim investigation report submitted to EPD on 24 November 2015. 2nd interim investigation report submitted to EPD on 17 December 2015. 3rd interim investigation report submitted to EPD on 31 December 2015. Final

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					In response to the complaint concern, additional water quality monitoring and additional site inspections have been conducted by the ET and the investigation findings were included in the interim investigation reports separately submitted to the EPD. In addition, the ET and IEC have conducted checking on the waste disposal records and site construction records with the CWB RSS team to confirm the key construction activities during the concerned period and the quantities of inert C&D material disposed. Upon further review on relevant records and follow up inspections on the implementation of site measures, the final investigation would be issued.	investigation report to be submitted in January 2016.

Appendix 10.1

Construction Programme of Individual Contracts

CEDD CONTRACT HK/2009/01

CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish
HK/2009/01 - Revised Works Progress Rev. 6H (Data Date: 20 Jan 16)				
Section 3 of the Works - CWB Tunnel, Slip Roads 2 & 3, Works in Area 8				
CWB Tunnelling Works (Stage 1 : CH2947 - CH3045)				
Stage 1 - Tunnel Structure Works (Bay 1 to Bay 7 : Ch2947 - Ch 3045)				
Tunnel Structure at Stage 1A & 1B (CH2947 - CH3045)				
S3A-TS-2080	Backfilling to formation level for Stage 1B (CH 80 to CH 120)	200d	19/01/15 A	05/02/16
CWB Tunnelling Works (Stage 2 : Ch3045 - Ch3129)				
Stage 2 - Tunnel Structure Works (Bay 7 to Bay 10 : CH3045 - CH3129)				
S3B-TS-9000A	Backfilling to Formation Level (CWB) - 12,000cu.m	20d	29/12/15 A	05/02/16
CWB Tunnelling Works (Stage 3 : Ch3129 - Ch3245)				
Stage 3 - Tunnel Structure Works (Bay 11 to Bay 20 : Ch3129 - Ch3245)				
Tunnel Structure at Stage 3A & 3B (CH3129 - CH3245)				
S3C-TS-2000E	Bay 10 to Bay 13 Slip Road 3 Top Slab	15d	25/12/15 A	22/01/16
S3C-TS-2000E	Bay 10 to Bay 13 Slip Road 3 Scaffold Removal	14d	23/01/16	05/02/16
S3C-TS-2000E	Bay 10 to Bay 13 Slip Road 3 Road Barrier	13d	06/02/16	18/02/16
S3C-TS-2000L	Removal of 1st layer of strut/waling	9d	04/12/15 A	05/02/16
S3C-TS-2000N	Construction of Bay 10 Slip Road 3 Road Barrier	7d	28/01/16	18/02/16
S3C-TS-2030H	Bay 14 CWB and Slip Road 3 Road Barrier	14d	19/11/15 A	18/02/16
S3C-TS-2030K	Backfilling to Road formation level from Bay 10 to Bay 14	30d	12/01/16 A	05/02/16
S3C-TS-2090C	Bay 15,16 & 17 Slip Road 3 Road Barrier	14d	25/01/16*	10/02/16
S3C-TS-2090D	Bay 15,16 & 17 Slip Road 2 Road Barrier	14d	25/01/16*	10/02/16
S3C-TS-2110E	Removal Scaffold at Bay 18 to 20	17d	13/01/16 A	05/02/16
S3C-TS-2110F	Bay 18, 19 & 20 CWB, Slip Road 3 and Slip Road 2 Road Barrier	9d	06/02/16	14/02/16
S3C-TS-2150	Backfilling up to Future Road Formation for Bay 19 - Bay20	32d	06/04/16	07/05/16

Remaining Work
Actual Work
Summary Bar
Critical Remaining Work
Milestone
Summa...

CEDD CONTRACT NO. HK/2009/01

Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)

WORKS PROGRAMME Rev.4 - 3 Month Programme starting from 20/01/16

Date	Revision	Checked	Appro...
15-Sep-15	Master Programme 6H		
20/01/16	Progress Updated on 20 Jan 2016		

筆ASK filters: 3-Month (Works), 3-Month Rolling Prog.

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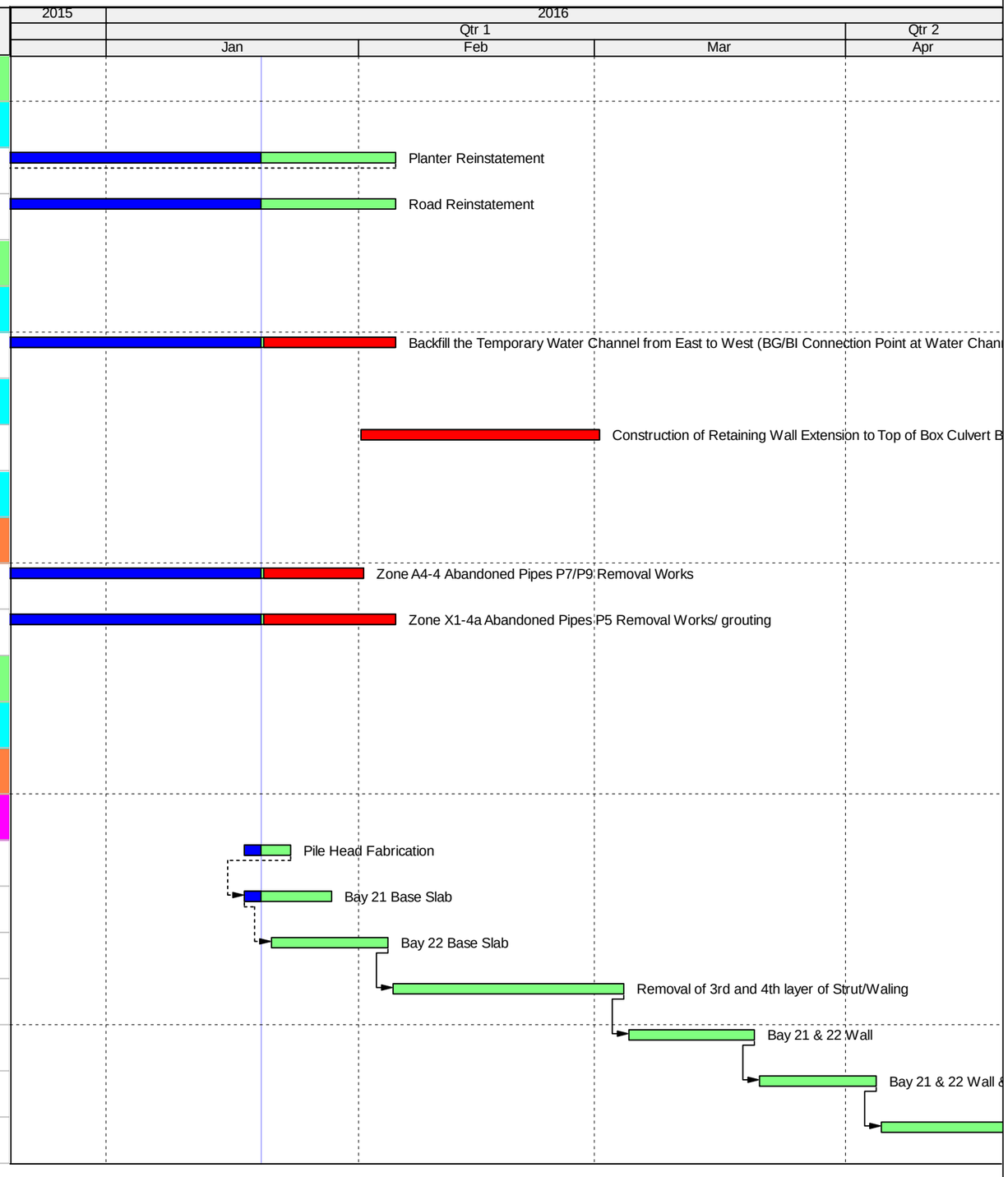
CEDD CONTRACT HK/2009/01

CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish
	Section 8 of the Works - Works in Area 6 (Utilities other than Watermains in Fenwick Pier Street)			
	Sewerage Works			
S8-3010	Planter Reinstatement	30d	29/07/15 A	05/02/16
S8-3020	Road Reinstatement	21d	25/09/15 A	05/02/16
	Section 9 of the Works - Remaindar of the Works			
	Box Culvert Construction			
S9-1070	Backfill the Temporary Water Channel from East to West (BG/BI Connection Point at Water Channel)	30d	02/06/15 A	05/02/16
	Reprovision of Expo Drive East			
S9-2060	Construction of Retaining Wall Extension to Top of Box Culvert Bay 7	30d	01/02/16*	01/03/16
	Waterworks in Area 9			
	Abandaned Pipes Removal			
S9-7090	Zone A4-4 Abandoned Pipes P7/P9 Removal Works	30d	14/10/15 A	01/02/16
S9-7100	Zone X1-4a Abandoned Pipes P5 Removal Works/ grouting	14d	27/10/15 A	05/02/16
	Variation Order No.153 - Design and Construct CWB Bypass Tunnel from CH3246 to CH3278			
	Works at Area 8 - CWB Tunnel, Slip Roads 2 & 3, Works in Area 8			
	CWB Tunnelling Works (Stage 4: Ch3246 - Ch3278)			
	Stage 4 - Tunnel Structure Works (Bay 21 to Bay 22 : CH3246 - CH3278)			
S4-TS-0005	Pile Head Fabrication	15d	18/01/16 A	23/01/16
S4-TS-0010	Bay 21 Base Slab	10d	18/01/16 A	28/01/16
S4-TS-0020	Bay 22 Base Slab	10d	21/01/16	04/02/16
S4-TS-0030	Removal of 3rd and 4th layer of Strut/Waling	28d	05/02/16	04/03/16
S4-TS-0040	Bay 21 & 22 Wall	15d	05/03/16	20/03/16
S4-TS-0050	Bay 21 & 22 Wall & OHVD Base Slab	15d	21/03/16	04/04/16
S4-TS-0060	Bay 21 & 22 OHVD Wall Stem and Top Slab	15d	05/04/16	20/04/16



Remaining Work
Actual Work
Summary Bar
Critical Remaining Work
Milestone
Summa...

CEDD CONTRACT NO. HK/2009/01

Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)

WORKS PROGRAMME Rev.4 - 3 Month Programme starting from 20/01/16

Date	Revision	Checked	Appro...
15-Sep-15	Master Programme 6H		
20/01/16	Progress Updated on 20 Jan 2016		

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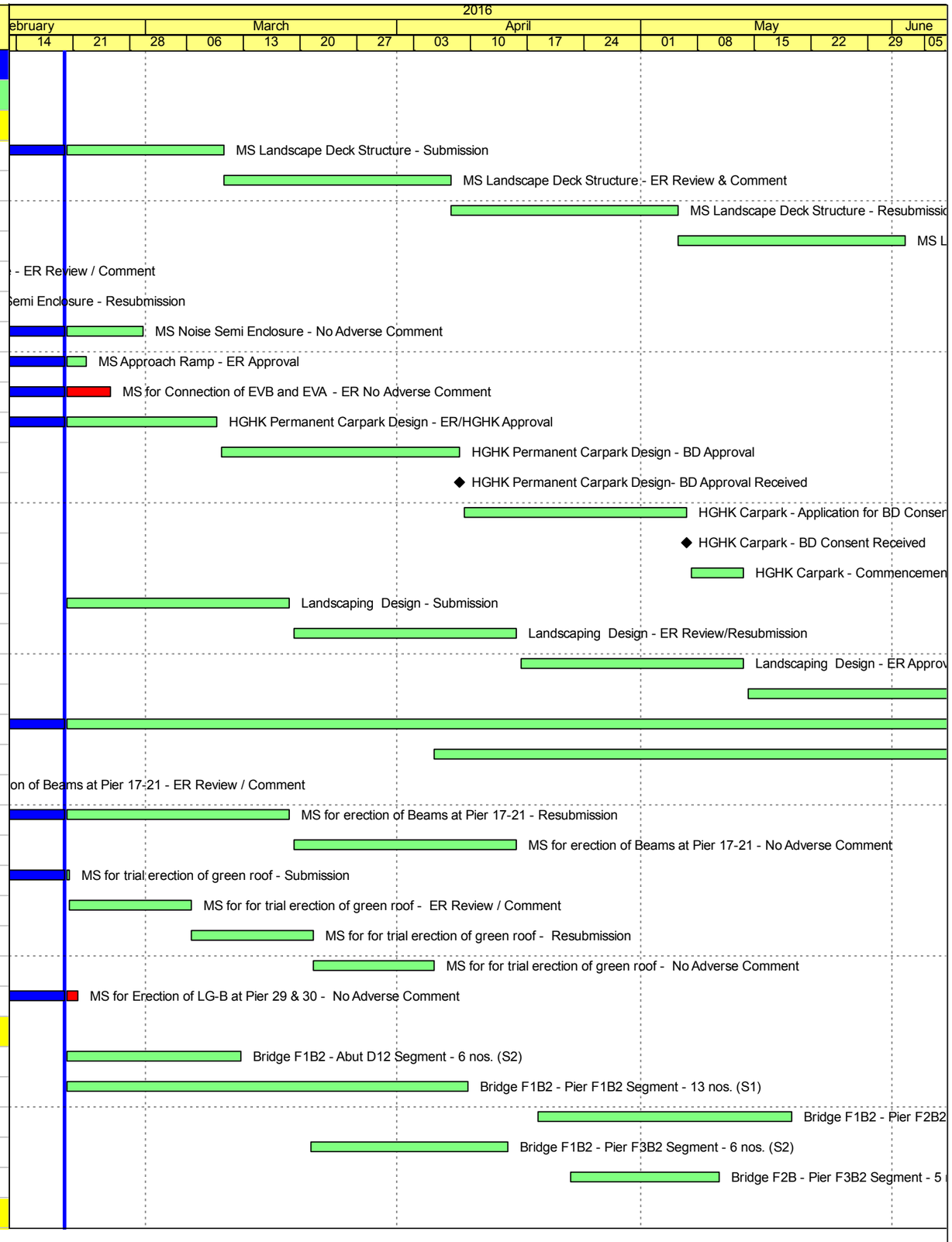
Activity ID	Activity Name	Rem Dur	Start	Finish
3MRP - Feb 2015 to May 2016				
02 - PRE-CONSTRUCTION WORKS				
02.3 - Method Statement / Shop Drawings				
0230-1380	MS Landscape Deck Structure - Submission	20	20-Jun-15 A	10-Mar-16
0230-1390	MS Landscape Deck Structure - ER Review & Comment	28	10-Mar-16	07-Apr-16
0230-1400	MS Landscape Deck Structure - Resubmission	28	07-Apr-16	05-May-16
0230-1410	MS Landscape Deck Structure - ER Approval	28	05-May-16	02-Jun-16
0230-1612	MS Noise Semi Enclosure - ER Review / Comment	0	16-Jan-16 A	24-Jan-16 A
0230-1613	MS Noise Semi Enclosure - Resubmission	0	25-Jan-16 A	03-Feb-16 A
0230-1614	MS Noise Semi Enclosure - No Adverse Comment	10	04-Feb-16 A	29-Feb-16
0230-1690	MS Approach Ramp - ER Approval	3	01-Feb-15 A	22-Feb-16
0230-2360	MS for Connection of EVB and EVA - ER No Adverse Comment	6	01-Jan-16 A	25-Feb-16
0240-1200	HGHK Permanent Carpark Design - ER/HGHK Approval	19	16-Jan-16 A	09-Mar-16
0240-1210	HGHK Permanent Carpark Design - BD Approval	30	10-Mar-16	08-Apr-16
0240-1220	HGHK Permanent Carpark Design- BD Approval Received	0		08-Apr-16
0240-1230	HGHK Carpark - Application for BD Consent (BA8)	28	09-Apr-16	06-May-16
0240-1240	HGHK Carpark - BD Consent Received	0		06-May-16
0240-1250	HGHK Carpark - Commencement Notification to BD (BA10)	7	07-May-16	13-May-16
0240-1270	Landscaping Design - Submission	28	20-Feb-16*	18-Mar-16
0240-1280	Landscaping Design - ER Review/Resubmission	28	19-Mar-16	15-Apr-16
0240-1290	Landscaping Design - ER Approval	28	16-Apr-16	13-May-16
0240-1295	Landscaping Design - Fabrication & Delivery	28	14-May-16	10-Jun-16
0240-1630	Green Wall Minimum 2 years Establishment	341	18-Apr-15 A	04-Apr-17
0240-1631	Green Roof Minimum 2 years Establishment	650	05-Apr-16	01-Jun-18
0240-2380	MS for erection of Beams at Pier 17-21 - ER Review / Comment	0	11-Jan-16 A	02-Feb-16 A
0240-2390	MS for erection of Beams at Pier 17-21 - Resubmission	28	03-Feb-16 A	18-Mar-16
0240-2391	MS for erection of Beams at Pier 17-21 - No Adverse Comment	28	19-Mar-16	15-Apr-16
0240-2440	MS for trial erection of green roof - Submission	1	20-Oct-15 A	20-Feb-16
0240-2450	MS for for trial erection of green roof - ER Review / Comment	15	20-Feb-16	06-Mar-16
0240-2460	MS for for trial erection of green roof - Resubmission	15	06-Mar-16	21-Mar-16
0240-2470	MS for for trial erection of green roof - No Adverse Comment	15	21-Mar-16	05-Apr-16
0240-2487	MS for Erection of LG-B at Pier 29 & 30 - No Adverse Comment	2	25-Dec-15 A	21-Feb-16
02.5 - Bridge Segment/Beam Off-site Precasting				
0250-3860	Bridge F1B2 - Abut D12 Segment - 6 nos. (S2)	19	20-Feb-16	12-Mar-16
0250-3880	Bridge F1B2 - Pier F1B2 Segment - 13 nos. (S1)	40	20-Feb-16	09-Apr-16
0250-3900	Bridge F1B2 - Pier F2B2 Segment - 11 nos. (S1)	28	18-Apr-16	19-May-16
0250-3920	Bridge F1B2 - Pier F3B2 Segment - 6 nos. (S2)	19	21-Mar-16	14-Apr-16
0250-3940	Bridge F2B - Pier F3B2 Segment - 5 nos. (S2)	16	22-Apr-16	10-May-16
02.6 - Fabrication & Delivery of Noise Enclosure				



Remaining Level of Effort
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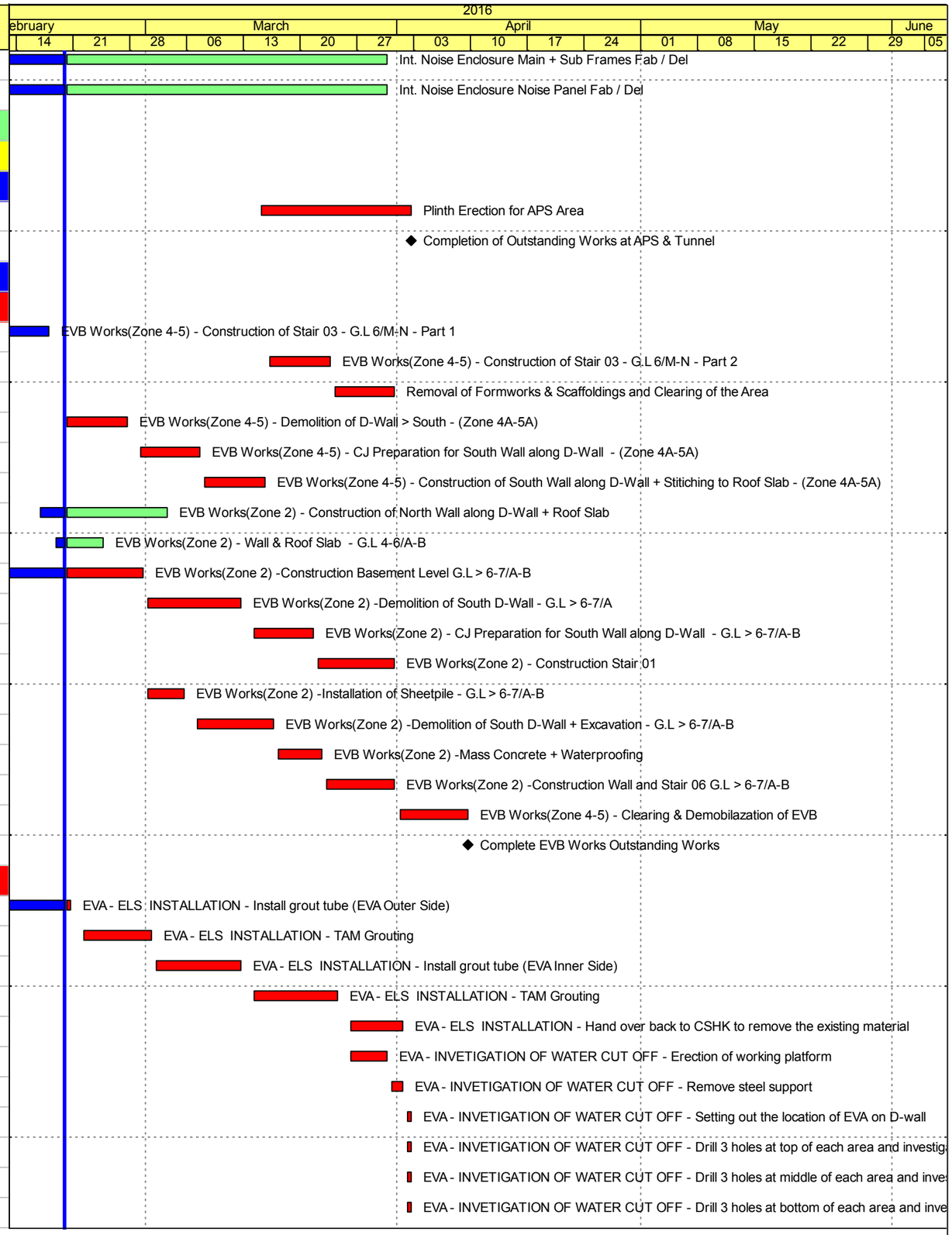
Activity ID	Activity Name	Rem Dur	Start	Finish
0260-5000	Int. Noise Enclosure Main + Sub Frames Fab / Del	32	01-Jun-15 A	30-Mar-16
0260-5010	Int. Noise Enclosure Noise Panel Fab / Del	32	19-Jan-15 A	30-Mar-16
05 - SECTION 2 & 2A OF THE WORKS				
05.1 - Cut & Cover Tunnel Ch 4855-4932 (APS Footprint)				
05.1.4 - APS & Tunnel Structure Outstanding Works				
0513-3570	Plinth Erection for APS Area	15	15-Mar-16*	02-Apr-16
0513-3580	Completion of Outstanding Works at APS & Tunnel	0		02-Apr-16*
05.1.6 - EVB Sub-structure & Tunnel				
05.1.6 - EVB Outstanding Works				
0515-2988	EVB Works(Zone 4-5) - Construction of Stair 03 - G.L 6/M-N - Part 1	0	23-Dec-15 A	18-Feb-16 A
0515-2990	EVB Works(Zone 4-5) - Construction of Stair 03 - G.L 6/M-N - Part 2	7	16-Mar-16	23-Mar-16
0515-2992	Removal of Formworks & Scaffoldings and Clearing of the Area	5	24-Mar-16	31-Mar-16
0515-2998	EVB Works(Zone 4-5) - Demolition of D-Wall > South - (Zone 4A-5A)	7	20-Feb-16	27-Feb-16
0515-3008	EVB Works(Zone 4-5) - CJ Preparation for South Wall along D-Wall - (Zone 4A-5A)	7	29-Feb-16	07-Mar-16
0515-3018	EVB Works(Zone 4-5) - Construction of South Wall along D-Wall + Stitiching to Roof Slab - (Zone 4A-5A)	7	08-Mar-16	15-Mar-16
0515-3058	EVB Works(Zone 2) - Construction of North Wall along D-Wall + Roof Slab	11	17-Feb-16 A	03-Mar-16
0515-3060	EVB Works(Zone 2) - Wall & Roof Slab - G.L 4-6/A-B	4	19-Feb-16 A	24-Feb-16
0515-3078	EVB Works(Zone 2) -Construction Basement Level G.L > 6-7/A-B	8	18-Jan-16 A	29-Feb-16
0515-3088	EVB Works(Zone 2) -Demolition of South D-Wall - G.L > 6-7/A	11	01-Mar-16	12-Mar-16
0515-3090	EVB Works(Zone 2) - CJ Preparation for South Wall along D-Wall - G.L > 6-7/A-B	7	14-Mar-16	21-Mar-16
0515-3091	EVB Works(Zone 2) - Construction Stair 01	7	22-Mar-16	31-Mar-16
0515-3093	EVB Works(Zone 2) -Installation of Sheetpile - G.L > 6-7/A-B	5	01-Mar-16	05-Mar-16
0515-3094	EVB Works(Zone 2) -Demolition of South D-Wall + Excavation - G.L > 6-7/A-B	9	07-Mar-16	16-Mar-16
0515-3095	EVB Works(Zone 2) -Mass Concrete + Waterproofing	5	17-Mar-16	22-Mar-16
0515-3096	EVB Works(Zone 2) -Construction Wall and Stair 06 G.L > 6-7/A-B	6	23-Mar-16	31-Mar-16
0515-3098	EVB Works(Zone 4-5) - Clearing & Demobilazation of EVB	7	01-Apr-16	09-Apr-16
0515-3099	Complete EVB Works Outstanding Works	0		09-Apr-16*
05.1.7 - Connection to EVA				
0515-3200	EVA - ELS INSTALLATION - Install grout tube (EVA Outer Side)	1	01-Feb-16 A	20-Feb-16
0515-3210	EVA - ELS INSTALLATION - TAM Grouting	8	22-Feb-16	01-Mar-16
0515-3220	EVA - ELS INSTALLATION - Install grout tube (EVA Inner Side)	10	02-Mar-16	12-Mar-16
0515-3230	EVA - ELS INSTALLATION - TAM Grouting	10	14-Mar-16	24-Mar-16
0515-3232	EVA - ELS INSTALLATION - Hand over back to CSHK to remove the existing material	5	26-Mar-16	01-Apr-16*
0515-3240	EVA - INVETIGATION OF WATER CUT OFF - Erection of working platform	3	26-Mar-16	30-Mar-16
0515-3250	EVA - INVETIGATION OF WATER CUT OFF - Remove steel support	2	31-Mar-16	01-Apr-16
0515-3260	EVA - INVETIGATION OF WATER CUT OFF - Setting out the location of EVA on D-wall	1	02-Apr-16	02-Apr-16
0515-3270	EVA - INVETIGATION OF WATER CUT OFF - Drill 3 holes at top of each area and investigate	1	02-Apr-16	02-Apr-16
0515-3280	EVA - INVETIGATION OF WATER CUT OFF - Drill 3 holes at middle of each area and investigate	1	02-Apr-16	02-Apr-16
0515-3290	EVA - INVETIGATION OF WATER CUT OFF - Drill 3 holes at bottom of each area and investigate	1	02-Apr-16	02-Apr-16



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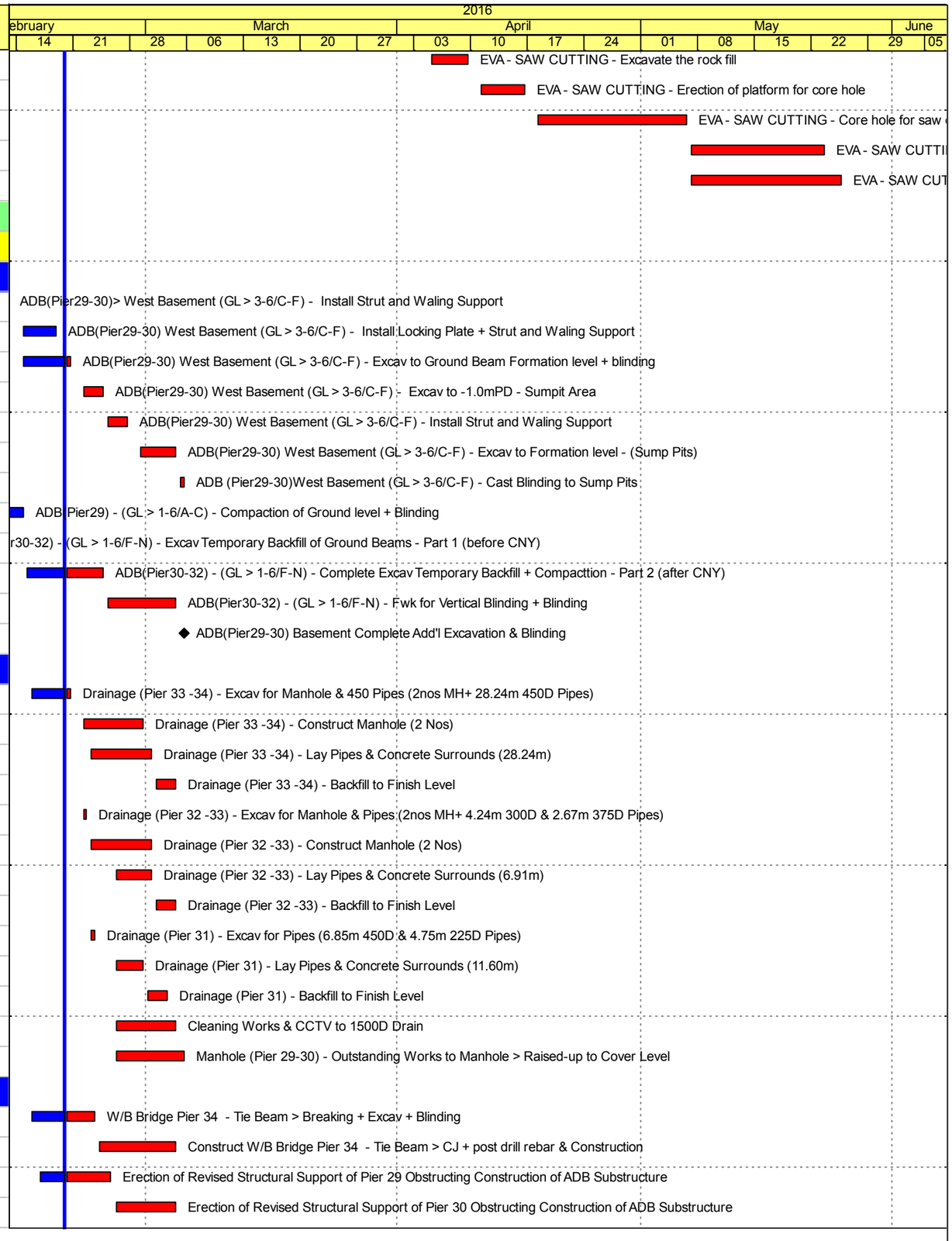
0515-3300	EVA - SAW CUTTING - Excavate the rock fill	5	05-Apr-16	09-Apr-16
0515-3302	EVA - SAW CUTTING - Erection of platform for core hole	6	11-Apr-16	16-Apr-16
0515-3310	EVA - SAW CUTTING - Core hole for saw cut (156 nos.)(5 set of coring machine)	17	18-Apr-16	06-May-16
0515-3320	EVA - SAW CUTTING - Saw cut (8 nos. Horz. and 9 nos. Vert. cut, 12 hrs per day)	14	07-May-16	23-May-16
0515-3330	EVA - SAW CUTTING - Remove Cutaway	16	07-May-16	25-May-16
06 - SECTION 3 OF THE WORKS				
06.3 - Admin Building				
Admin Building - Add'l Excavation & Blinding to Ground Slab				
630-3091	ADB(Pier29-30)> West Basement (GL > 3-6/C-F) - Install Strut and Waling Support	0	20-Jan-16 A	13-Feb-16 A
630-3093	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Install Locking Plate + Strut and Waling Support	0	15-Feb-16 A	19-Feb-16 A
630-3095	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Excav to Ground Beam Formation level + blinding	1	15-Feb-16 A	20-Feb-16
630-3116	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Excav to -1.0mPD - Sumpit Area	3	22-Feb-16	24-Feb-16
630-3120	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Install Strut and Waling Support	3	25-Feb-16	27-Feb-16
630-3220	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Excav to Formation level - (Sump Pits)	5	29-Feb-16	04-Mar-16
630-3340	ADB (Pier29-30)West Basement (GL > 3-6/C-F) - Cast Blinding to Sump Pits	1	05-Mar-16	05-Mar-16
630-3364	ADB(Pier29) - (GL > 1-6/A-C) - Compaction of Ground level + Blinding	0	26-Jan-16 A	15-Feb-16 A
630-3366	ADB(Pier30-32) - (GL > 1-6/F-N) - Excav Temporary Backfill of Ground Beams - Part 1 (before CNY)	0	22-Jan-16 A	05-Feb-16 A
630-3368	ADB(Pier30-32) - (GL > 1-6/F-N) - Complete Excav Temporary Backfill + Compacttion - Part 2 (after CNY)	4	15-Feb-16 A	24-Feb-16
630-3370	ADB(Pier30-32) - (GL > 1-6/F-N) - Fwk for Vertical Blinding + Blinding	8	25-Feb-16	04-Mar-16
630-3380	ADB(Pier29-30) Basement Complete Add'l Excavation & Blinding	0		05-Mar-16*
Admin Building - Remaining Drainage Works (yellow)				
0630-2355	Drainage (Pier 33 -34) - Excav for Manhole & 450 Pipes (2nos MH+ 28.24m 450D Pipes)	1	16-Feb-16 A	20-Feb-16
0630-2357	Drainage (Pier 33 -34) - Construct Manhole (2 Nos)	7	22-Feb-16	29-Feb-16
0630-2359	Drainage (Pier 33 -34) - Lay Pipes & Concrete Surrounds (28.24m)	7	23-Feb-16	01-Mar-16
0630-2361	Drainage (Pier 33 -34) - Backfill to Finish Level	3	02-Mar-16	04-Mar-16
0630-2363	Drainage (Pier 32 -33) - Excav for Manhole & Pipes (2nos MH+ 4.24m 300D & 2.67m 375D Pipes)	1	22-Feb-16	22-Feb-16
0630-2365	Drainage (Pier 32 -33) - Construct Manhole (2 Nos)	7	23-Feb-16	01-Mar-16
0630-2367	Drainage (Pier 32 -33) - Lay Pipes & Concrete Surrounds (6.91m)	4	26-Feb-16	01-Mar-16
0630-2369	Drainage (Pier 32 -33) - Backfill to Finish Level	3	02-Mar-16	04-Mar-16
0630-2371	Drainage (Pier 31) - Excav for Pipes (6.85m 450D & 4.75m 225D Pipes)	1	23-Feb-16	23-Feb-16
0630-2373	Drainage (Pier 31) - Lay Pipes & Concrete Surrounds (11.60m)	3	26-Feb-16	29-Feb-16
0630-2375	Drainage (Pier 31) - Backfill to Finish Level	3	01-Mar-16	03-Mar-16
0630-2376	Cleaning Works & CCTV to 1500D Drain	7	26-Feb-16	04-Mar-16
0630-2378	Manhole (Pier 29-30) - Outstanding Works to Manhole > Raised-up to Cover Level	8	26-Feb-16	05-Mar-16
Admin Building - Misc Items				
0610-1880	W/B Bridge Pier 34 - Tie Beam > Breaking + Excav + Blinding	3	16-Feb-16 A	23-Feb-16
0610-1900	Construct W/B Bridge Pier 34 - Tie Beam > CJ + post drill rebar & Construction	9	24-Feb-16	04-Mar-16
0630-2513	Erection of Revised Structural Support of Pier 29 Obstructing Construction of ADB Substructure	5	17-Feb-16 A	25-Feb-16
0630-2515	Erection of Revised Structural Support of Pier 30 Obstructing Construction of ADB Substructure	7	26-Feb-16	04-Mar-16



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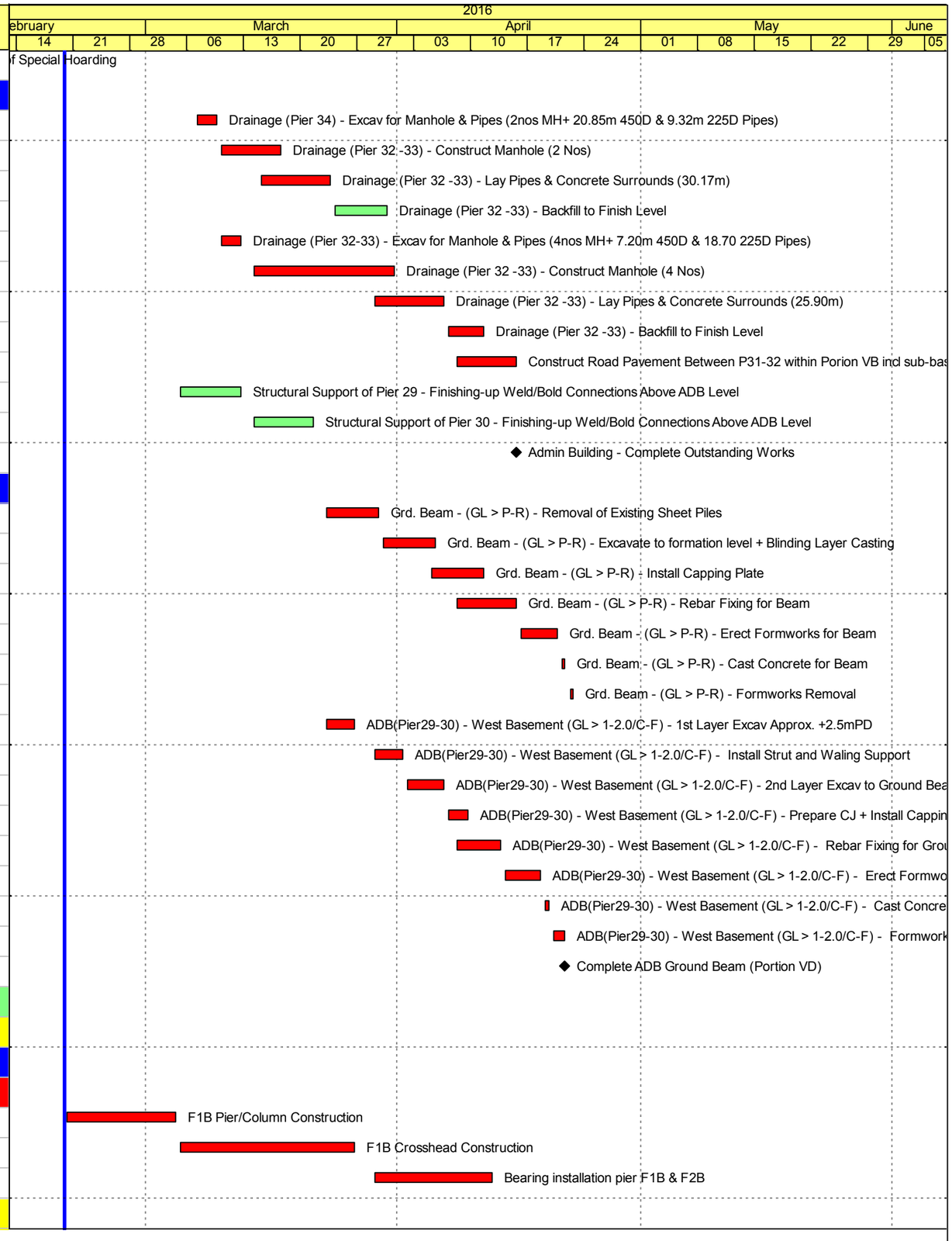
Activity ID	Activity Name	Rem Dur	Start	Finish
0630-2518	Reconstruction of Special Hoarding	0	23-Jan-16 A	31-Jan-16 A
Admin Building - Outstanding Works After Hanover to CC				
0630-2630	Drainage (Pier 34) - Excav for Manhole & Pipes (2nos MH+ 20.85m 450D & 9.32m 225D Pipes)	3	07-Mar-16	09-Mar-16
0630-2640	Drainage (Pier 32 -33) - Construct Manhole (2 Nos)	7	10-Mar-16	17-Mar-16
0630-2650	Drainage (Pier 32 -33) - Lay Pipes & Concrete Surrounds (30.17m)	8	15-Mar-16	23-Mar-16
0630-2660	Drainage (Pier 32 -33) - Backfill to Finish Level	4	24-Mar-16	30-Mar-16
0630-2670	Drainage (Pier 32-33) - Excav for Manhole & Pipes (4nos MH+ 7.20m 450D & 18.70 225D Pipes)	3	10-Mar-16	12-Mar-16
0630-2680	Drainage (Pier 32 -33) - Construct Manhole (4 Nos)	14	14-Mar-16	31-Mar-16
0630-2690	Drainage (Pier 32 -33) - Lay Pipes & Concrete Surrounds (25.90m)	7	29-Mar-16	06-Apr-16
0630-2700	Drainage (Pier 32 -33) - Backfill to Finish Level	4	07-Apr-16	11-Apr-16
0630-2705	Construct Road Pavement Between P31-32 within Porion VB incl sub-base	7	08-Apr-16	15-Apr-16
0630-2710	Structural Support of Pier 29 - Finishing-up Weld/Bold Connections Above ADB Level	7	05-Mar-16	12-Mar-16
0630-2720	Structural Support of Pier 30 - Finishing-up Weld/Bold Connections Above ADB Level	7	14-Mar-16	21-Mar-16
0630-2730	Admin Building - Complete Outstanding Works	0		15-Apr-16*
Admin Building - Ground Beams to be Completed after CC Basement (Timing to be Confirmed)				
0630-1880	Grd. Beam - (GL > P-R) - Removal of Existing Sheet Piles	4	23-Mar-16	29-Mar-16
0630-1900	Grd. Beam - (GL > P-R) - Excavate to formation level + Blinding Layer Casting	5	30-Mar-16	05-Apr-16
0630-1920	Grd. Beam - (GL > P-R) - Install Capping Plate	6	05-Apr-16	11-Apr-16
0630-1940	Grd. Beam - (GL > P-R) - Rebar Fixing for Beam	7	08-Apr-16	15-Apr-16
0630-1960	Grd. Beam - (GL > P-R) - Erect Formworks for Beam	4	16-Apr-16	20-Apr-16
0630-1980	Grd. Beam - (GL > P-R) - Cast Concrete for Beam	1	21-Apr-16	21-Apr-16
0630-2000	Grd. Beam - (GL > P-R) - Formworks Removal	1	22-Apr-16	22-Apr-16
0630-2036	ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - 1st Layer Excav Approx. +2.5mPD	3	23-Mar-16	26-Mar-16
0630-2037	ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Install Strut and Waling Support	4	29-Mar-16	01-Apr-16
0630-2038	ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - 2nd Layer Excav to Ground Beam Formation level + blinding	3	02-Apr-16	06-Apr-16
0630-2040	ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Prepare CJ + Install Capping Plate	3	07-Apr-16	09-Apr-16
0630-2080	ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Rebar Fixing for Ground Beam	5	08-Apr-16	13-Apr-16
0630-2100	ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Erect Formworks for Ground Beam	4	14-Apr-16	18-Apr-16
0630-2120	ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Cast Concrete for Ground Beam	1	19-Apr-16	19-Apr-16
0630-2140	ADB(Pier29-30) - West Basement (GL > 1-2.0/C-F) - Formworks Removal	2	20-Apr-16	21-Apr-16
0630-2160	Complete ADB Ground Beam (Portion VD)	0		21-Apr-16
10 - SECTION X OF THE WORKS				
10.1 - E/B Bridges (Bridge D, E and F)				
10.1.1 - Marine Pier Construction				
Pier F01 to F02				
1011-8600	F1B Pier/Column Construction	12	20-Feb-16	04-Mar-16
1011-8620	F1B Crosshead Construction	18	05-Mar-16	26-Mar-16
1011-8640	Bearing installation pier F1B & F2B	12	29-Mar-16	12-Apr-16
10.2 - W/B Bridges (Bridge C and F)				



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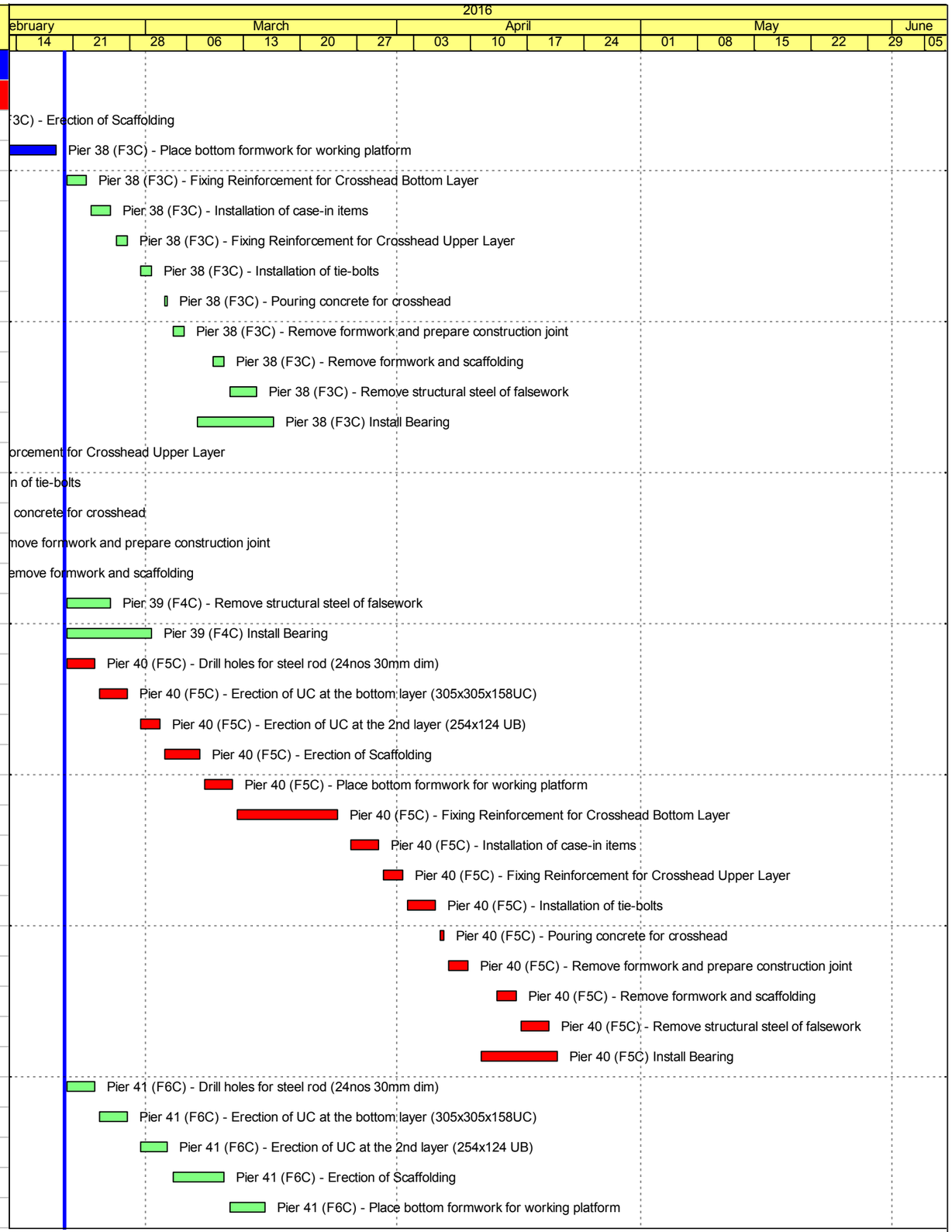
Activity ID	Activity Name	Rem Dur	Start	Finish
10.2.1 - Pier Construction				
Pier 38 to 43				
1021-1844	Pier 38 (F3C) - Erection of Scaffolding	0	20-Jan-16 A	05-Feb-16 A
1021-1845	Pier 38 (F3C) - Place bottom formwork for working platform	0	11-Feb-16 A	19-Feb-16 A
1021-1846	Pier 38 (F3C) - Fixing Reinforcement for Crosshead Bottom Layer	2	20-Feb-16	22-Feb-16
1021-1847	Pier 38 (F3C) - Installation of case-in items	3	23-Feb-16	25-Feb-16
1021-1848	Pier 38 (F3C) - Fixing Reinforcement for Crosshead Upper Layer	2	26-Feb-16	27-Feb-16
1021-1849	Pier 38 (F3C) - Installation of tie-bolts	2	29-Feb-16	01-Mar-16
1021-1850	Pier 38 (F3C) - Pouring concrete for crosshead	1	03-Mar-16	03-Mar-16
1021-1851	Pier 38 (F3C) - Remove formwork and prepare construction joint	2	04-Mar-16	05-Mar-16
1021-1852	Pier 38 (F3C) - Remove formwork and scaffolding	2	09-Mar-16	10-Mar-16
1021-1853	Pier 38 (F3C) - Remove structural steel of falsework	3	11-Mar-16	14-Mar-16
1021-1880	Pier 38 (F3C) Install Bearing	9	07-Mar-16	16-Mar-16
1021-1928	Pier 39 (F4C) - Fixing Reinforcement for Crosshead Upper Layer	0	22-Jan-16 A	23-Jan-16 A
1021-1929	Pier 39 (F4C) - Installation of tie-bolts	0	24-Jan-16 A	25-Jan-16 A
1021-1930	Pier 39 (F4C) - Pouring concrete for crosshead	0	26-Jan-16 A	26-Jan-16 A
1021-1931	Pier 39 (F4C) - Remove formwork and prepare construction joint	0	27-Jan-16 A	29-Jan-16 A
1021-1932	Pier 39 (F4C) - Remove formwork and scaffolding	0	28-Jan-16 A	30-Jan-16 A
1021-1933	Pier 39 (F4C) - Remove structural steel of falsework	5	20-Feb-16	25-Feb-16
1021-1960	Pier 39 (F4C) Install Bearing	9	20-Feb-16	01-Mar-16
1021-2001	Pier 40 (F5C) - Drill holes for steel rod (24nos 30mm dim)	3	20-Feb-16	23-Feb-16
1021-2002	Pier 40 (F5C) - Erection of UC at the bottom layer (305x305x158UC)	4	24-Feb-16	27-Feb-16
1021-2003	Pier 40 (F5C) - Erection of UC at the 2nd layer (254x124 UB)	3	29-Feb-16	02-Mar-16
1021-2004	Pier 40 (F5C) - Erection of Scaffolding	4	03-Mar-16	07-Mar-16
1021-2005	Pier 40 (F5C) - Place bottom formwork for working platform	4	08-Mar-16	11-Mar-16
1021-2006	Pier 40 (F5C) - Fixing Reinforcement for Crosshead Bottom Layer	11	12-Mar-16	24-Mar-16
1021-2007	Pier 40 (F5C) - Installation of case-in items	2	26-Mar-16	29-Mar-16
1021-2008	Pier 40 (F5C) - Fixing Reinforcement for Crosshead Upper Layer	3	30-Mar-16	01-Apr-16
1021-2009	Pier 40 (F5C) - Installation of tie-bolts	2	02-Apr-16	05-Apr-16
1021-2010	Pier 40 (F5C) - Pouring concrete for crosshead	1	06-Apr-16	06-Apr-16
1021-2011	Pier 40 (F5C) - Remove formwork and prepare construction joint	3	07-Apr-16	09-Apr-16
1021-2012	Pier 40 (F5C) - Remove formwork and scaffolding	3	13-Apr-16	15-Apr-16
1021-2013	Pier 40 (F5C) - Remove structural steel of falsework	3	16-Apr-16	19-Apr-16
1021-2040	Pier 40 (F5C) Install Bearing	9	11-Apr-16	20-Apr-16
1021-2081	Pier 41 (F6C) - Drill holes for steel rod (24nos 30mm dim)	3	20-Feb-16	23-Feb-16
1021-2082	Pier 41 (F6C) - Erection of UC at the bottom layer (305x305x158UC)	4	24-Feb-16	27-Feb-16
1021-2083	Pier 41 (F6C) - Erection of UC at the 2nd layer (254x124 UB)	4	29-Feb-16	03-Mar-16
1021-2084	Pier 41 (F6C) - Erection of Scaffolding	6	04-Mar-16	10-Mar-16
1021-2085	Pier 41 (F6C) - Place bottom formwork for working platform	4	11-Mar-16	15-Mar-16



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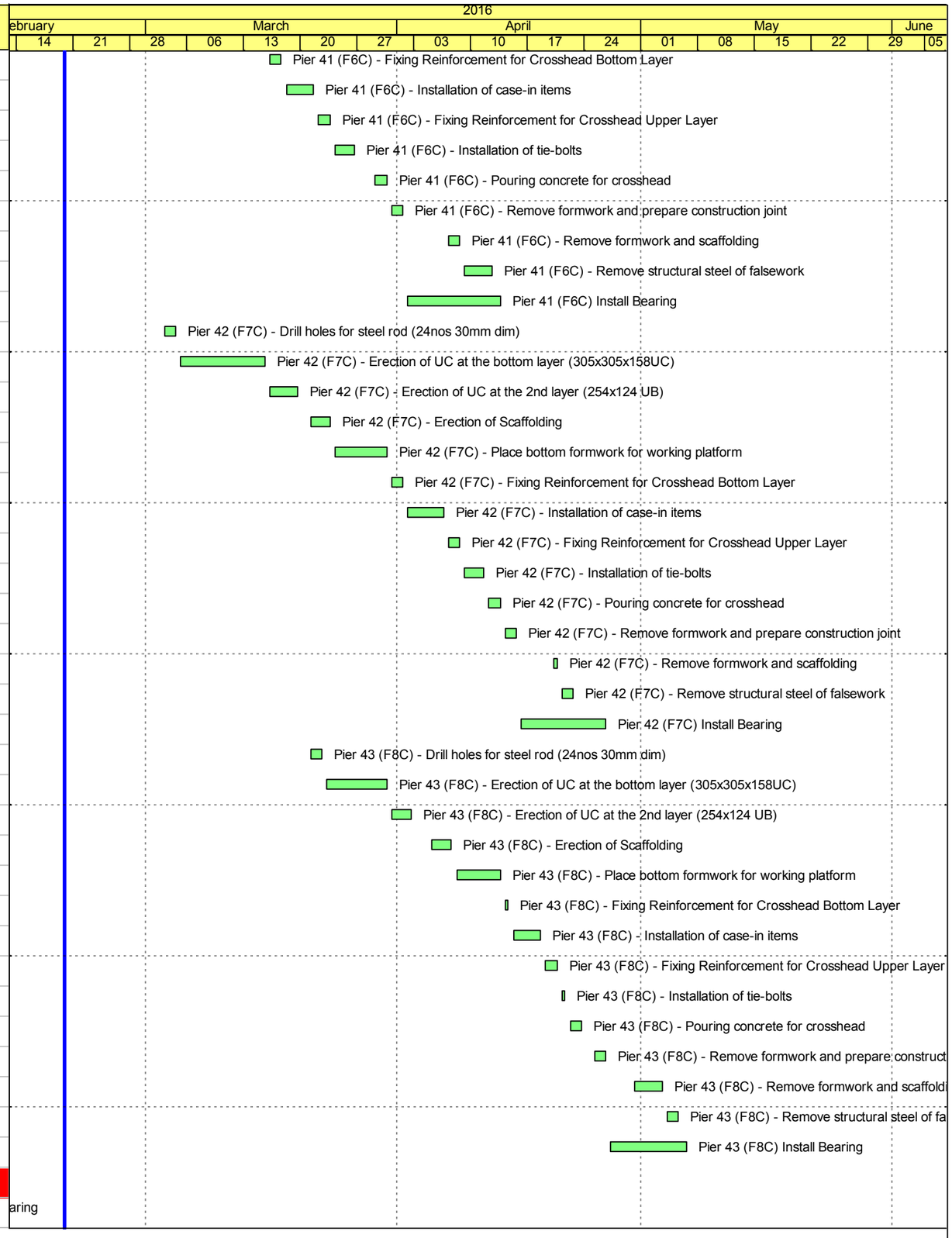
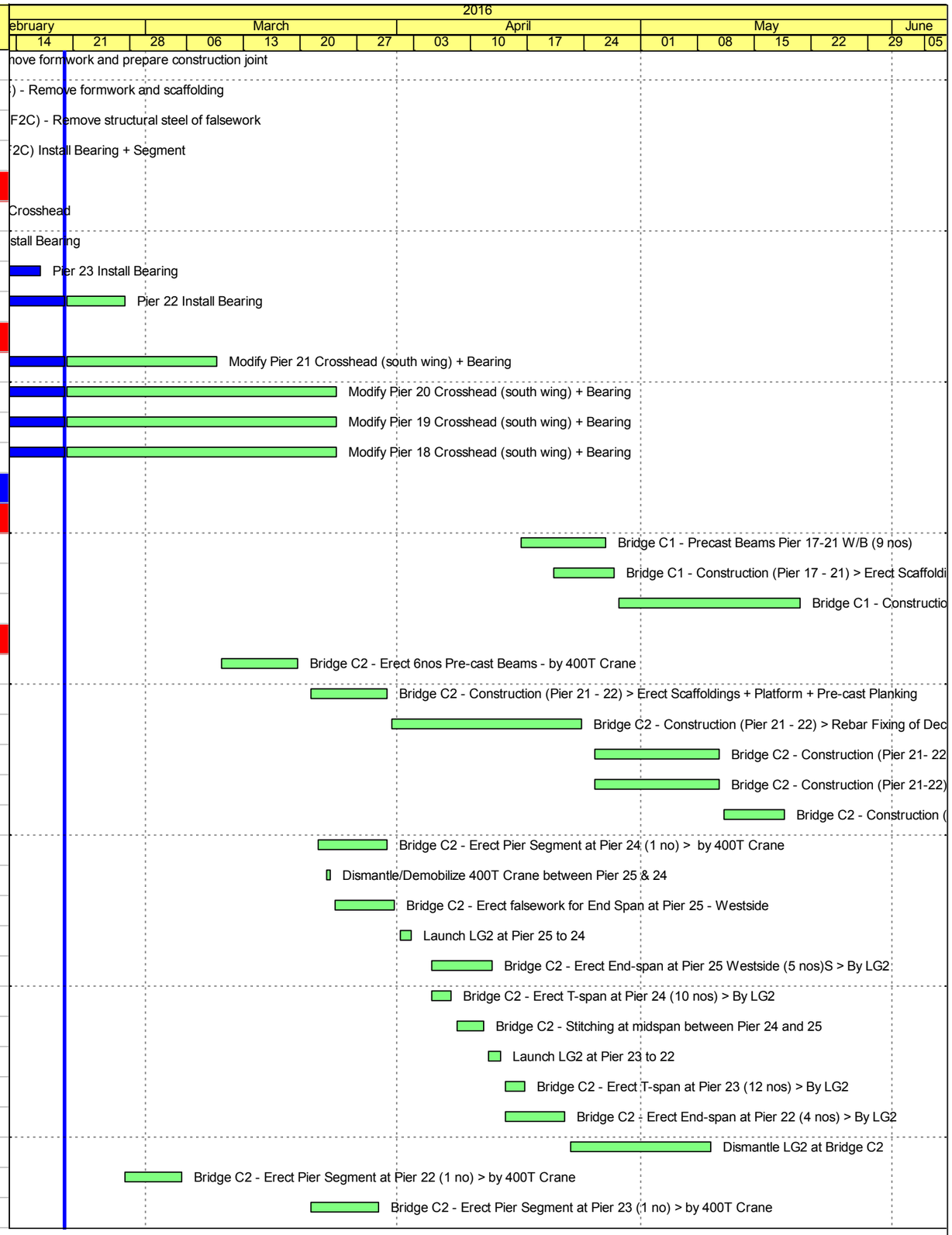
3 Months Rolling Programme(as at 20-Feb-2016)

Activity ID	Activity Name	Rem Dur	Start	Finish
1021-2086	Pier 41 (F6C) - Fixing Reinforcement for Crosshead Bottom Layer	2	16-Mar-16	17-Mar-16
1021-2087	Pier 41 (F6C) - Installation of case-in items	3	18-Mar-16	21-Mar-16
1021-2088	Pier 41 (F6C) - Fixing Reinforcement for Crosshead Upper Layer	2	22-Mar-16	23-Mar-16
1021-2089	Pier 41 (F6C) - Installation of tie-bolts	2	24-Mar-16	26-Mar-16
1021-2090	Pier 41 (F6C) - Pouring concrete for crosshead	2	29-Mar-16	30-Mar-16
1021-2091	Pier 41 (F6C) - Remove formwork and prepare construction joint	2	31-Mar-16	01-Apr-16
1021-2092	Pier 41 (F6C) - Remove formwork and scaffolding	2	07-Apr-16	08-Apr-16
1021-2093	Pier 41 (F6C) - Remove structural steel of falsework	3	09-Apr-16	12-Apr-16
1021-2120	Pier 41 (F6C) Install Bearing	9	02-Apr-16	13-Apr-16
1021-2161	Pier 42 (F7C) - Drill holes for steel rod (24nos 30mm dim)	2	03-Mar-16	04-Mar-16
1021-2162	Pier 42 (F7C) - Erection of UC at the bottom layer (305x305x158UC)	9	05-Mar-16	15-Mar-16
1021-2163	Pier 42 (F7C) - Erection of UC at the 2nd layer (254x124 UB)	4	16-Mar-16	19-Mar-16
1021-2164	Pier 42 (F7C) - Erection of Scaffolding	3	21-Mar-16	23-Mar-16
1021-2165	Pier 42 (F7C) - Place bottom formwork for working platform	4	24-Mar-16	30-Mar-16
1021-2166	Pier 42 (F7C) - Fixing Reinforcement for Crosshead Bottom Layer	2	31-Mar-16	01-Apr-16
1021-2167	Pier 42 (F7C) - Installation of case-in items	3	02-Apr-16	06-Apr-16
1021-2168	Pier 42 (F7C) - Fixing Reinforcement for Crosshead Upper Layer	2	07-Apr-16	08-Apr-16
1021-2169	Pier 42 (F7C) - Installation of tie-bolts	2	09-Apr-16	11-Apr-16
1021-2170	Pier 42 (F7C) - Pouring concrete for crosshead	2	12-Apr-16	13-Apr-16
1021-2171	Pier 42 (F7C) - Remove formwork and prepare construction joint	2	14-Apr-16	15-Apr-16
1021-2172	Pier 42 (F7C) - Remove formwork and scaffolding	1	20-Apr-16	20-Apr-16
1021-2173	Pier 42 (F7C) - Remove structural steel of falsework	2	21-Apr-16	22-Apr-16
1021-2200	Pier 42 (F7C) Install Bearing	9	16-Apr-16	26-Apr-16
1021-2241	Pier 43 (F8C) - Drill holes for steel rod (24nos 30mm dim)	2	21-Mar-16	22-Mar-16
1021-2242	Pier 43 (F8C) - Erection of UC at the bottom layer (305x305x158UC)	5	23-Mar-16	30-Mar-16
1021-2243	Pier 43 (F8C) - Erection of UC at the 2nd layer (254x124 UB)	3	31-Mar-16	02-Apr-16
1021-2244	Pier 43 (F8C) - Erection of Scaffolding	3	05-Apr-16	07-Apr-16
1021-2245	Pier 43 (F8C) - Place bottom formwork for working platform	5	08-Apr-16	13-Apr-16
1021-2246	Pier 43 (F8C) - Fixing Reinforcement for Crosshead Bottom Layer	1	14-Apr-16	14-Apr-16
1021-2247	Pier 43 (F8C) - Installation of case-in items	3	15-Apr-16	18-Apr-16
1021-2248	Pier 43 (F8C) - Fixing Reinforcement for Crosshead Upper Layer	2	19-Apr-16	20-Apr-16
1021-2249	Pier 43 (F8C) - Installation of tie-bolts	1	21-Apr-16	21-Apr-16
1021-2250	Pier 43 (F8C) - Pouring concrete for crosshead	2	22-Apr-16	23-Apr-16
1021-2251	Pier 43 (F8C) - Remove formwork and prepare construction joint	2	25-Apr-16	26-Apr-16
1021-2252	Pier 43 (F8C) - Remove formwork and scaffolding	3	30-Apr-16	03-May-16
1021-2253	Pier 43 (F8C) - Remove structural steel of falsework	2	04-May-16	05-May-16
1021-2290	Pier 43 (F8C) Install Bearing	9	27-Apr-16	06-May-16
Pier 36 to 37				
1021-1640	Pier 36 (F1C) Install Bearing	0	11-Jan-16 A	26-Jan-16 A



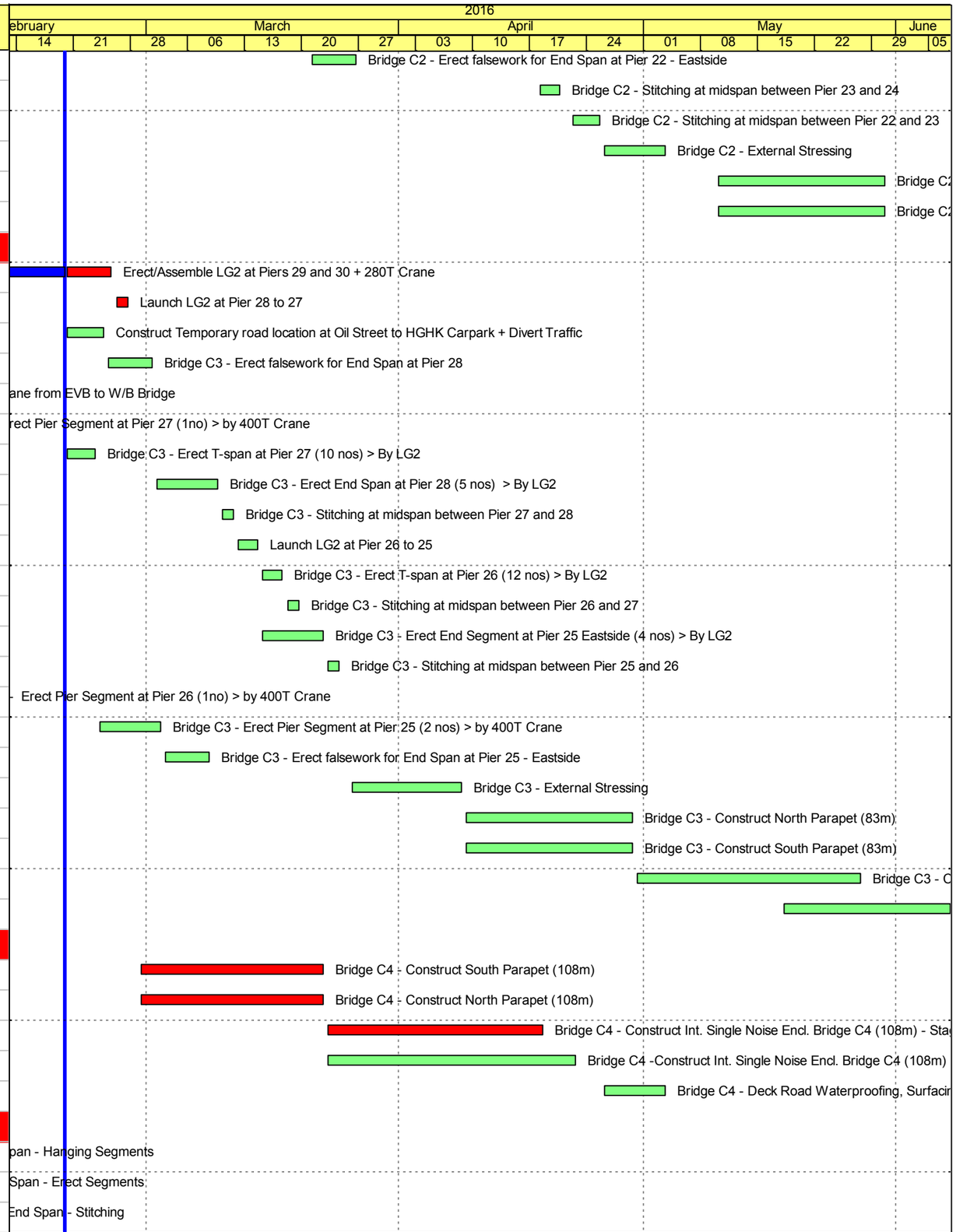
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Activity ID	Activity Name	Rem Dur	Start	Finish
1021-1691	Pier 37 (F2C) - Remove formwork and prepare construction joint	0	25-Jan-16 A	28-Jan-16 A
1021-1694	Pier 37 (F2C) - Remove formwork and scaffolding	0	30-Jan-16 A	02-Feb-16 A
1021-1697	Pier 37 (F2C) - Remove structural steel of falsework	0	03-Feb-16 A	05-Feb-16 A
1022-1920	Pier 37 (F2C) Install Bearing + Segment	0	03-Feb-16 A	05-Feb-16 A
Pier 20 to 25				
1021-1100	Pier 25 Reconstruct Crosshead	0	05-Jan-16 A	28-Jan-16 A
1021-1120	Pier 25 Install Bearing	0	29-Jan-16 A	05-Feb-16 A
1021-1360	Pier 23 Install Bearing	0	08-Jan-16 A	17-Feb-16 A
1021-1430	Pier 22 Install Bearing	6	18-Jan-16 A	27-Feb-16
Pier 17 to 19				
1021-1215	Modify Pier 21 Crosshead (south wing) + Bearing	16	21-Dec-15 A	09-Mar-16
1021-1225	Modify Pier 20 Crosshead (south wing) + Bearing	29	21-Dec-15 A	24-Mar-16
1021-1230	Modify Pier 19 Crosshead (south wing) + Bearing	29	20-Nov-15 A	24-Mar-16
1021-1235	Modify Pier 18 Crosshead (south wing) + Bearing	29	23-Oct-15 A	24-Mar-16
10.2.2 - Bridge Construction				
Bridge C1				
1022-1000	Bridge C1 - Precast Beams Pier 17-21 W/B (9 nos)	9	16-Apr-16	26-Apr-16
1022-1001	Bridge C1 - Construction (Pier 17 - 21) > Erect Scaffoldings + Platform + Pre-cast Planking	7	20-Apr-16	27-Apr-16
1022-1002	Bridge C1 - Construction (Pier 17 - 21) > Rebar Fixing of Deck + Diaphragm + Concreting	20	28-Apr-16	20-May-16
Bridge C2				
1022-2750	Bridge C2 - Erect 6nos Pre-cast Beams - by 400T Crane	9	10-Mar-16	19-Mar-16
1022-2751	Bridge C2 - Construction (Pier 21 - 22) > Erect Scaffoldings + Platform + Pre-cast Planking	7	21-Mar-16	30-Mar-16
1022-2752	Bridge C2 - Construction (Pier 21 - 22) > Rebar Fixing of Deck + Diaphragm + Concreting	20	31-Mar-16	23-Apr-16
1022-2753	Bridge C2 - Construction (Pier 21- 22) > Construct Parapet (North & South)	14	25-Apr-16	10-May-16
1022-2755	Bridge C2 - Construction (Pier 21-22) > Install Street Furniture/GullyEtc.	14	25-Apr-16	10-May-16
1022-2756	Bridge C2 - Construction (Pier 21-22) > Install MJ at Pier 22	7	11-May-16	18-May-16
1022-2800	Bridge C2 - Erect Pier Segment at Pier 24 (1 no) > by 400T Crane	6	22-Mar-16	30-Mar-16
1022-2802	Dismantle/Demobilize 400T Crane between Pier 25 & 24	1	23-Mar-16	23-Mar-16
1022-2804	Bridge C2 - Erect falsework for End Span at Pier 25 - Westside	5	24-Mar-16	31-Mar-16
1022-2805	Launch LG2 at Pier 25 to 24	2	01-Apr-16	02-Apr-16
1022-2807	Bridge C2 - Erect End-span at Pier 25 Westside (5 nos)S > By LG2	7	05-Apr-16	12-Apr-16
1022-2820	Bridge C2 - Erect T-span at Pier 24 (10 nos) > By LG2	3	05-Apr-16	07-Apr-16
1022-2822	Bridge C2 - Stitching at midspan between Pier 24 and 25	3	08-Apr-16	11-Apr-16
1022-2824	Launch LG2 at Pier 23 to 22	2	12-Apr-16	13-Apr-16
1022-2826	Bridge C2 - Erect T-span at Pier 23 (12 nos) > By LG2	3	14-Apr-16	16-Apr-16
1022-2827	Bridge C2 - Erect End-span at Pier 22 (4 nos) > By LG2	7	14-Apr-16	21-Apr-16
1022-2828	Dismantle LG2 at Bridge C2	15	22-Apr-16	09-May-16
1022-2829	Bridge C2 - Erect Pier Segment at Pier 22 (1 no) > by 400T Crane	6	27-Feb-16	05-Mar-16
1022-2846	Bridge C2 - Erect Pier Segment at Pier 23 (1 no) > by 400T Crane	6	21-Mar-16	29-Mar-16



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

Activity ID	Activity Name	Rem Dur	Start	Finish
1022-2851	Bridge C2 - Erect falsework for End Span at Pier 22 - Eastside	5	21-Mar-16	26-Mar-16
1022-2920	Bridge C2 - Stitching at midspan between Pier 23 and 24	3	18-Apr-16	20-Apr-16
1022-2980	Bridge C2 - Stitching at midspan between Pier 22 and 23	3	22-Apr-16	25-Apr-16
1022-3020	Bridge C2 - External Stressing	7	26-Apr-16	03-May-16
1022-3040	Bridge C2 - Construct North Parapet - Excl. Pier 21-22	18	10-May-16	30-May-16
1022-3180	Bridge C2 - Construct South Parapet - Excl. Pier 21-22	18	10-May-16	30-May-16
Bridge C3				
1022-1070	Erect/Assemble LG2 at Piers 29 and 30 + 280T Crane	5	15-Dec-15 A	25-Feb-16
1022-1071	Launch LG2 at Pier 28 to 27	2	26-Feb-16	27-Feb-16
1022-1072	Construct Temporary road location at Oil Street to HGHK Carpark + Divert Traffic	4	20-Feb-16	24-Feb-16
1022-1073	Bridge C3 - Erect falsework for End Span at Pier 28	5	25-Feb-16	01-Mar-16
1022-1075	Relocate 400T Crane from EVB to W/B Bridge	0	26-Jan-16 A	30-Jan-16 A
1022-1120	Bridge C3 - Erect Pier Segment at Pier 27 (1no) > by 400T Crane	0	01-Feb-16 A	02-Feb-16 A
1022-2580	Bridge C3 - Erect T-span at Pier 27 (10 nos) > By LG2	3	20-Feb-16	23-Feb-16
1022-2582	Bridge C3 - Erect End Span at Pier 28 (5 nos) > By LG2	7	02-Mar-16	09-Mar-16
1022-2583	Bridge C3 - Stitching at midspan between Pier 27 and 28	2	10-Mar-16	11-Mar-16
1022-2584	Launch LG2 at Pier 26 to 25	2	12-Mar-16	14-Mar-16
1022-2585	Bridge C3 - Erect T-span at Pier 26 (12 nos) > By LG2	3	15-Mar-16	17-Mar-16
1022-2586	Bridge C3 - Stitching at midspan between Pier 26 and 27	2	18-Mar-16	19-Mar-16
1022-2588	Bridge C3 - Erect End Segment at Pier 25 Eastside (4 nos) > By LG2	7	15-Mar-16	22-Mar-16
1022-2590	Bridge C3 - Stitching at midspan between Pier 25 and 26	2	23-Mar-16	24-Mar-16
1022-2620	Bridge C3 - Erect Pier Segment at Pier 26 (1no) > by 400T Crane	0	02-Feb-16 A	04-Feb-16 A
1022-2642	Bridge C3 - Erect Pier Segment at Pier 25 (2 nos) > by 400T Crane	7	24-Feb-16	02-Mar-16
1022-2644	Bridge C3 - Erect falsework for End Span at Pier 25 - Eastside	5	03-Mar-16	08-Mar-16
1022-2740	Bridge C3 - External Stressing	10	26-Mar-16	08-Apr-16
1022-2760	Bridge C3 - Construct North Parapet (83m)	18	09-Apr-16	29-Apr-16
1022-2780	Bridge C3 - Construct South Parapet (83m)	18	09-Apr-16	29-Apr-16
1022-4110	Bridge C3 - Construct Int. Single Noise Encl. Bridge C3 (83m)	24	30-Apr-16	27-May-16
1022-4111	Bridge C3 - Deck Road Waterproofing, Surfacing & Marking	18	18-May-16	07-Jun-16
Bridge C4				
1022-1552	Bridge C4 - Construct South Parapet (108m)	20	29-Feb-16	22-Mar-16
1022-1555	Bridge C4 - Construct North Parapet (108m)	20	29-Feb-16	22-Mar-16
1022-1558	Bridge C4 - Construct Int. Single Noise Encl. Bridge C4 (108m) - Stage 1 (sides)	20	23-Mar-16	18-Apr-16
1022-1561	Bridge C4 -Construct Int. Single Noise Encl. Bridge C4 (108m) - Stage 2 (arch)	24	23-Mar-16	22-Apr-16
1022-1564	Bridge C4 - Deck Road Waterproofing, Surfacing & Marking	7	26-Apr-16	03-May-16
Bridge C5				
1022-3905	Pier 33 - P32-33 End Span - Hanging Segments	0	23-Jan-16 A	25-Jan-16 A
1022-3907	Pier 33 - P32-33 End Span - Erect Segments	0	26-Jan-16 A	26-Jan-16 A
1022-3909	Pier 33 - P32-33 End Span - Stitching	0	27-Jan-16 A	29-Jan-16 A



Remaining Level of Effort
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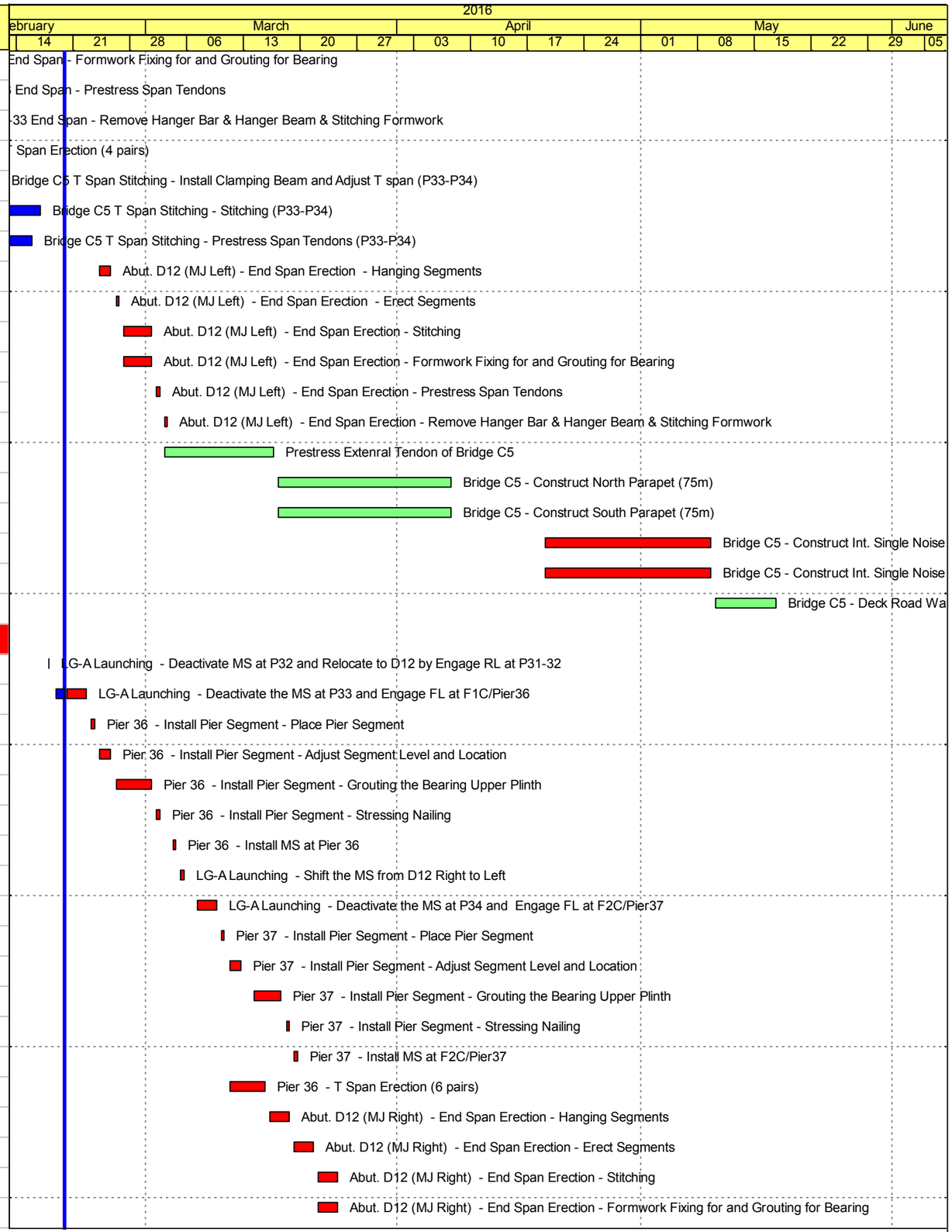
Milestone

Contract HY/2009/19
3 Months Rolling Programme(as at 20-Feb-2016)

Activity ID	Activity Name	Rem Dur	Start	Finish
1022-3911	Pier 33 - P32-33 End Span - Formwork Fixing for and Grouting for Bearing	0	27-Jan-16 A	29-Jan-16 A
1022-3913	Pier 33 - P32-33 End Span - Prestress Span Tendons	0	30-Jan-16 A	30-Jan-16 A
1022-3915	Pier 33 - P32-33 End Span - Remove Hanger Bar & Hanger Beam & Stitching Formwork	0	01-Feb-16 A	01-Feb-16 A
1022-3917	Pier 34 - T Span Erection (4 pairs)	0	27-Jan-16 A	04-Feb-16 A
1022-3919	Bridge C5 T Span Stitching - Install Clamping Beam and Adjust T span (P33-P34)	0	05-Feb-16 A	12-Feb-16 A
1022-3921	Bridge C5 T Span Stitching - Stitching (P33-P34)	0	13-Feb-16 A	17-Feb-16 A
1022-3923	Bridge C5 T Span Stitching - Prestress Span Tendons (P33-P34)	0	13-Feb-16 A	16-Feb-16 A
1022-3924	Abut. D12 (MJ Left) - End Span Erection - Hanging Segments	2	24-Feb-16	25-Feb-16
1022-3927	Abut. D12 (MJ Left) - End Span Erection - Erect Segments	1	26-Feb-16	26-Feb-16
1022-3930	Abut. D12 (MJ Left) - End Span Erection - Stitching	3	27-Feb-16	01-Mar-16
1022-3933	Abut. D12 (MJ Left) - End Span Erection - Formwork Fixing for and Grouting for Bearing	3	27-Feb-16	01-Mar-16
1022-3936	Abut. D12 (MJ Left) - End Span Erection - Prestress Span Tendons	1	02-Mar-16	02-Mar-16
1022-3939	Abut. D12 (MJ Left) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	03-Mar-16	03-Mar-16
1022-3942	Prestress Extenral Tendon of Bridge C5	12	03-Mar-16	16-Mar-16
1022-3950	Bridge C5 - Construct North Parapet (75m)	16	17-Mar-16	07-Apr-16
1022-3951	Bridge C5 - Construct South Parapet (75m)	16	17-Mar-16	07-Apr-16
1022-3952	Bridge C5 - Construct Int. Single Noise Encl. Bridge C5 (75m) - Stage 1	18	19-Apr-16	09-May-16
1022-3953	Bridge C5 - Construct Int. Single Noise Encl. Bridge C5 (75m) - Stage 2	18	19-Apr-16	09-May-16
1022-3954	Bridge C5 - Deck Road Waterproofing, Surfacing & Marking	7	10-May-16	17-May-16
Bridge F1C				
1022.1-3955	LG-A Launching - Deactivate MS at P32 and Relocate to D12 by Engage RL at P31-32	0	18-Feb-16 A	18-Feb-16 A
1022.1-3965	LG-A Launching - Deactivate the MS at P33 and Engage FL at F1C/Pier36	2	19-Feb-16 A	22-Feb-16
1022.1-3975	Pier 36 - Install Pier Segment - Place Pier Segment	1	23-Feb-16	23-Feb-16
1022.1-3985	Pier 36 - Install Pier Segment - Adjust Segment Level and Location	2	24-Feb-16	25-Feb-16
1022.1-3995	Pier 36 - Install Pier Segment - Grouting the Bearing Upper Plinth	4	26-Feb-16	01-Mar-16
1022.1-4005	Pier 36 - Install Pier Segment - Stressing Nailing	1	02-Mar-16	02-Mar-16
1022.1-4015	Pier 36 - Install MS at Pier 36	1	04-Mar-16	04-Mar-16
1022.1-4025	LG-A Launching - Shift the MS from D12 Right to Left	1	05-Mar-16	05-Mar-16
1022.1-4035	LG-A Launching - Deactivate the MS at P34 and Engage FL at F2C/Pier37	3	07-Mar-16	09-Mar-16
1022.1-4045	Pier 37 - Install Pier Segment - Place Pier Segment	1	10-Mar-16	10-Mar-16
1022.1-4055	Pier 37 - Install Pier Segment - Adjust Segment Level and Location	2	11-Mar-16	12-Mar-16
1022.1-4065	Pier 37 - Install Pier Segment - Grouting the Bearing Upper Plinth	4	14-Mar-16	17-Mar-16
1022.1-4075	Pier 37 - Install Pier Segment - Stressing Nailing	1	18-Mar-16	18-Mar-16
1022.1-4085	Pier 37 - Install MS at F2C/Pier37	1	19-Mar-16	19-Mar-16
1022.1-4095	Pier 36 - T Span Erection (6 pairs)	4	11-Mar-16	15-Mar-16
1022.1-4105	Abut. D12 (MJ Right) - End Span Erection - Hanging Segments	3	16-Mar-16	18-Mar-16
1022.1-4115	Abut. D12 (MJ Right) - End Span Erection - Erect Segments	2	19-Mar-16	21-Mar-16
1022.1-4125	Abut. D12 (MJ Right) - End Span Erection - Stitching	3	22-Mar-16	24-Mar-16
1022.1-4135	Abut. D12 (MJ Right) - End Span Erection - Formwork Fixing for and Grouting for Bearing	3	22-Mar-16	24-Mar-16



Remaining Level of Effort
Actual Level of Effort
Actual Work
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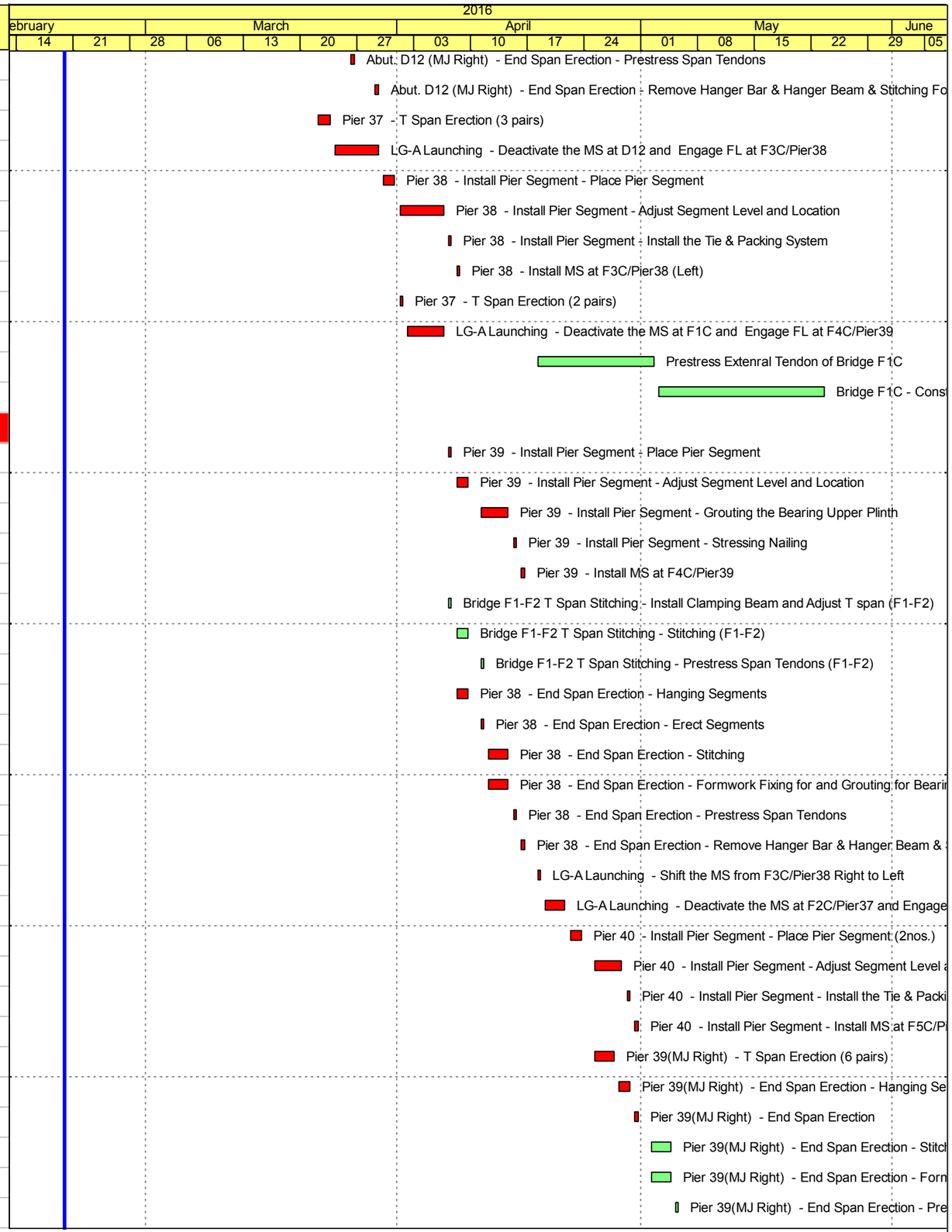
Milestone

Contract HY/2009/19
3 Months Rolling Programme(as at 20-Feb-2016)

Activity ID	Activity Name	Rem Dur	Start	Finish
1022.1-4145	Abut. D12 (MJ Right) - End Span Erection - Prestress Span Tendons	1	26-Mar-16	26-Mar-16
1022.1-4155	Abut. D12 (MJ Right) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	29-Mar-16	29-Mar-16
1022.1-4165	Pier 37 - T Span Erection (3 pairs)	2	22-Mar-16	23-Mar-16
1022.1-4175	LG-A Launching - Deactivate the MS at D12 and Engage FL at F3C/Pier38	3	24-Mar-16	29-Mar-16
1022.1-4185	Pier 38 - Install Pier Segment - Place Pier Segment	2	30-Mar-16	31-Mar-16
1022.1-4195	Pier 38 - Install Pier Segment - Adjust Segment Level and Location	4	01-Apr-16	06-Apr-16
1022.1-4205	Pier 38 - Install Pier Segment - Install the Tie & Packing System	1	07-Apr-16	07-Apr-16
1022.1-4215	Pier 38 - Install MS at F3C/Pier38 (Left)	1	08-Apr-16	08-Apr-16
1022.1-4225	Pier 37 - T Span Erection (2 pairs)	1	01-Apr-16	01-Apr-16
1022.1-4235	LG-A Launching - Deactivate the MS at F1C and Engage FL at F4C/Pier39	3	02-Apr-16	06-Apr-16
1022.1-4240	Prestress Extenral Tendon of Bridge F1C	13	18-Apr-16	02-May-16
1022.1-4245	Bridge F1C - Construct South Parapet (86m)	18	03-May-16	23-May-16
Bridge F2C				
1022.1-4255	Pier 39 - Install Pier Segment - Place Pier Segment	1	07-Apr-16	07-Apr-16
1022.1-4258	Pier 39 - Install Pier Segment - Adjust Segment Level and Location	2	08-Apr-16	09-Apr-16
1022.1-4261	Pier 39 - Install Pier Segment - Grouting the Bearing Upper Plinth	4	11-Apr-16	14-Apr-16
1022.1-4264	Pier 39 - Install Pier Segment - Stressing Nailing	1	15-Apr-16	15-Apr-16
1022.1-4267	Pier 39 - Install MS at F4C/Pier39	1	16-Apr-16	16-Apr-16
1022.1-4270	Bridge F1-F2 T Span Stitching - Install Clamping Beam and Adjust T span (F1-F2)	1	07-Apr-16	07-Apr-16
1022.1-4273	Bridge F1-F2 T Span Stitching - Stitching (F1-F2)	2	08-Apr-16	09-Apr-16
1022.1-4276	Bridge F1-F2 T Span Stitching - Prestress Span Tendons (F1-F2)	1	11-Apr-16	11-Apr-16
1022.1-4279	Pier 38 - End Span Erection - Hanging Segments	2	08-Apr-16	09-Apr-16
1022.1-4282	Pier 38 - End Span Erection - Erect Segments	1	11-Apr-16	11-Apr-16
1022.1-4285	Pier 38 - End Span Erection - Stitching	3	12-Apr-16	14-Apr-16
1022.1-4288	Pier 38 - End Span Erection - Formwork Fixing for and Grouting for Bearing	3	12-Apr-16	14-Apr-16
1022.1-4291	Pier 38 - End Span Erection - Prestress Span Tendons	1	15-Apr-16	15-Apr-16
1022.1-4294	Pier 38 - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	16-Apr-16	16-Apr-16
1022.1-4297	LG-A Launching - Shift the MS from F3C/Pier38 Right to Left	1	18-Apr-16	18-Apr-16
1022.1-4300	LG-A Launching - Deactivate the MS at F2C/Pier37 and Engage FL at F5C/Pier40	3	19-Apr-16	21-Apr-16
1022.1-4303	Pier 40 - Install Pier Segment - Place Pier Segment (2nos.)	2	22-Apr-16	23-Apr-16
1022.1-4306	Pier 40 - Install Pier Segment - Adjust Segment Level and Location	4	25-Apr-16	28-Apr-16
1022.1-4309	Pier 40 - Install Pier Segment - Install the Tie & Packing System	1	29-Apr-16	29-Apr-16
1022.1-4312	Pier 40 - Install Pier Segment - Install MS at F5C/Pier40 (Right)	1	30-Apr-16	30-Apr-16
1022.1-4315	Pier 39(MJ Right) - T Span Erection (6 pairs)	3	25-Apr-16	27-Apr-16
1022.1-4318	Pier 39(MJ Right) - End Span Erection - Hanging Segments	2	28-Apr-16	29-Apr-16
1022.1-4321	Pier 39(MJ Right) - End Span Erection	1	30-Apr-16	30-Apr-16
1022.1-4324	Pier 39(MJ Right) - End Span Erection - Stitching	3	02-May-16	04-May-16
1022.1-4327	Pier 39(MJ Right) - End Span Erection - Formwork Fixing for and Grouting for Bearing	3	02-May-16	04-May-16
1022.1-4330	Pier 39(MJ Right) - End Span Erection - Prestress Span Tendons	1	05-May-16	05-May-16



Remaining Level of Effort
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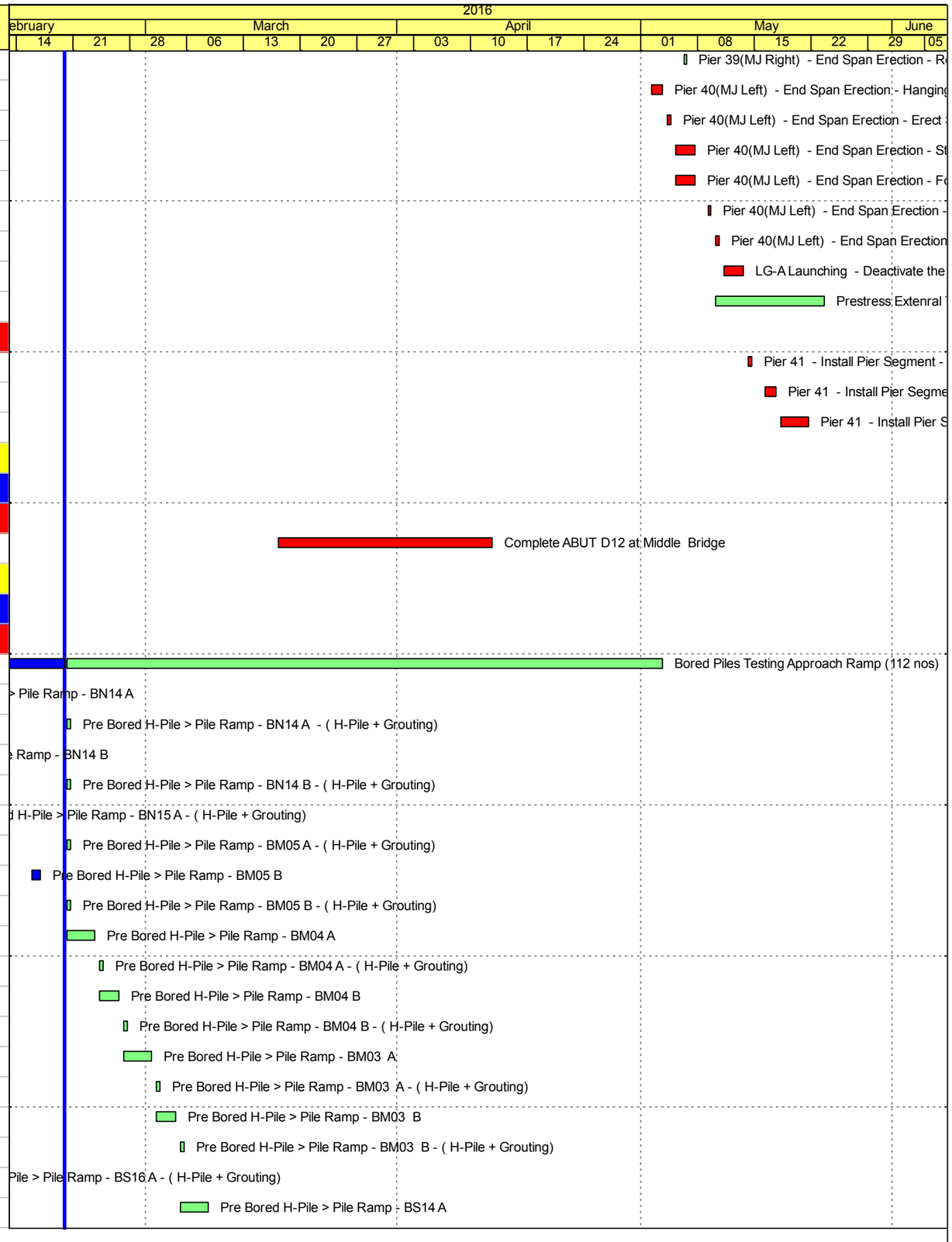
Contract HY/2009/19
3 Months Rolling Programme(as at 20-Feb-2016)

Activity ID	Activity Name	Rem Dur	Start	Finish
1022.1-4333	Pier 39(MJ Right) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	06-May-16	06-May-16
1022.1-4336	Pier 40(MJ Left) - End Span Erection - Hanging Segments	2	02-May-16	03-May-16
1022.1-4339	Pier 40(MJ Left) - End Span Erection - Erect Segments	1	04-May-16	04-May-16
1022.1-4342	Pier 40(MJ Left) - End Span Erection - Stitching	3	05-May-16	07-May-16
1022.1-4345	Pier 40(MJ Left) - End Span Erection - Formwork Fixing for and Grouting for Bearing	3	05-May-16	07-May-16
1022.1-4348	Pier 40(MJ Left) - End Span Erection - Prestress Span Tendons	1	09-May-16	09-May-16
1022.1-4351	Pier 40(MJ Left) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	10-May-16	10-May-16
1022.1-4354	LG-A Launching - Deactivate the MS at F3C/Pier37 and Engage FL at F6C/Pier41	3	11-May-16	13-May-16
1022.1-4355	Prestress Extenral Tendon of Bridge F2C/Pier36	12	10-May-16	23-May-16
Bridge F3C				
1022.1-4370	Pier 41 - Install Pier Segment - Place Pier Segment	1	14-May-16	14-May-16
1022.1-4375	Pier 41 - Install Pier Segment - Adjust Segment Level and Location	2	16-May-16	17-May-16
1022.1-4380	Pier 41 - Install Pier Segment - Grouting the Bearing Upper Plinth	4	18-May-16	21-May-16
10.3 - Middle Bridge (Bridge F)				
10.3.1 - Pier Construction				
Abutment D12				
1031-1920	Complete ABUT D12 at Middle Bridge	20	17-Mar-16	12-Apr-16
10.6 - Tunnel Approach Ramp				
10.6.1 - Approach Ramp (Excluding Portion IIB)				
Bored Piles				
1061-1120	Bored Piles Testing Approach Ramp (112 nos)	60	01-Jun-15 A	03-May-16
1061-3980	Pre Bored H-Pile > Pile Ramp - BN14 A	0	28-Jan-16 A	30-Jan-16 A
1061-3981	Pre Bored H-Pile > Pile Ramp - BN14 A - (H-Pile + Grouting)	1	20-Feb-16	20-Feb-16
1061-4000	Pre Bored H-Pile > Pile Ramp - BN14 B	0	23-Jan-16 A	26-Jan-16 A
1061-4001	Pre Bored H-Pile > Pile Ramp - BN14 B - (H-Pile + Grouting)	1	20-Feb-16	20-Feb-16
1061-40221	Pre Bored H-Pile > Pile Ramp - BN15 A - (H-Pile + Grouting)	0	05-Feb-16 A	05-Feb-16 A
1061-4221	Pre Bored H-Pile > Pile Ramp - BM05 A - (H-Pile + Grouting)	1	20-Feb-16	20-Feb-16
1061-4240	Pre Bored H-Pile > Pile Ramp - BM05 B	0	16-Feb-16 A	17-Feb-16 A
1061-4241	Pre Bored H-Pile > Pile Ramp - BM05 B - (H-Pile + Grouting)	1	20-Feb-16	20-Feb-16
1061-4260	Pre Bored H-Pile > Pile Ramp - BM04 A	3	20-Feb-16	23-Feb-16
1061-4261	Pre Bored H-Pile > Pile Ramp - BM04 A - (H-Pile + Grouting)	1	24-Feb-16	24-Feb-16
1061-4280	Pre Bored H-Pile > Pile Ramp - BM04 B	3	24-Feb-16	26-Feb-16
1061-4281	Pre Bored H-Pile > Pile Ramp - BM04 B - (H-Pile + Grouting)	1	27-Feb-16	27-Feb-16
1061-4300	Pre Bored H-Pile > Pile Ramp - BM03 A	3	27-Feb-16	01-Mar-16
1061-4301	Pre Bored H-Pile > Pile Ramp - BM03 A - (H-Pile + Grouting)	1	02-Mar-16	02-Mar-16
1061-4320	Pre Bored H-Pile > Pile Ramp - BM03 B	3	02-Mar-16	04-Mar-16
1061-4321	Pre Bored H-Pile > Pile Ramp - BM03 B - (H-Pile + Grouting)	1	05-Mar-16	05-Mar-16
1061-4341	Pre Bored H-Pile > Pile Ramp - BS16 A - (H-Pile + Grouting)	0	02-Feb-16 A	02-Feb-16 A
1061-4420	Pre Bored H-Pile > Pile Ramp - BS14 A	3	05-Mar-16	08-Mar-16



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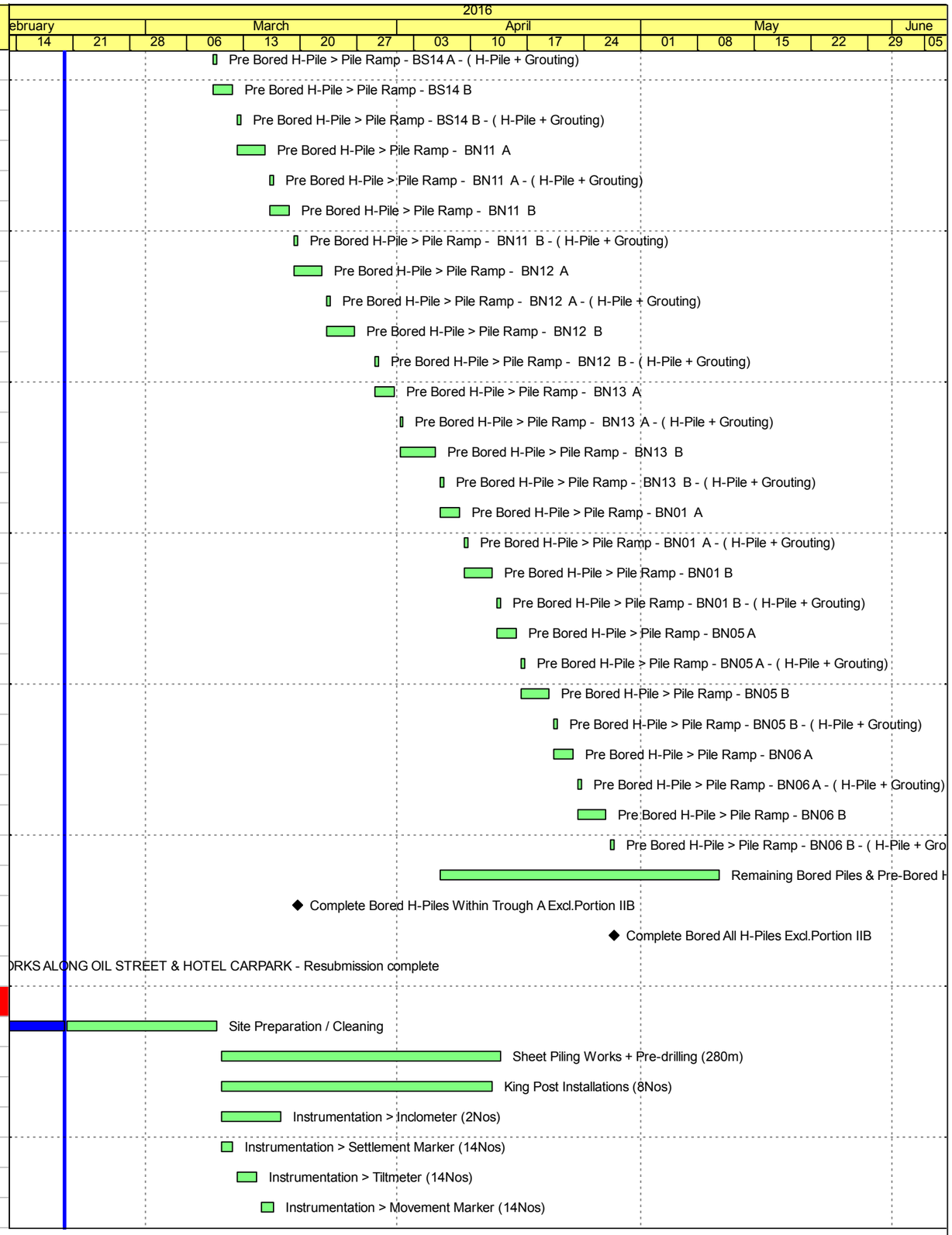
Activity ID	Activity Name	Rem Dur	Start	Finish
1061-4421	Pre Bored H-Pile > Pile Ramp - BS14 A - (H-Pile + Grouting)	1	09-Mar-16	09-Mar-16
1061-4440	Pre Bored H-Pile > Pile Ramp - BS14 B	3	09-Mar-16	11-Mar-16
1061-4441	Pre Bored H-Pile > Pile Ramp - BS14 B - (H-Pile + Grouting)	1	12-Mar-16	12-Mar-16
1061-4460	Pre Bored H-Pile > Pile Ramp - BN11 A	3	12-Mar-16	15-Mar-16
1061-4461	Pre Bored H-Pile > Pile Ramp - BN11 A - (H-Pile + Grouting)	1	16-Mar-16	16-Mar-16
1061-4480	Pre Bored H-Pile > Pile Ramp - BN11 B	3	16-Mar-16	18-Mar-16
1061-4481	Pre Bored H-Pile > Pile Ramp - BN11 B - (H-Pile + Grouting)	1	19-Mar-16	19-Mar-16
1061-4500	Pre Bored H-Pile > Pile Ramp - BN12 A	3	19-Mar-16	22-Mar-16
1061-4501	Pre Bored H-Pile > Pile Ramp - BN12 A - (H-Pile + Grouting)	1	23-Mar-16	23-Mar-16
1061-4520	Pre Bored H-Pile > Pile Ramp - BN12 B	3	23-Mar-16	26-Mar-16
1061-4521	Pre Bored H-Pile > Pile Ramp - BN12 B - (H-Pile + Grouting)	1	29-Mar-16	29-Mar-16
1061-4540	Pre Bored H-Pile > Pile Ramp - BN13 A	3	29-Mar-16	31-Mar-16
1061-4541	Pre Bored H-Pile > Pile Ramp - BN13 A - (H-Pile + Grouting)	1	01-Apr-16	01-Apr-16
1061-4560	Pre Bored H-Pile > Pile Ramp - BN13 B	3	01-Apr-16	05-Apr-16
1061-4561	Pre Bored H-Pile > Pile Ramp - BN13 B - (H-Pile + Grouting)	1	06-Apr-16	06-Apr-16
1061-4580	Pre Bored H-Pile > Pile Ramp - BN01 A	3	06-Apr-16	08-Apr-16
1061-4581	Pre Bored H-Pile > Pile Ramp - BN01 A - (H-Pile + Grouting)	1	09-Apr-16	09-Apr-16
1061-4600	Pre Bored H-Pile > Pile Ramp - BN01 B	3	09-Apr-16	12-Apr-16
1061-4601	Pre Bored H-Pile > Pile Ramp - BN01 B - (H-Pile + Grouting)	1	13-Apr-16	13-Apr-16
1061-4620	Pre Bored H-Pile > Pile Ramp - BN05 A	3	13-Apr-16	15-Apr-16
1061-4621	Pre Bored H-Pile > Pile Ramp - BN05 A - (H-Pile + Grouting)	1	16-Apr-16	16-Apr-16
1061-4640	Pre Bored H-Pile > Pile Ramp - BN05 B	3	16-Apr-16	19-Apr-16
1061-4641	Pre Bored H-Pile > Pile Ramp - BN05 B - (H-Pile + Grouting)	1	20-Apr-16	20-Apr-16
1061-4660	Pre Bored H-Pile > Pile Ramp - BN06 A	3	20-Apr-16	22-Apr-16
1061-4661	Pre Bored H-Pile > Pile Ramp - BN06 A - (H-Pile + Grouting)	1	23-Apr-16	23-Apr-16
1061-4680	Pre Bored H-Pile > Pile Ramp - BN06 B	3	23-Apr-16	26-Apr-16
1061-4681	Pre Bored H-Pile > Pile Ramp - BN06 B - (H-Pile + Grouting)	1	27-Apr-16	27-Apr-16
1061-4700	Remaining Bored Piles & Pre-Bored H-Pile Testing	30	06-Apr-16	10-May-16
1061-4710	Complete Bored H-Piles Within Trough A Excl.Portion IIB	0		19-Mar-16
1061-4720	Complete Bored All H-Piles Excl.Portion IIB	0		27-Apr-16
A1560	STAGE 2 ELS WORKS ALONG OIL STREET & HOTEL CARPARK - Resubmission complete	0		30-Jan-16 A
Excavation & ELS Works				
1061-8000	Site Preparation / Cleaning	16	18-Jan-16 A	09-Mar-16
1061-8020	Sheet Piling Works + Pre-drilling (280m)	27	10-Mar-16	13-Apr-16
1061-8040	King Post Installations (8Nos)	26	10-Mar-16	12-Apr-16
1061-8060	Instrumentation > Inclometer (2Nos)	7	10-Mar-16	17-Mar-16
1061-8100	Instrumentation > Settlement Marker (14Nos)	2	10-Mar-16	11-Mar-16
1061-8120	Instrumentation > Tiltmeter (14Nos)	2	12-Mar-16	14-Mar-16
1061-8140	Instrumentation > Movement Marker (14Nos)	2	15-Mar-16	16-Mar-16



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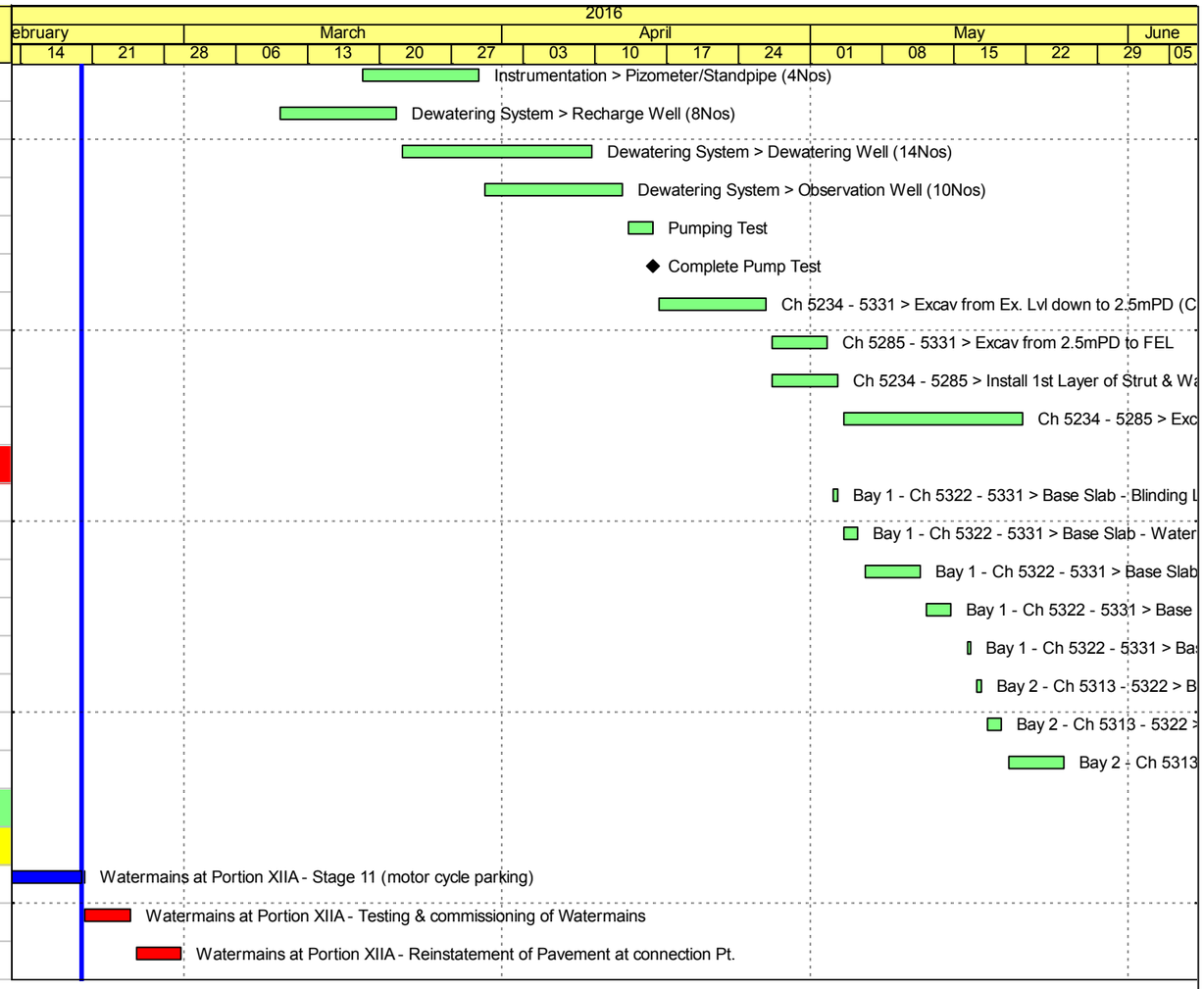
Activity ID	Activity Name	Rem Dur	Start	Finish
1061-8160	Instrumentation > Pizometer/Standpipe (4Nos)	8	18-Mar-16	29-Mar-16
1061-8180	Dewatering System > Recharge Well (8Nos)	10	10-Mar-16	21-Mar-16
1061-8200	Dewatering System > Dewatering Well (14Nos)	14	22-Mar-16	09-Apr-16
1061-8220	Dewatering System > Observation Well (10Nos)	11	30-Mar-16	12-Apr-16
1061-8240	Pumping Test	3	13-Apr-16	15-Apr-16
1061-8260	Complete Pump Test	0		15-Apr-16
1061-8280	Ch 5234 - 5331 > Excav from Ex. Lvl down to 2.5mPD (Ch 5285 - 5331 w/ open cut)	9	16-Apr-16	26-Apr-16
1061-8300	Ch 5285 - 5331 > Excav from 2.5mPD to FEL	5	27-Apr-16	02-May-16
1061-8320	Ch 5234 - 5285 > Install 1st Layer of Strut & Waling	6	27-Apr-16	03-May-16
1061-8340	Ch 5234 - 5285 > Excav from 2.5mPD to 1m Below 2nd Layer of Struts	16	04-May-16	21-May-16
Structure Works				
1061-8400	Bay 1 - Ch 5322 - 5331 > Base Slab - Blinding Layer	1	03-May-16	03-May-16
1061-8420	Bay 1 - Ch 5322 - 5331 > Base Slab - Water Proofing Membrane	2	04-May-16	05-May-16
1061-8440	Bay 1 - Ch 5322 - 5331 > Base Slab - Rebar Fixing	5	06-May-16	11-May-16
1061-8460	Bay 1 - Ch 5322 - 5331 > Base Slab - Erect Formworks	3	12-May-16	14-May-16
1061-8480	Bay 1 - Ch 5322 - 5331 > Base Slab - Concreting	1	16-May-16	16-May-16
1061-8500	Bay 2 - Ch 5313 - 5322 > Base Slab - Blinding Layer	1	17-May-16	17-May-16
1061-8520	Bay 2 - Ch 5313 - 5322 > Base Slab - Water Proofing Membrane	2	18-May-16	19-May-16
1061-8540	Bay 2 - Ch 5313 - 5322 > Base Slab - Rebar Fixing	5	20-May-16	25-May-16
11 - SECTION 11 OF THE WORKS				
11.2 - Roadworks				
1110-2790	Watermains at Portion XIIA - Stage 11 (motor cycle parking)	0	03-Nov-15 A	20-Feb-16
1110-2800	Watermains at Portion XIIA - Testing & commissioning of Watermains	4	20-Feb-16	24-Feb-16
1110-2810	Watermains at Portion XIIA - Reinstatement of Pavement at connection Pt.	4	25-Feb-16	29-Feb-16



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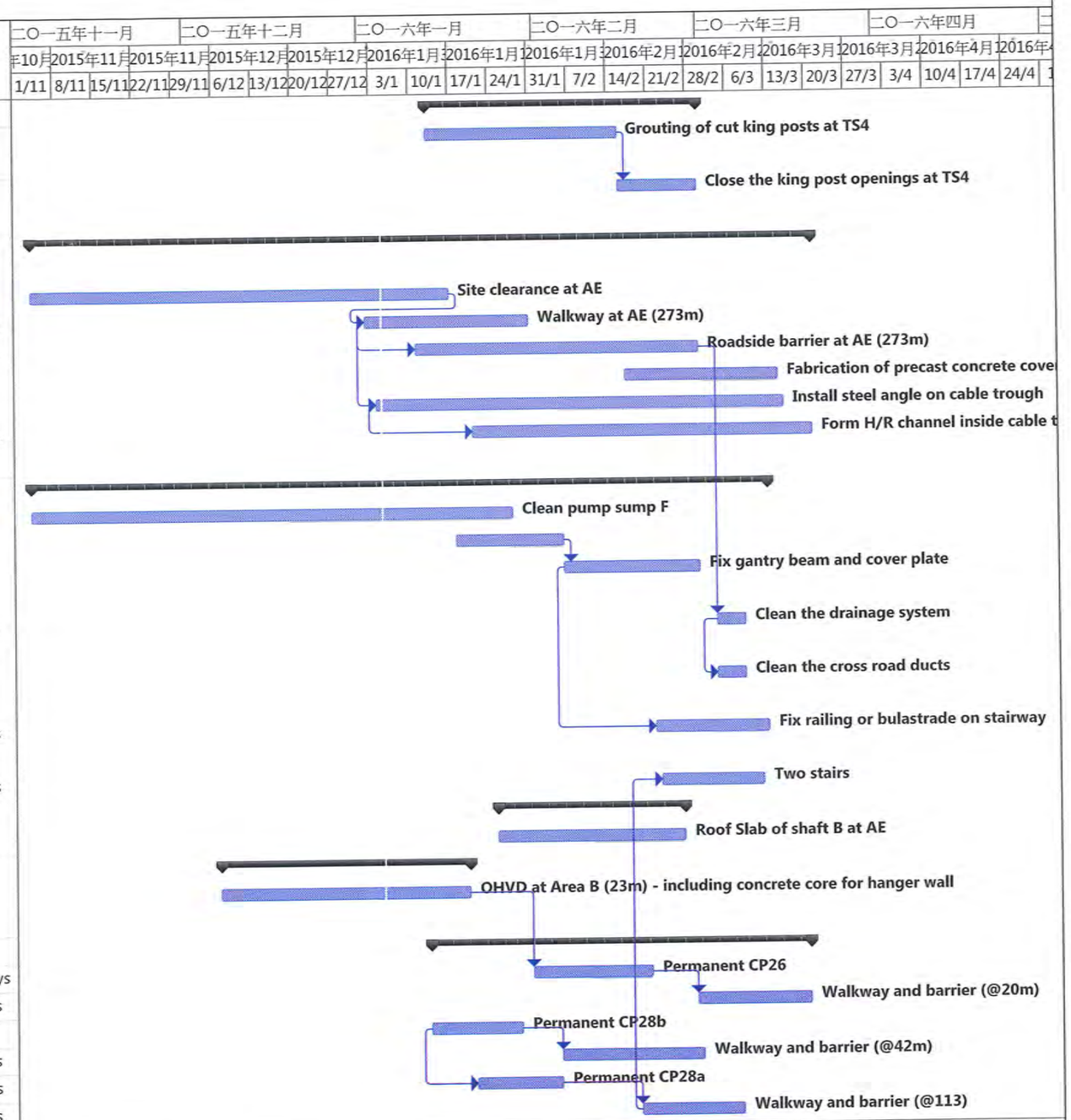
Contract HY/2009/19
3 Months Rolling Programme(as at 20-Feb-2016)

Remaining works at TS4 and AE

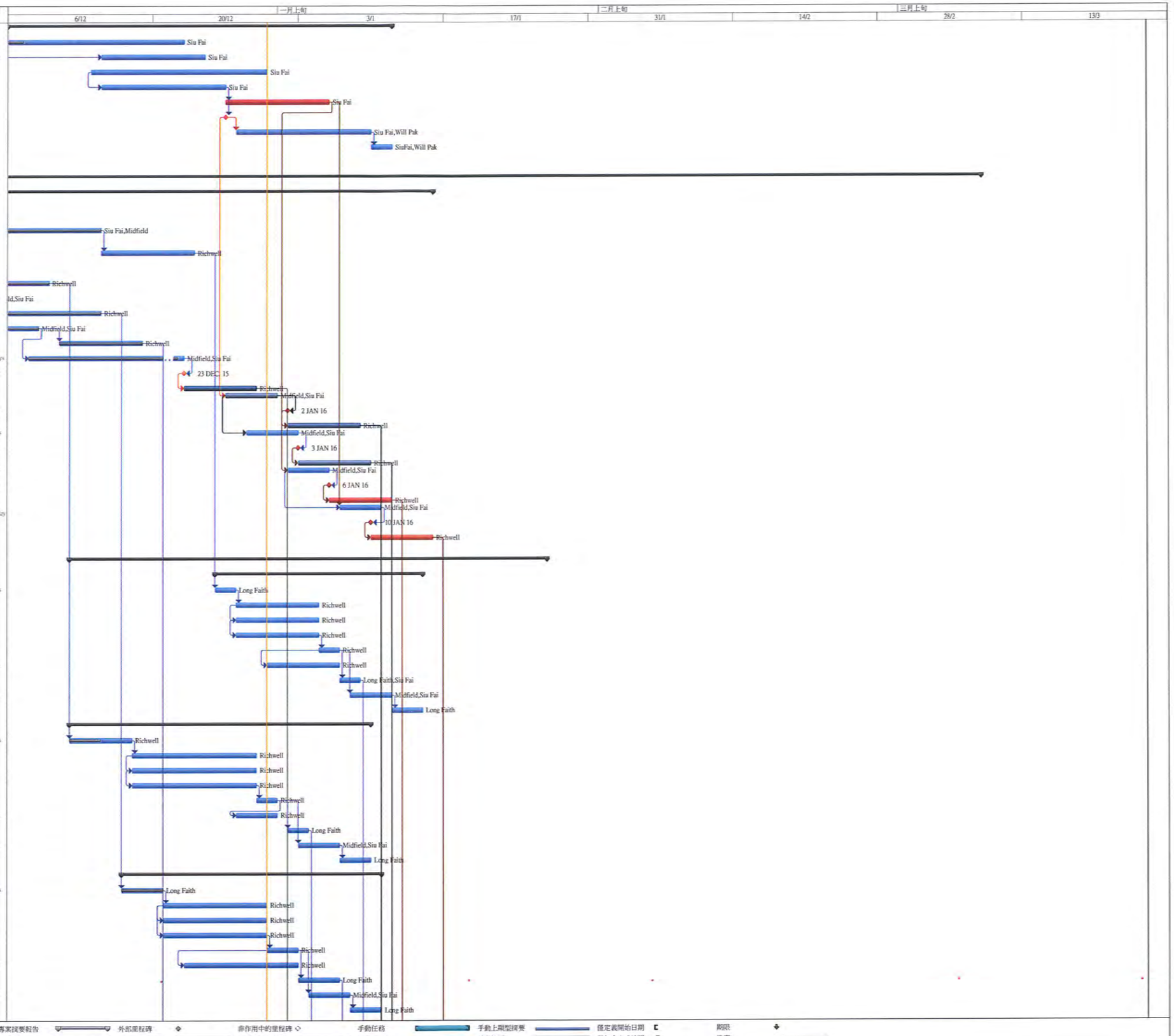
識別碼	Task Name	工期	開始時間	完成時間	前置任務
1	**King Post at TS4 and TPCWAE**	**37 days**	**1月13日星期三**	**2月29日星期一**	
2	Grouting of cut king posts (hollow rectangular shape) left on base slab and roof slab at TS4	25 days	1月13日星期三	2月15日星期一	
3	Close the King post openings on OHVD slab at TS4	12 days	2月16日星期二	2月29日星期一	2
4	**Cable trough at TS4 of TPCWAE (not included remaining OHVD areas and shaft D)**	**114 days**	**11月4日星期三**	**3月20日星期日**	
5	Site clearance inside TPCWAE (near shaft A, B & C)	61 days	11月4日星期三	1月16日星期六	
6	Construction of walkway at TPCWAE	25 days	1月2日星期六	1月30日星期六	5FS-31 days
7	Construction of roadside barrier at TPCWAE	39 days	1月11日星期一	2月29日星期一	6SS+7 days
8	Fabrication of precast concrete covers at TS4 and TPCWAE	25 days	2月17日星期三	3月14日星期一	
9	Install steel angle on cable trough	60 days	1月4日星期一	3月15日星期二	6SS
10	Form the half round channel on inverted slab/ inside cable trough	50 days	1月21日星期四	3月20日星期日	9SS+15 days
11	**Other outstanding works**	**106 days**	**11月4日星期三**	**3月12日星期六**	
12	Cleaning of pump sump F	70 days	11月4日星期三	1月27日星期三	
13	Fabrication of gantry beam in workshop	18 days	1月18日星期一	2月5日星期五	
14	Fix gantry beam and cover plates inside pump sump F	15 days	2月6日星期六	2月29日星期一	13
15	Cleaning of drainage system for CCTV survey at TS4 and TPCWAE	5 days	3月4日星期五	3月8日星期二	7FS+3 days
16	Vertification of blockage at all cross road ducts at TS4 and TPCWAE	5 days	3月4日星期五	3月8日星期二	15SS
17	Fix railing or bulastrade on stairway at SR8 of TS4	19 days	2月22日星期一	3月12日星期六	14SS+8 days
18	Construction of two stairs adjacent to CP28a and CP28b	17 days	2月23日星期二	3月11日星期五	29SS+3 days
19	**Closing of roof slab at shaft A and B of TPCWAE**	**25 days**	**1月25日星期一**	**2月26日星期五**	
20	Construction of roof slab at shaft B	25 days	1月25日星期一	2月26日星期五	
21	**Remaining OHVD slab at TS4 and TPCWAE**	**35 days**	**12月7日星期一**	**1月19日星期二**	
22	Construction of OHVD slab at Area B (SR8 and WB of TPCWAE)	35 days	12月7日星期一	1月19日星期二	
23	**Reinstatement of three permanent CP at TPCWAE and TS4**	**56 days**	**1月13日星期三**	**3月19日星期六**	
24	Reduce wall opening for CP26	14 days	1月31日星期日	2月20日星期六	22FS+10 days
25	Remaining walkway and roadside barrier	20 days	2月29日星期一	3月19日星期六	24FS+6 days
26	Reduce wall opening for CP28b	14 days	1月13日星期三	1月28日星期四	
27	Remaining walkway and roadside barrier	16 days	2月5日星期五	2月29日星期一	26FS+7 days
28	Reduce wall opening for CP28a	14 days	1月21日星期四	2月4日星期四	26SS+7 days
29	Remaining walkway and roadside barrier	16 days	2月19日星期五	3月7日星期一	28FS+7 days



Project:040116 programme for remaining work
Date: 4/1/2016

Task | Split | Milestone | Summary | Project Summary | 非作用中的任務 | 非作用中的里程碑 | 非作用中的摘要 | 手動任務 | 僅包含工期 | 手動上顯型摘要 | 手動摘要 | 僅定義開始日期 | 僅包含完成時間 | Progress | Deadline

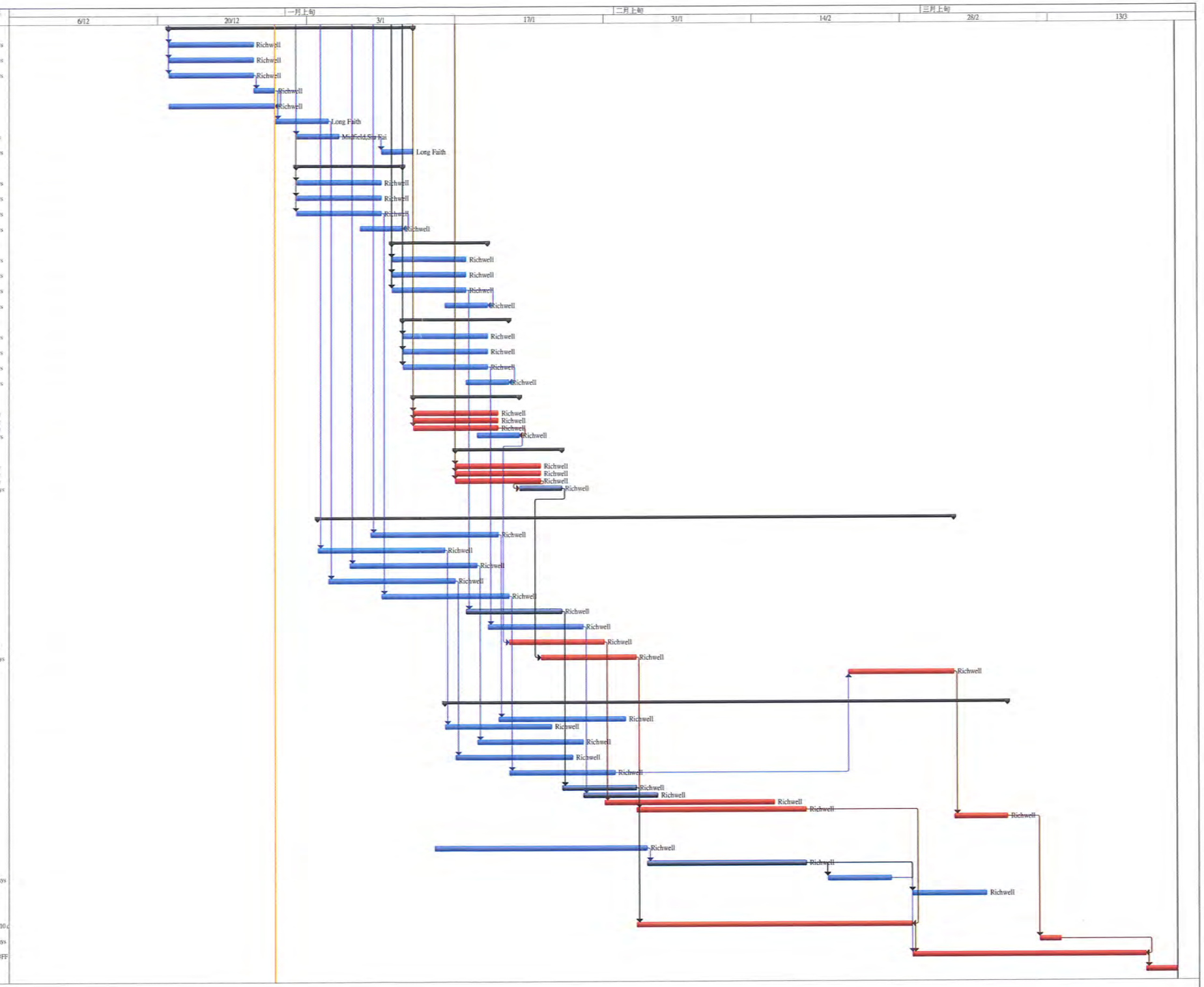
識別碼		任務名稱	工期	開始時間	完成時間	前置任務
1		TPCWAB/ TPCWAW Bulkhead Removal	36 days	12月6日星期日	1月11日星期一	
2		E/B Bulkhead Breakthrough (800m3)	17 days	12月6日星期日	12月22日星期二	
3		E/B Skin Wall Removal and Breakthrough (500 m3)	10 days	12月15日星期二	12月24日星期四	2SS+3 days
4		W/B Bulkhead Breakthrough (1000 m3)	17 days	12月14日星期一	12月30日星期三	
5		Erection of Steel Frame under Shaft B (50 ton)	12 days	12月15日星期二	12月26日星期六	4SS
6		W/B Skin Wall Removal and Breakthrough (500 m3)	9 days	12月27日星期日	1月5日星期二	5
7		No lifting point for rock excavation inside AW	1 day	12月27日星期日	12月27日星期日	5
8		Rock excavation out from Shaft B (~2,000m3)	12 days	12月28日星期一	1月9日星期六	7
9		Demobilize all breakers and backhoes at Shaft B	2 days	1月10日星期日	1月11日星期一	8
10						
11		CCT Structure	105 days	11月19日星期四	3月8日星期二	
12		Base Slab (9500m3 approx.)	57 days	11月19日星期四	1月15日星期五	
13		Handover of Bulkhead Wall from WDII (Coupler Joint Checking, Bentonite Cleaning)	14 days	11月19日星期四	12月2日星期三	
14		Vertical Blinding and Waterproofing of Bay B1 (Includes test and inspection), Drill and Fix Rebar	12 days	12月3日星期四	12月14日星期一	13
15		Delay Start of Bay B1 (12m, 1116 m3) - Original by 21-11-2015	9 days	12月15日星期二	12月23日星期三	14
16		Vertical Blinding and Waterproofing of Bay B2 (Includes test and inspection)	4 days	11月26日星期四	11月29日星期日	
17		Bay B2 (11m, 865 m3)	10 days	11月30日星期一	12月9日星期三	16
18		Vertical Blinding and Waterproofing of Bay B3 (includes test and inspection)	4 days	11月30日星期一	12月3日星期四	16
19		Bay B3 (15m, 1196 m3)	11 days	12月4日星期五	12月14日星期一	18
20		Vertical Blinding and Waterproofing of Bay B4 (includes test and inspection)	5 days	12月4日星期五	12月8日星期二	18
21		Bay B4 (14m, 1193 m3)	8 days	12月11日星期五	12月18日星期五	20
22		Vertical Blinding and Waterproofing of Bay B5 (includes test and inspection)	14 days	12月8日星期二	12月22日星期二	20FS+12 days
23		Handover Date for structural work for Bay 5	1 day	12月23日星期三	12月23日星期三	22FF+1 day
24		Bay B5 (14.95m, 1225 m3)	7 days	12月23日星期三	12月29日星期二	23SS
25		Vertical Blinding and Waterproofing of Bay B6 (includes test and inspection)	5 days	12月27日星期日	12月31日星期四	7SS
26		Handover Date for structural work for Bay 6	1 day	1月2日星期六	1月2日星期六	25FF+1 day
27		Bay B6 (11.3m, 1161 m3)	7 days	1月2日星期六	1月8日星期五	26SS
28		Vertical Blinding and Waterproofing of Bay B7 (includes test and inspection)	4 days	12月29日星期二	1月2日星期六	25SS-2 days
29		Handover Date for structural work for Bay 7	1 day	1月3日星期日	1月3日星期日	28FF+1 day
30		Bay B7 (10.8m, 1135 m3)	7 days	1月3日星期日	1月9日星期六	29SS
31		Vertical Blinding and Waterproofing of Bay B8 (includes test and inspection)	4 days	1月2日星期六	1月5日星期二	6FS-4 days
32		Handover Date for structural work for Bay 8	1 day	1月6日星期三	1月6日星期三	31FF+1 day
33		Bay B8 (10.8m, 1153 m3)	6 days	1月6日星期三	1月11日星期一	32SS
34		Vertical Blinding and Waterproofing of Bay B9 (includes test and inspection)	4 days	1月7日星期四	1月10日星期日	31SS+1 day,6FS-1 day
35		Handover Date for structural work for Bay 9	1 day	1月10日星期日	1月10日星期日	34FF
36		Bay B9 Stitching (8m, 900 m3)	6 days	1月10日星期日	1月15日星期五	35SS
37						
38		Wall of Tunnel Structure (4000m3)	45 days	12月12日星期六	1月26日星期二	
39		Bay 1 Wall and Associate Strut Removal Works (S1,2,5,6,24)	19 days	12月26日星期六	1月14日星期四	
40		Removal of 6th layer ELS Strut and Bolding (S24)	2 days	12月26日星期六	12月27日星期日	15FS+2 days
41		Bay 1 W01 (12m) - Concreting to -24.0 mPD	7 days	12月28日星期一	1月4日星期一	40
42		Bay 1 W02 (12m) - Concreting to -24.0 mPD	7 days	12月28日星期一	1月4日星期一	41SS
43		Bay 1 W03 (12m) - Concreting to -24.0 mPD	7 days	12月28日星期一	1月4日星期一	42SS
44		Curing and Formwork Removal	2 days	1月5日星期二	1月6日星期三	43
45		Construction of Maintenance Walkway and Profile Barrier	6 days	12月31日星期四	1月6日星期三	44SS-4 days
46		Installation of Repropping at -25.5 mPD	2 days	1月7日星期四	1月8日星期五	44
47		Waterproof and backfill	4 days	1月8日星期五	1月11日星期一	44FS+1 day
48		Removal of 5th layer ELS Strut and Bolding (S1,2,5,6,24)	3 days	1月12日星期二	1月14日星期四	47
49		Bay 2 Wall and Associate Strut Removal Works (S3,4,7,8,25)	28 days	12月12日星期六	1月9日星期六	
50		Removal of 6th layer ELS Strut and Bolding (S25)	6 days	12月12日星期六	12月17日星期四	17FS+2 days
51		Bay 2 W01 (11m) - Concreting to -24.0 mPD	12 days	12月18日星期五	12月29日星期二	50
52		Bay 2 W02 (11m) - Concreting to -24.0 mPD	12 days	12月18日星期五	12月29日星期二	51SS
53		Bay 2 W03 (11m) - Concreting to -24.0 mPD	12 days	12月18日星期五	12月29日星期二	52SS
54		Curing and Formwork Removal	2 days	12月30日星期三	12月31日星期四	53
55		Construction of Maintenance Walkway and Profile Barrier	4 days	12月28日星期一	12月31日星期四	54FS-4 days
56		Installation of Repropping at -25.5 mPD	2 days	1月2日星期六	1月3日星期日	54
57		Waterproof and backfill	4 days	1月3日星期日	1月6日星期三	54FS+1 day
58		Removal of 5th layer ELS Strut and Bolding (S3,4,7,8,25)	3 days	1月7日星期四	1月9日星期六	57
59		Bay 3 Wall and Associate Strut Removal Works (S9,10)	24 days	12月17日星期四	1月10日星期日	
60		Removal of 6th layer ELS Strut and Bolding (S9)	4 days	12月17日星期四	12月20日星期日	19FS+2 days
61		Bay 3 W01 (15m) - Concreting to -24.0 mPD	10 days	12月21日星期一	12月30日星期三	60
62		Bay 3 W02 (15m) - Concreting to -24.0 mPD	10 days	12月21日星期一	12月30日星期三	61SS
63		Bay 3 W03 (15m) - Concreting to -24.0 mPD	10 days	12月21日星期一	12月30日星期三	61SS
64		Curing and Formwork Removal	2 days	12月31日星期四	1月2日星期六	63
65		Construction of Maintenance Walkway and Profile Barrier	10 days	12月23日星期三	1月2日星期六	64SS-8 days
66		Installation of Repropping at -25.5 mPD	4 days	1月3日星期日	1月6日星期三	64
67		Waterproof and backfill	4 days	1月4日星期一	1月7日星期四	64FS+1 day
68		Removal of 5th layer ELS Strut and Bolding (S9,10)	3 days	1月8日星期五	1月10日星期日	67



TPCWAW Detail Programme

任務 分割 里程碑 摘要 專案摘要報告 外部任務 外部里程碑 非作用中的任務 非作用中的里程碑 非作用中的摘要 手動任務 僅包含工期 手動上期型摘要 手動摘要 僅定義開始日期 僅包含完成時間 期限 進度

識別碼		任務名稱	工期	開始時間	完成時間	前置任務
69		Bay 4 Wall and Associate Strut Removal Works (S11)	22 days	12月21日星期一	1月12日星期二	
70		Bay 4 W01 (15m) - Concreting to -24.0 mPD	8 days	12月21日星期一	12月28日星期一	21FS+2 days
71		Bay 4 W02 (15m) - Concreting to -24.0 mPD	8 days	12月21日星期一	12月28日星期一	21FS+2 days
72		Bay 4 W03 (15m) - Concreting to -24.0 mPD	8 days	12月21日星期一	12月28日星期一	21FS+2 days
73		Curing and Formwork Removal	2 days	12月29日星期二	12月30日星期三	72
74		Construction of Maintenance Walkway and Profile Barrier	10 days	12月21日星期一	12月30日星期三	73FF
75		Installation of Repropping at -25.5 mPD	4 days	12月31日星期四	1月4日星期一	73
76		Waterproof and backfill	4 days	1月2日星期六	1月5日星期二	73FS+1 day
77		Removal of 5th layer ELS Strut and Bolding (S11)	3 days	1月10日星期日	1月12日星期二	76FS+4 days
78		**Bay 5 Wall (15m)**	**10 days**	**1月2日星期六**	**1月11日星期一**	
79		Bay 5 W01 (15m)	8 days	1月2日星期六	1月9日星期六	24FS+2 days
80		Bay 5 W02 (15m)	8 days	1月2日星期六	1月9日星期六	24FS+2 days
81		Bay 5 W03 (15m)	8 days	1月2日星期六	1月9日星期六	24FS+2 days
82		Construction of Maintenance Walkway and Profile Barrier	4 days	1月8日星期五	1月11日星期一	81FF+2 days
83		**Bay 6 Wall (12.5m)**	**9 days**	**1月11日星期一**	**1月19日星期二**	
84		Bay 6 W01 (12.5m)	7 days	1月11日星期一	1月17日星期日	27FS+2 days
85		Bay 6 W02 (12.5m)	7 days	1月11日星期一	1月17日星期日	27FS+2 days
86		Bay 6 W03 (12.5m)	7 days	1月11日星期一	1月17日星期日	27FS+2 days
87		Construction of Maintenance Walkway and Profile Barrier	4 days	1月16日星期六	1月19日星期二	86FF+2 days
88		**Bay 7 Wall (12m)**	**10 days**	**1月12日星期二**	**1月21日星期四**	
89		Bay 7 W01 (12m)	8 days	1月12日星期二	1月19日星期二	30FS+2 days
90		Bay 7 W02 (12m)	8 days	1月12日星期二	1月19日星期二	30FS+2 days
91		Bay 7 W03 (12m)	8 days	1月12日星期二	1月19日星期二	30FS+2 days
92		Construction of Maintenance Walkway and Profile Barrier	4 days	1月18日星期一	1月21日星期四	91FF+2 days
93		**Bay 8 Wall (12m)**	**10 days**	**1月13日星期三**	**1月22日星期五**	
94		Bay 8 W01 (12m)	8 days	1月13日星期三	1月20日星期三	33FS-1 day
95		Bay 8 W02 (12m)	8 days	1月13日星期三	1月20日星期三	33FS-1 day
96		Bay 8 W03 (12m)	8 days	1月13日星期三	1月20日星期三	33FS-1 day
97		Construction of Maintenance Walkway and Profile Barrier	4 days	1月19日星期二	1月22日星期五	96FF+2 days
98		**Bay 9 Wall (8m)**	**10 days**	**1月17日星期日**	**1月26日星期二**	
99		Bay 9 W01 (8m)	8 days	1月17日星期日	1月24日星期日	36FS-1 day
100		Bay 9 W01 (8m)	8 days	1月17日星期日	1月24日星期日	36FS-1 day
101		Bay 9 W01 (8m)	8 days	1月17日星期日	1月24日星期日	36FS-1 day
102		Construction of Maintenance Walkway and Profile Barrier	4 days	1月23日星期六	1月26日星期二	101FS-2 days
103						
104		OHVD	55 days	1月4日星期一	3月3日星期四	
105		Bay R1 OHVD and Kicker Wall (Falsework and Formwork Erection)	12 days	1月9日星期六	1月20日星期三	46
106		Bay R2 OHVD and Kicker Wall (Falsework and Formwork Erection)	12 days	1月4日星期一	1月15日星期五	56
107		Bay R3 OHVD and Kicker Wall (Falsework and Formwork Erection)	12 days	1月7日星期四	1月18日星期一	66
108		Bay R4 OHVD and Kicker Wall (Falsework and Formwork Erection)	12 days	1月5日星期二	1月16日星期六	75
109		Bay R5 OHVD and Kicker wall (Falsework and Formwork Erection)	12 days	1月10日星期日	1月21日星期四	85
110		Bay R6 OHVD and Kicker Wall (Falsework and Formwork Erection)	9 days	1月18日星期一	1月26日星期二	86
111		Bay R7 OHVD and Kicker Wall (Falsework and Formwork Erection)	9 days	1月20日星期三	1月28日星期四	91
112		Bay R8 OHVD and Kicker Wall (Falsework and Formwork Erection)	9 days	1月22日星期五	1月30日星期六	97FS-1 day
113		Bay R9 OHVD and Kicker Wall (Falsework and Formwork Erection)	9 days	1月25日星期一	2月2日星期二	102FS-2 days
114		Bay R10 OHVD and Kicker Wall (Falsework and Formwork Erection)	10 days	2月23日星期二	3月3日星期四	121FS+17 days
115						
116		Top Slab (12790m3)	48 days	1月16日星期六	3月8日星期二	
117		Bay R1	12 days	1月21日星期四	2月1日星期一	105
118		Bay R2(partial)	10 days	1月16日星期六	1月25日星期一	106
119		Bay R3	10 days	1月19日星期二	1月28日星期四	107
120		Bay R4	11 days	1月17日星期日	1月27日星期三	108
121		Bay R5	10 days	1月22日星期五	1月31日星期日	109
122		Bay R6	7 days	1月27日星期三	2月2日星期二	110
123		Bay R7	7 days	1月29日星期五	2月4日星期四	111
124		Bay R8	11 days	1月31日星期日	2月15日星期一	112
125		Bay R9	11 days	2月3日星期三	2月18日星期四	113
126		Bay R10 (Bay2 Remaining Bay after falsework removal of B1-B5)	5 days	3月4日星期五	3月8日星期二	114
127						
128		Shaft B Reinstatement - OHVD slab	20 days	1月15日星期五	2月3日星期三	
129		Shaft B Reinstatement - roof slab	10 days	2月4日星期四	2月18日星期四	128
130		Waterproofing top slab at Shaft B	6 days	2月21日星期日	2月26日星期五	129FS+2 days
131		Shaft B Reinstatement - removal formwork&falseworks	7 days	2月29日星期一	3月6日星期日	129FS+10 days
132						
133		Waterproofing top slab-load transfer king posts	21 days	2月3日星期三	2月28日星期日	122,125FF-10 d
134		Waterproofing top slab at Bay 10	2 days	3月12日星期六	3月13日星期日	126FS+3 days
135		Backfill and ELS removal (up to -	22 days	2月29日星期一	3月21日星期一	133,130,134FF
136		Recharge water (up to -7mPD)	3 days	3月22日星期二	3月24日星期四	135

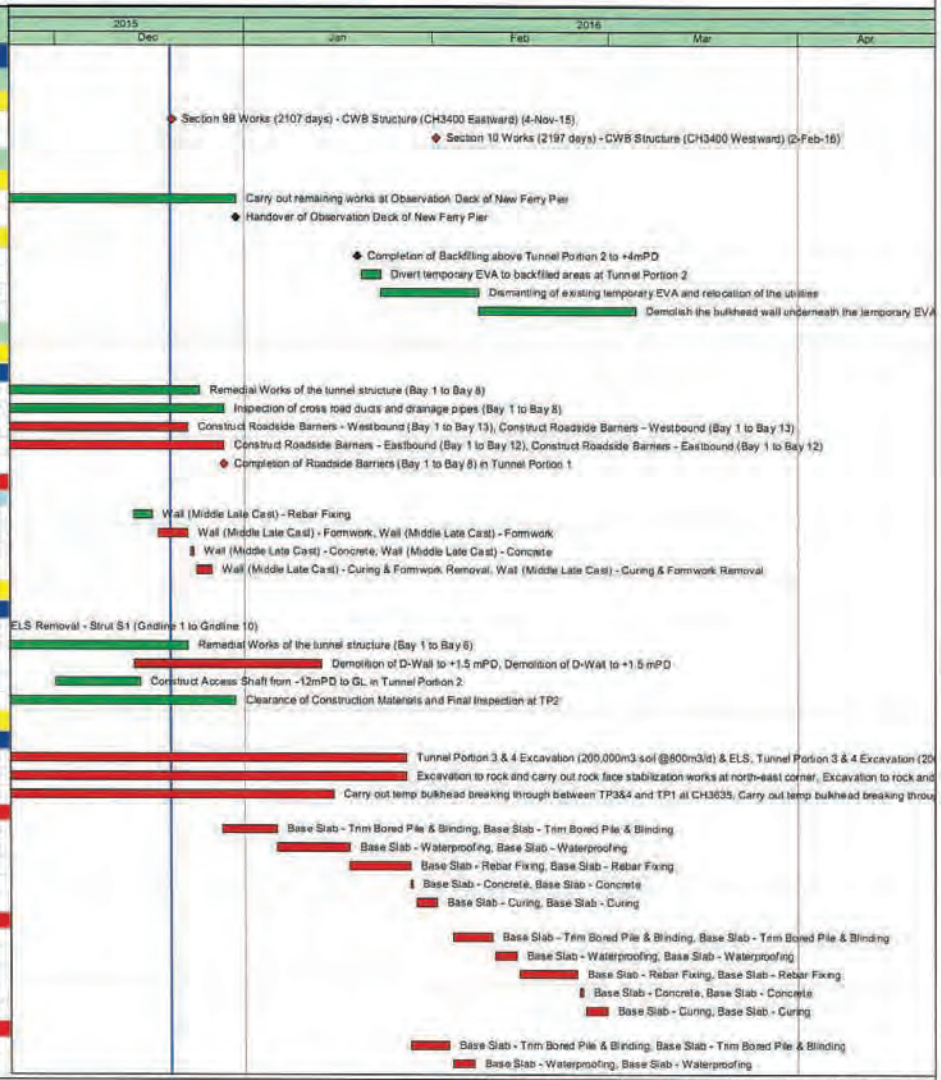


TPCWAW Detail Programme

任務 里程碑 專案摘要報告 外部里程碑 非作用中的里程碑 手動任務 手動上期型摘要 僅定義開始日期 期限
分割 摘要 外部任務 非作用中的任務 非作用中的摘要 僅包含工期 手動摘要 僅包含完成時間 進度

CEDD CONTRACT HK/2009/02

Activity ID	Activity Name	Orig Dur	Rem Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar
Three Months Rolling Programme 2015-12-20 (dd 20-Dec-15)							
Programme Milestones (Revised up to EOTO No.15 issued on 30-Oct-15)							
Contractual Completion Dates							
KDC0170	Section 9B Works (2107 days) - CWB Structure (CH3400 Eastward) (4-Nov-15)	0	0		20-Dec-15*	-45	Calendar Day
KDC0180	Section 10 Works (2197 days) - CWB Structure (CH3400 Westward) (2-Feb-16)	0	0		01-Feb-16*	0	Calendar Day
Section 8A of the Works - Reprovisioning of Wan Chai Ferry Pier in Area 8							
T&C and Handover							
S8A-TC-9490	Carry out remaining works at Observation Deck of New Ferry Pier	80	11	20-Jun-15 A	30-Dec-15	1	Calendar Day
S8A-TC-9500	Handover of Observation Deck of New Ferry Pier	0	0		30-Dec-15*	1	Calendar Day
Outstanding Works							
S8A-FM-1005	Completion of Backfilling above Tunnel Portion 2 to +4mPD	0	0		19-Jan-16	118	Calendar Day
S8A-OUT-1010	Divert temporary EVA to backfilled areas at Tunnel Portion 2	4	4	20-Jan-16	23-Jan-16	118	Calendar Day
S8A-OUT-1020	Dismantling of existing temporary EVA and relocation of the utilities	13	13	23-Jan-16	08-Feb-16	95	HK Working Day
S8A-OUT-1030	Demolish the bulkhead wall underneath the temporary EVA	22	22	08-Feb-16	05-Mar-16	95	HK Working Day
Section 9B of the Works - CWB Tunnel Structure (CH3400 - CH3796)							
Tunnel Portion 1 (CH3500-CH3630)							
CWB Structural Works							
S9B-T1-5020	Remedial Works of the tunnel structure (Bay 1 to Bay 8)	40	4	15-Aug-15 A	24-Dec-15	1	HK Working Day
S9B-T1-5030	Inspection of cross road ducts and drainage pipes (Bay 1 to Bay 8)	41	5	29-Sep-15 A	28-Dec-15*	2	HK Working Day
S9B-T1-5100A	Construct Roadside Barriers - Westbound (Bay 1 to Bay 13)	40	2	27-Oct-15 A	22-Dec-15	-41	HK Working Day
S9B-T1-5100B	Construct Roadside Barriers - Eastbound (Bay 1 to Bay 12)	40	5	10-Nov-15 A	28-Dec-15	-44	HK Working Day
S9B-T1-5110	Completion of Roadside Barriers (Bay 1 to Bay 8) in Tunnel Portion 1	0	0		28-Dec-15	-54	Calendar Day
Bay 6 (For OHVD Base Slab & Side Wall, Combined to Bay 5)							
Wall							
S9B-T1-B6-1120	Wall (Middle Late Cast) - Rebar Fixing	4	0	14-Dec-15 A	17-Dec-15 A		HK Working Day
S9B-T1-B6-1130A	Wall (Middle Late Cast) - Formwork	3	2	18-Dec-15 A	22-Dec-15	-45	HK Working Day
S9B-T1-B6-1130B	Wall (Middle Late Cast) - Concrete	1	1	23-Dec-15	23-Dec-15	-45	HK Working Day
S9B-T1-B6-1140	Wall (Middle Late Cast) - Curing & Formwork Removal	3	3	24-Dec-15	26-Dec-15	-52	Calendar Day
Tunnel Portion 2 (CH3425-CH3500)							
CWB Structural Works							
S9B-T2-5110	ELS Removal - Strut S1 (Gridline 1 to Gridline 10)	3	0	16-Nov-15 A	22-Nov-15 A		HK Working Day
S9B-T2-5120	Remedial Works of the tunnel structure (Bay 1 to Bay 6)	40	2	26-Oct-15 A	22-Dec-15	2	HK Working Day
S9B-T2-5140	Demolition of D-Wall to +1.5 mPD	30	25	14-Dec-15 A	13-Jan-16	-79	Calendar Day
S9B-T2-6000C	Construct Access Shaft from -12mPD to GL in Tunnel Portion 2	11	0	01-Dec-15 A	15-Dec-15 A		Calendar Day
S9B-T2-6005	Clearance of Construction Materials and Final Inspection at TP2	30	10	28-Oct-15 A	30-Dec-15*	2	Calendar Day
Tunnel Portion 3 & Tunnel Portion 4 (CH3630-CH3790)							
CWB Structural Works							
S9B-T34-2000	Tunnel Portion 3 & 4 Excavation (200,000m3 soil @800m3/d) & ELS	250	24	13-Feb-15 A	27-Jan-16	-541	HK Working Day
S9B-T34-2000A	Excavation to rock and carry out rock face stabilization works at north-east corner	49	24	13-Nov-15 A	27-Jan-16	-460	HK Working Day
S9B-T34-3000	Carry out temp bulkhead breaking through between TP3&4 and TP1 at CH3635	34	14	04-Sep-15 A	15-Jan-16	-531	HK Working Day
Bay 1							
S9B-T34-B1-1000	Base Slab - Trim Bored Pile & Blinding	7	7	28-Dec-15	06-Jan-16	-531	HK Working Day
S9B-T34-B1-1010	Base Slab - Waterproofing	4	4	06-Jan-16	18-Jan-16	-531	HK Working Day
S9B-T34-B1-1020	Base Slab - Rebar Fixing	10	10	18-Jan-16	26-Jan-16	-669	Calendar Day
S9B-T34-B1-1030	Base Slab - Concrete	1	1	28-Jan-16	28-Jan-16	-644	Calendar Day
S9B-T34-B1-1040	Base Slab - Curing	4	4	29-Jan-16	01-Feb-16	-644	Calendar Day
Bay 2							
S9B-T34-B2-1000	Base Slab - Trim Bored Pile & Blinding	7	7	04-Feb-16	10-Feb-16	-680	Calendar Day
S9B-T34-B2-1010	Base Slab - Waterproofing	4	4	11-Feb-16	14-Feb-16	-680	Calendar Day
S9B-T34-B2-1020	Base Slab - Rebar Fixing	10	10	15-Feb-16	24-Feb-16	-680	Calendar Day
S9B-T34-B2-1030	Base Slab - Concrete	1	1	25-Feb-16	25-Feb-16	-672	Calendar Day
S9B-T34-B2-1040	Base Slab - Curing	4	4	29-Feb-16	29-Feb-16	-672	Calendar Day
Bay 3							
S9B-T34-B3-1000	Base Slab - Trim Bored Pile & Blinding	7	7	28-Jan-16	03-Feb-16	-680	Calendar Day
S9B-T34-B3-1010	Base Slab - Waterproofing	4	4	04-Feb-16	07-Feb-16	-680	Calendar Day



◆ Milestone
◆ Critical Milestones
Current Works
Critical Works

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-Dec-15)

Date	Revision	Checked	Approved
20-Dec-15			

CEDD CONTRACT HK/2009/02

Activity ID	Activity Name	Orig Dur	Rem Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar
S9B-T34-B3-1020	Base Slab - Rebar Fixing	7	7	08-Feb-16	14-Feb-16	-680	Calendar Day
S9B-T34-B3-1030	Base Slab - Concrete	1	1	15-Feb-16	15-Feb-16	-662	Calendar Day
S9B-T34-B3-1040	Base Slab - Curing	4	4	16-Feb-16	19-Feb-16	-662	Calendar Day
S9B-T34-B3-1150	Wall (Middle) - Rebar Fixing & Working Platform	4	4	15-Mar-16	18-Mar-16	-657	Calendar Day
Bay 4							
S9B-T34-B4-1000	Base Slab - Trim Bored Pile & Blinding	7	7	11-Feb-16	17-Feb-16	-677	Calendar Day
S9B-T34-B4-1010	Base Slab - Waterproofing	4	4	18-Feb-16	21-Feb-16	-677	Calendar Day
S9B-T34-B4-1020	Base Slab - Rebar Fixing	7	7	25-Feb-16	02-Mar-16	-680	Calendar Day
S9B-T34-B4-1030	Base Slab - Concrete	1	1	03-Mar-16	03-Mar-16	-679	Calendar Day
S9B-T34-B4-1040	Base Slab - Curing	4	4	04-Mar-16	07-Mar-16	-679	Calendar Day
Bay 5							
S9B-T34-B5-1000	Base Slab - Trim Bored Pile & Blinding	7	7	16-Feb-16	23-Feb-16	-668	Calendar Day
S9B-T34-B5-1010	Base Slab - Waterproofing	4	4	23-Feb-16	27-Feb-16	-668	Calendar Day
Bay 6							
S9B-T34-B6-1000	Base Slab - Trim Bored Pile & Blinding	7	7	26-Feb-16	04-Mar-16	-666	Calendar Day
S9B-T34-B6-1010	Base Slab - Waterproofing	4	4	04-Mar-16	08-Mar-16	-665	Calendar Day
Bay 7							
S9B-T34-B7-1000	Base Slab - Trim Bored Pile & Blinding	7	7	13-Feb-16	20-Feb-16	-672	Calendar Day
S9B-T34-B7-1010	Base Slab - Waterproofing	4	4	20-Feb-16	24-Feb-16	-672	Calendar Day
S9B-T34-B7-1020	Base Slab - Rebar Fixing	7	7	03-Mar-16	09-Mar-16	-680	Calendar Day
Bay 8							
S9B-T34-B8-1000	Base Slab - Trim Bored Pile & Blinding	7	7	19-Feb-16	26-Feb-16	-666	Calendar Day
S9B-T34-B8-1010	Base Slab - Waterproofing	4	4	26-Feb-16	01-Mar-16	-665	Calendar Day
Bay 9							
S9B-T34-B9-1000	Base Slab - Trim Bored Pile & Blinding	7	7	04-Mar-16	11-Mar-16	-665	Calendar Day
S9B-T34-B9-1010	Base Slab - Waterproofing	4	4	11-Mar-16	15-Mar-16	-665	Calendar Day
Bay 10							
S9B-T34-B10-1000	Base Slab - Trim Bored Pile & Blinding	7	7	15-Mar-16	22-Mar-16	-656	Calendar Day
Bay 11							
S9B-T34-B11-1000	Base Slab - Trim Bored Pile & Blinding	7	7	08-Mar-16	15-Mar-16	-666	Calendar Day
S9B-T34-B11-1010	Base Slab - Waterproofing	4	4	15-Mar-16	19-Mar-16	-664	Calendar Day
Bay 13							
S9B-T34-B13-1000	Base Slab - Trim Bored Pile & Blinding	7	7	13-Feb-16	20-Feb-16	-623	Calendar Day
S9B-T34-B13-1010	Base Slab - Waterproofing	4	4	20-Feb-16	24-Feb-16	-623	Calendar Day
S9B-T34-B13-1020	Base Slab - Rebar Fixing	7	7	24-Feb-16	02-Mar-16	-623	Calendar Day
S9B-T34-B13-1030	Base Slab - Concrete	1	1	02-Mar-16	03-Mar-16	-623	Calendar Day
S9B-T34-B13-1040	Base Slab - Curing	4	4	03-Mar-16	07-Mar-16	-623	Calendar Day
Bay 14							
S9B-T34-B14-0990	Base Slab - Trim Bored Pile & Blinding	7	7	20-Feb-16	27-Feb-16	-606	Calendar Day
S9B-T34-B14-1000	Base Slab - Waterproofing	4	4	29-Feb-16	04-Mar-16	-602	Calendar Day
S9B-T34-B14-1010	Base Slab - Rebar Fixing	10	10	04-Mar-16	14-Mar-16	-594	Calendar Day
Bay 15							
S9B-T34-B15-0990	Base Slab - Trim Bored Pile & Blinding	7	7	27-Feb-16	05-Mar-16	-606	Calendar Day
S9B-T34-B15-1000	Base Slab - Waterproofing	4	4	05-Mar-16	09-Mar-16	-603	Calendar Day
S9B-T34-B15-1010	Base Slab - Rebar Fixing	7	7	09-Mar-16	16-Mar-16	-596	Calendar Day
Bay 16							
S9B-T34-B16-0990	Base Slab - Trim Bored Pile & Blinding	7	7	05-Mar-16	12-Mar-16	-606	Calendar Day
S9B-T34-B16-1000	Base Slab - Waterproofing	4	4	12-Mar-16	16-Mar-16	-606	Calendar Day
S9B-T34-B16-1010	Base Slab - Rebar Fixing	10	10	16-Mar-16	26-Mar-16	-606	Calendar Day
Bay 17							
S9B-T34-B17-0990	Base Slab - Trim Bored Pile & Blinding	7	7	20-Feb-16	27-Feb-16	-599	Calendar Day
S9B-T34-B17-1000	Base Slab - Waterproofing	4	4	27-Feb-16	02-Mar-16	-589	Calendar Day
S9B-T34-B17-1010	Base Slab - Rebar Fixing	7	7	02-Mar-16	09-Mar-16	-589	Calendar Day
S9B-T34-B17-1020	Base Slab - Concrete	1	1	09-Mar-16	10-Mar-16	-589	Calendar Day
Bay 18							
S9B-T34-B18-1000	Base Slab - Trim Bored Pile & Blinding	5	5	27-Feb-16	03-Mar-16	-599	Calendar Day
S9B-T34-B18-1010	Base Slab - Waterproofing	3	3	03-Mar-16	06-Mar-16	-599	Calendar Day

◆ Milestone
◆ Critical Milestones
Current Works
Critical Works

CHUN WO - CRGL

JOINT VENTURE

CEDD CONTRACT NO. HK/2009/02

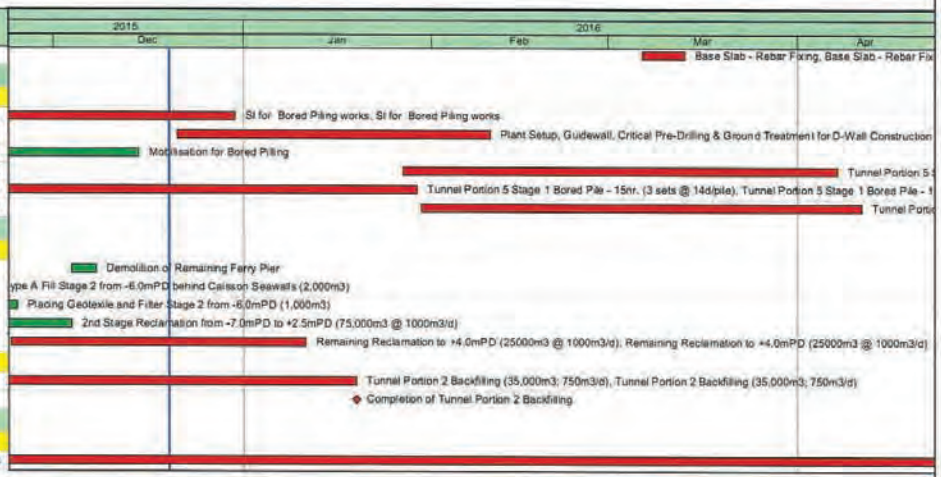
WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)

3-MONTH ROLLING PROGRAMME (dd 20-Dec-15)

Date	Revision	Checked	Approved
20-Dec-15			

CEDD CONTRACT HK/2009/02

Activity ID	Activity Name	Orl Dur	Rem Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar
S9B-T34-B18-1020	Base Slab - Rebar Fixing	7	7	06-Mar-16	13-Mar-16	-599	Calendar Day
Section 10 Works - CWB Tunnel Structure (CH3246 - CH3400)							
Tunnel Portion 5 (CH3276-CH3400)							
S10-T5-0900	SI for Bored Piling works	53	7	02-Nov-15 A	30-Dec-15	-537	HK Working Day
S10-T5-1000	Plant Setup, Guidewall, Critical Pre-Drilling & Ground Treatment for D-Wall Construction f...	36	36	21-Dec-15	10-Feb-16	-804	HK Working Day
S10-T5-1005	Mobilisation for Bored Piling	11	0	13-Nov-15 A	15-Dec-15 A		HK Working Day
S10-T5-1010	Tunnel Portion 5 Stage 1 D-wall (29 nos. Panels; 7d/panel; 3G+1C)	58	58	27-Jan-16	07-Apr-16	-604	HK Working Day
S10-T5-1030	Tunnel Portion 5 Stage 1 Bored Pile - 15nr. (3 sets @ 14d/pile)	58	26	17-Nov-15 A	29-Jan-16	-583	HK Working Day
S10-T5-1050	Tunnel Portion 5 Stage 2 Bored Pile - 14nr. (3 sets @ 14d/pile)	58	58	30-Jan-16	11-Apr-16	-583	HK Working Day
Section 11 of the Works - Remainder of Works							
Marine Works at WCR3							
S11-R3-1410	Demolition of Remaining Ferry Pier	11	0	04-Dec-15 A	08-Dec-15 A		Calendar Day
S11-R3-1820	Type A Fill Stage 2 from +6.0mPD behind Caisson Seawalls (2,000m3)	9	0	02-Nov-15 A	21-Nov-15 A		Calendar Day
S11-R3-1840	Placing Geotexile and Filter Stage 2 from -6.0mPD (1,000m3)	9	0	05-Nov-15 A	25-Nov-15 A		Calendar Day
S11-R3-1900	2nd Stage Reclamation from -7.0mPD to +2.5mPD (75,000m3 @ 1000m3/d)	71	0	01-Nov-15 A	04-Dec-15 A		Calendar Day
S11-R3-2000	Remaining Reclamation to +4.0mPD (25000m3 @ 1000m3/d)	22	22	24-Nov-15 A	11-Jan-16	-754	Calendar Day
Formation and Hard Landscaping Works							
S11-FM-2000A	Tunnel Portion 2 Backfilling (35,000m3; 750m3/d)	71	22	25-Sep-15 A	19-Jan-16	-79	Calendar Day
S11-FM-2000B	Completion of Tunnel Portion 2 Backfilling	0	0		19-Jan-16	-56	Calendar Day
Soft Landscaping & Establishment Works							
Section 8D of the Works - Establishment Works in Area 8							
S8D-0010	Carry out establishment work on new ferry pier	288	224	28-Aug-15 A	27-Aug-16	-2	7-Day Workweek



◆ Milestone
◆ Critical Milestones
Current Works
Critical Works

CHUN WO - CRGL

JOINT VENTURE

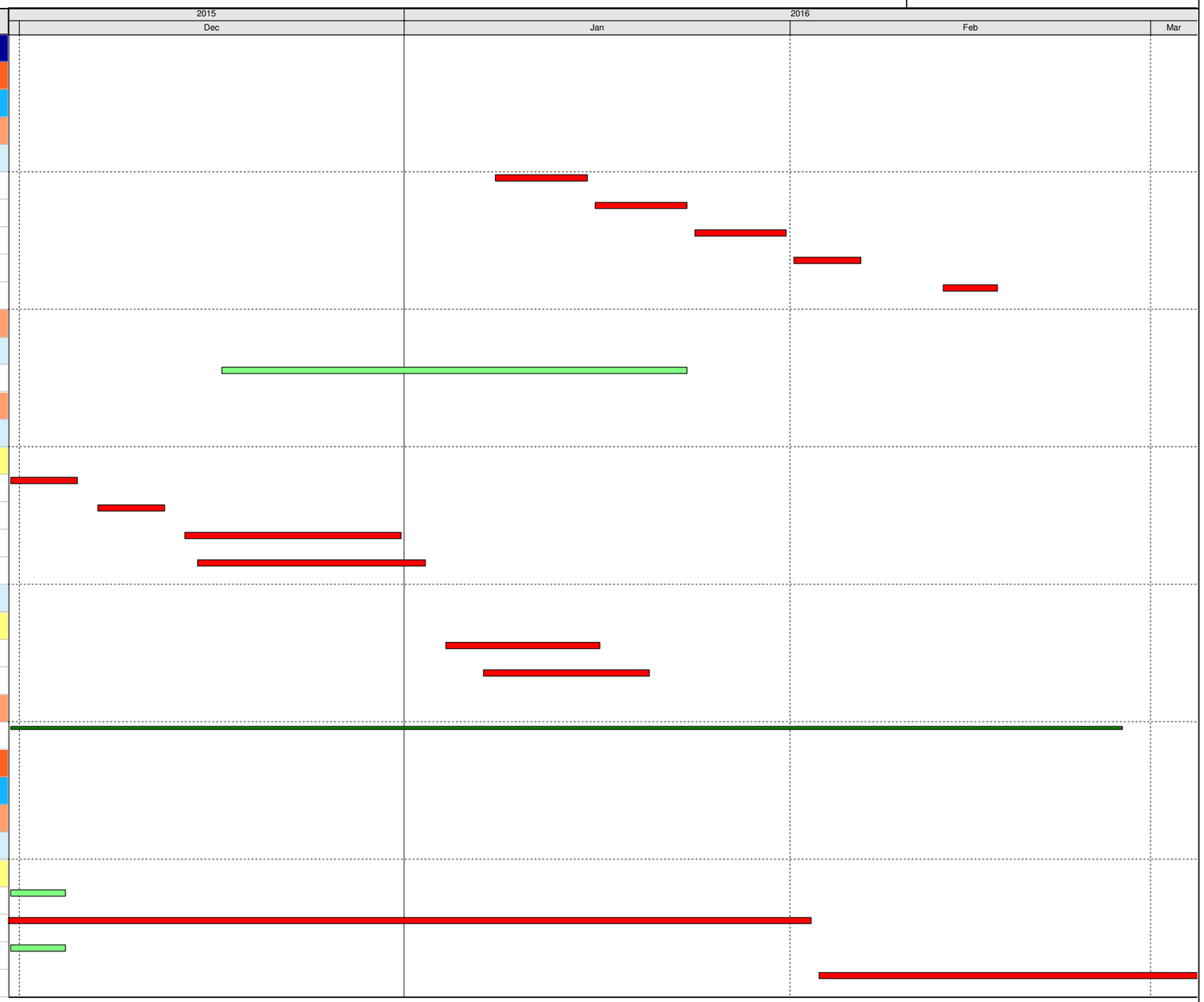
CEDD CONTRACT NO. HK/2009/02

WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)

3-MONTH ROLLING PROGRAMME (dd 20-Dec-15)

Date	Revision	Checked	Approved
20-Dec-15			

Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish
HK/2012/08 Three Months Rolling Programme (Dec 2015 to Feb 2016)				
Dredging and Reclamation				
Marine Work Construction				
Zone A1				
Seawall Construction - Zone A1				
MAR10310	Zone A1 - seawall - Type 3 - fill rock mound	8	08-Jan-16	15-Jan-16
MAR10312	Zone A1 - seawall - Type 3 - lay toe block and leveling stone	8	16-Jan-16	23-Jan-16
MAR10320	Zone A1 - seawall - install block seawall type 3	8	24-Jan-16	31-Jan-16
MAR10340	Zone A1 - seawall - place type A behind seawall Type 3	6	01-Feb-16	06-Feb-16
MAR10345	Zone A1 - seawall - lay geotextile and filter behind seawall Type 3	4	13-Feb-16	17-Feb-16
Zone C				
Dredging - Zone C				
MAR11520	Zone C - Cut existing pipe pile (2 nos.)	30	17-Dec-15	23-Jan-16
Zone D				
Seawall Construction - Zone D				
Seawall 10 & 11				
MAR20582	Zone D - fill rock mound for Seawall 10 & 11	6	30-Nov-15	05-Dec-15
MAR20584	Zone D - lay toe block and level stone for Seawall 10 & 11	6	07-Dec-15	12-Dec-15
MAR20605	Zone D - Install block seawall 10	14	14-Dec-15	31-Dec-15
MAR20610	Zone D - Install block seawall 11	14	15-Dec-15	02-Jan-16
Filling - Zone D				
Filling at North				
MAR12160	Zone D - Sorted Public Fill up to +2.5mPD (north area)	12	04-Jan-16	16-Jan-16
MAR12180	Zone D - Sorted & Compacted Public Fill from +2.5 to +4mPD (north area)	12	07-Jan-16	20-Jan-16
Others - Landing Steps				
MAR21400	Zone D - [summary] landing steps at seawall 9	70	30-Nov-15	27-Feb-16
Works for Section Completion				
Construction				
Section II - MVB Structure				
MVB Substructure - ELS & Structural Works for Portion A				
MVB Substructure - Structural Works for Portion A				
SII11140	Sec II - MVB A - Remove Strut SL7 and SL6	5	30-Nov-15	04-Dec-15
SII11160	Sec II - MVB A - Construct B3/F top slab, column and wall	53	10-Nov-15 A	02-Feb-16
SII11180	Sec II - MVB A - Remove Strut SL5 and SL4	5	30-Nov-15	04-Dec-15
SII11200	Sec II - MVB A - Construct 2/F top slab, colum and wall	57	03-Feb-16	19-Apr-16



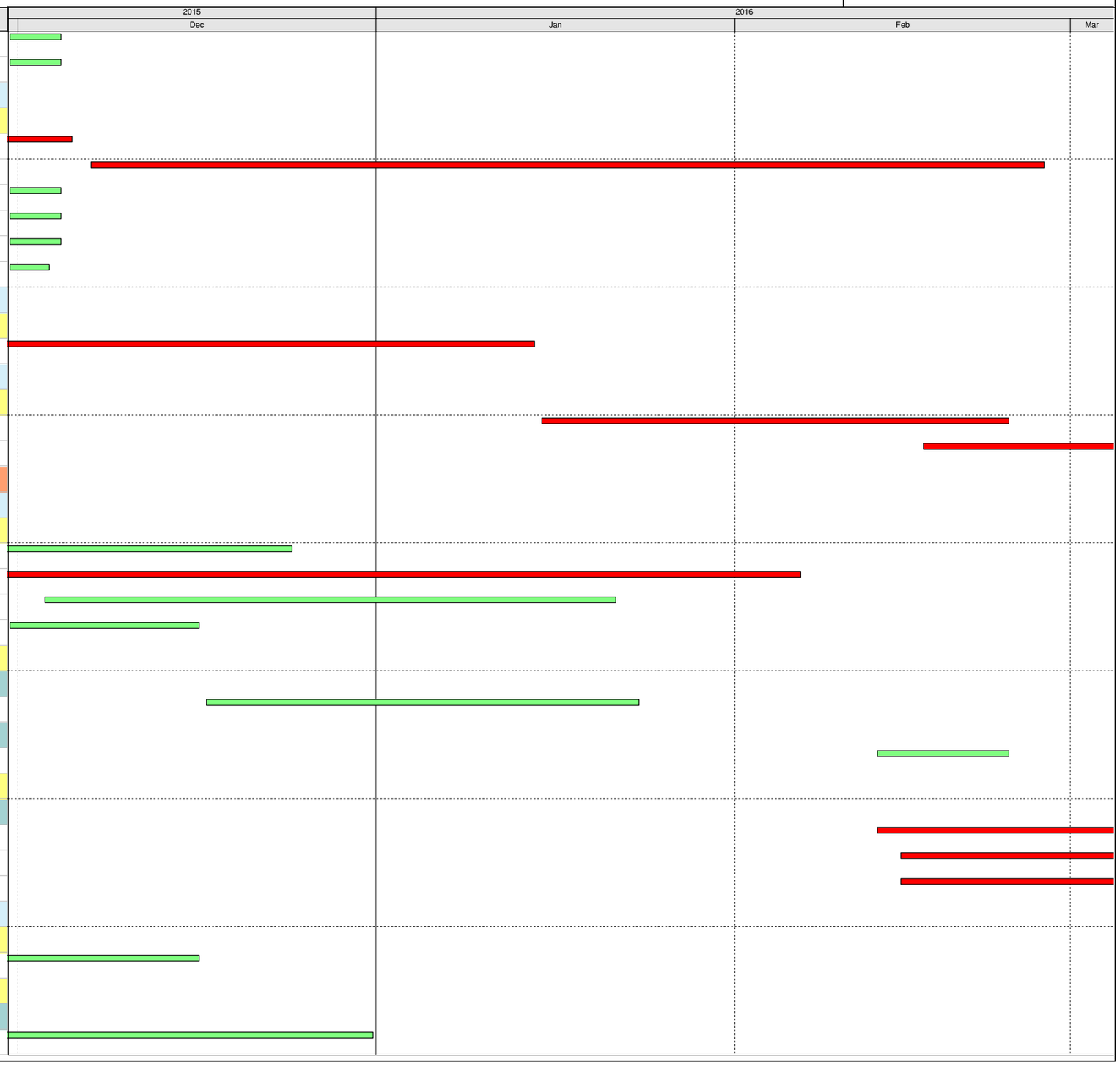
Data Date:
30-Nov-15

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

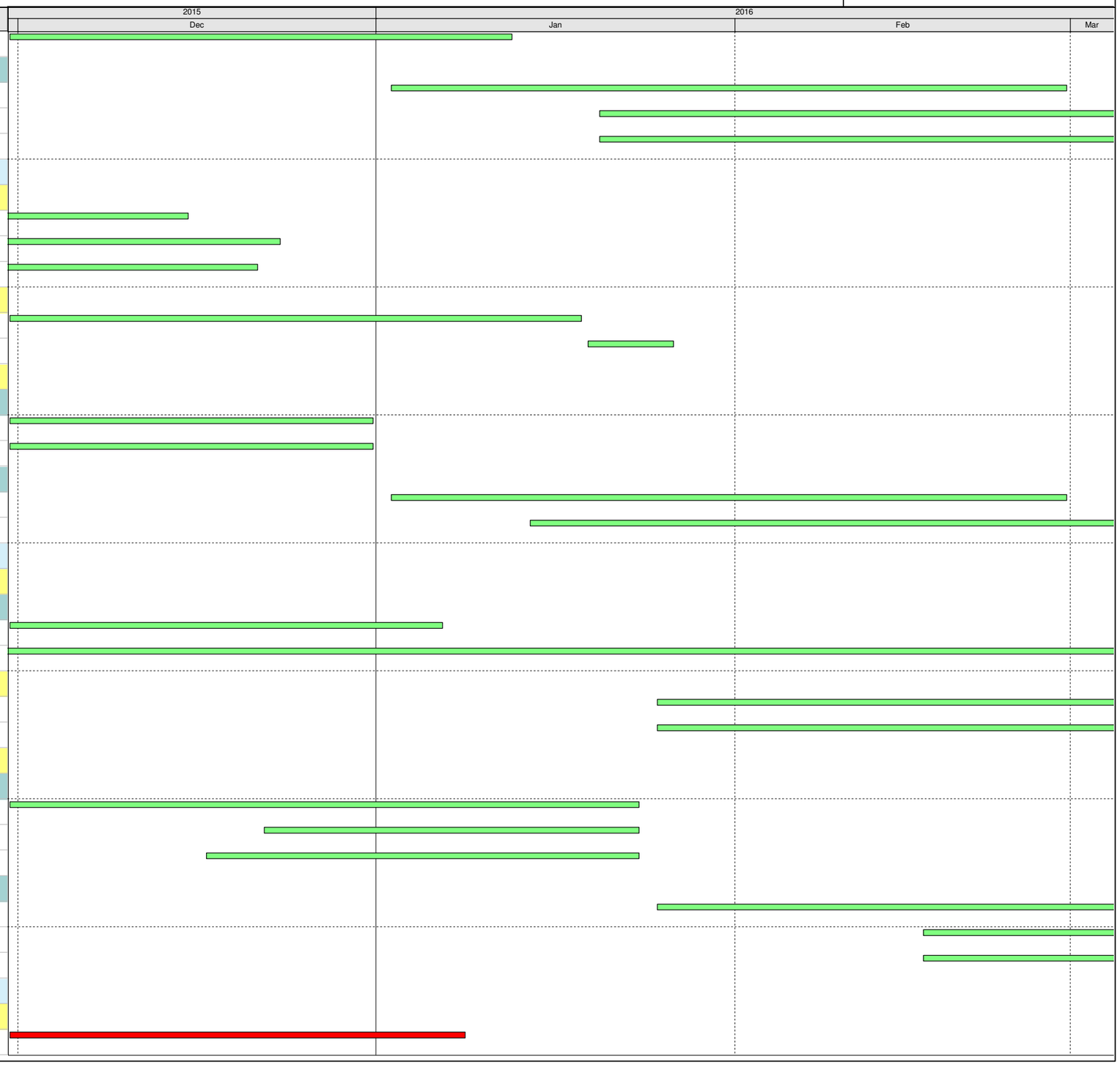
Works Programme for non-CRIII Zones?Dec 2015 to Feb 2016)

Date	Revision	Checked	Approved
29-Dec-15			

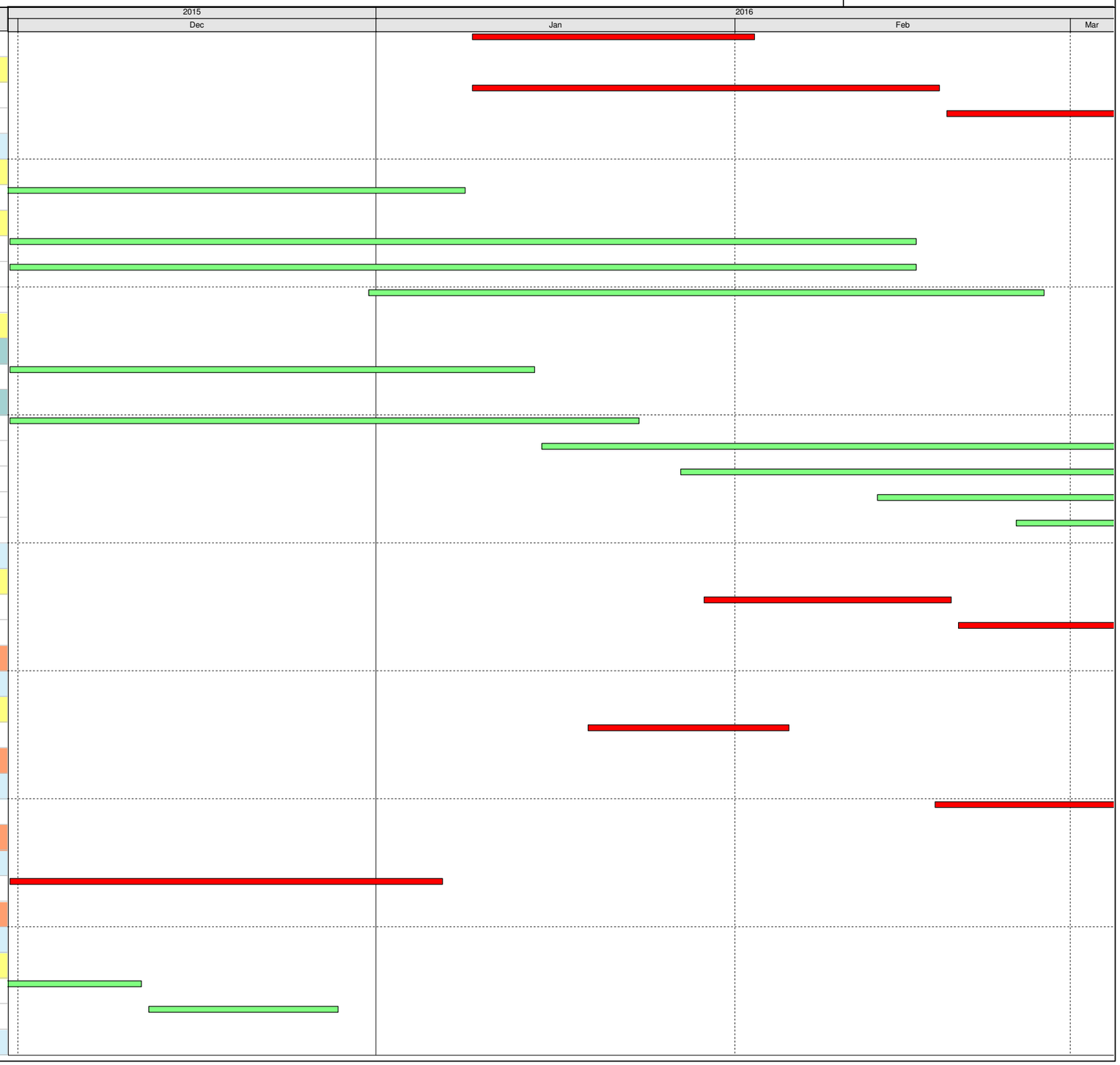
Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish
SII11220	Sec II - MVB A - Remove Strut SL3 and SL2	5	30-Nov-15	04-Dec-15
SII11280	Sec II - MVB A: Remove Strut SL1	5	30-Nov-15	04-Dec-15
MVB Substructure - ELS & Structural Works for Portion B				
MVB Substructure - Structural Works for Portion B				
SII11780	Sec II - MVB B: Construct B3/F base slab	6	29-Sep-15 A	05-Dec-15
SII11800	Sec II - MVB B: Construct B3/F wall, colum & base slab	64	07-Dec-15	27-Feb-16
SII11820	Sec II - MVB B: remove strut SL8, SL7	5	30-Nov-15	04-Dec-15
SII11860	Sec II - MVB B: Remove Strut SL6 & SL5	5	30-Nov-15	04-Dec-15
SII11900	Sec II - MVB B: Remove Strut SL4 & SL3	5	30-Nov-15	04-Dec-15
SII11940	Sec II - MVB B: Remove Strut SL2	4	30-Nov-15	03-Dec-15
MVB Substructure - Piling Works				
MVB C - Prebored H Piles				
SII10400	Sec II - MVB C - construct prebored H-piles	37	20-Nov-15 A	14-Jan-16
MVB Substructure - Diaphragm Wall for Portion C				
MVB C - Pumping Test Preparation/ Pumping Test				
SII10660	Sec II - MVB C - sheetpile wall installation	30	15-Jan-16	24-Feb-16
SII10680	Sec II - MVB C - Precaution grout / fissure grout	35	17-Feb-16	28-Mar-16
Section II A - CWB Tunnel & Slip Road Structures and Facilities				
CWB A2(2)				
CWB A2 (2) - Dwall & Piling				
SIIA15320	Sec II A - CWB A2 : construct Temp DWall (1.2m thk)	22	06-Oct-15 A	24-Dec-15
SIIA15360	Sec II A - CWB A2 : construct pre-bored H-pile	57	16-Nov-15 A	06-Feb-16
SIIA15400	Sec II A - CWB A2 : Dwall sonic test	40	03-Dec-15	21-Jan-16
SIIA15420	Sec II A - CWB A2 Loading Test for Prebored H-pile	15	30-Nov-15	16-Dec-15
CWB A2 (2) - Pumping Test Preparation/ Pumping Test				
CWB A2 - Pumping Test Preparation				
SIIA15440	Sec II A - CWB A2 : Install dewatering/ recharging/ observation well	30	17-Dec-15	23-Jan-16
CWB A2 & B - Pumping Test				
SIIA15460	Sec II A - CWB A2 : Pumping Test	10	13-Feb-16	24-Feb-16
CWB A2 (2) - ELS & Tunnel Structure				
CWB A2 - ELS				
SIIA12440	Sec II A - CWB A2 : shoring & excavation	31	13-Feb-16	19-Mar-16
SIIA12445	Sec II A - CWB A2 : demolition of temp bulk head wall at west end	30	15-Feb-16	19-Mar-16
SIIA12448	Sec IIA - CWB A2 : demolition of temp bulk head wall at East end	30	15-Feb-16	19-Mar-16
CWB B (& A2(1))				
CWB B - Dwall & Piling				
SIIA11560	Sec II A - CWB B: Concrete Plug (MTR TWL)	15	15-Jun-15 A	16-Dec-15
CWB B - ELS & Tunnel Structure				
CWB B - ELS				
SIIA13520	Sec II A - CWB B: Shoring & Excavation	26	22-Oct-15 A	31-Dec-15



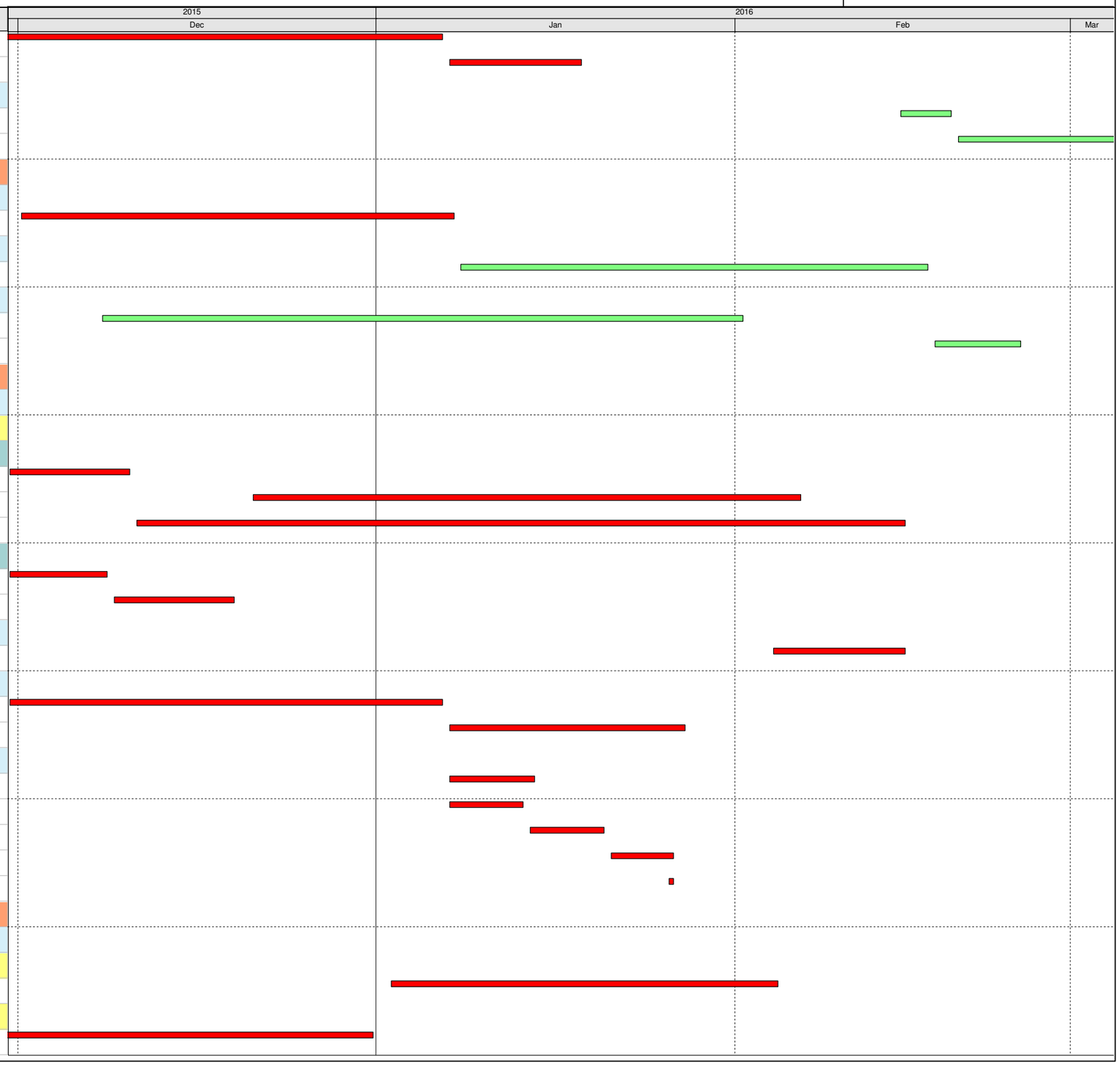
Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish
SIIA13540	Sec II A - CWB B: Demolish Sheetpile Bulkhead wall at Concrete Plug	35	30-Nov-15	12-Jan-16
	CWB B - Tunnel Structure			
SIIA13560	Sec II A - CWB B: base, wall, OHVD & roof (bay 1)	45	02-Jan-16	29-Feb-16
SIIA13600	Sec II A - CWB B: base, wall, OHVD & roof (bay 2)	45	20-Jan-16	17-Mar-16
SIIA13660	Sec II A - CWB B: base, wall, OHVD & roof (bay 3)	45	20-Jan-16	17-Mar-16
	CWB C (W)			
	CWB C(W) - Dwall Construction			
SIIA11960	Sec II A - CWB CW: Concrete Plug (MTR TWL)	14	16-Jun-15 A	15-Dec-15
SIIA11980	Sec II A - CWB CW: D-wall contact grout / fissure grout	21	21-Aug-15 A	23-Dec-15
SIIA12000	Sec II A - CWB CW: Dwall sonic test / interface core	19	17-Aug-15 A	21-Dec-15
	CWB C(W) - Pumping Test Preparation/ Pumping Test			
SIIA12020	Sec II A - CWB CW: Install dewatering/ recharging/ observation wells	40	30-Nov-15	18-Jan-16
SIIA12040	Sec II A - CWB CW: Pumping Test	8	19-Jan-16	26-Jan-16
	CWB C(W) - ELS & Tunnel Structure			
	CWB C(W) - ELS			
SIIA12080	Sec II A - CWB CW: Shoring & Excavation	26	30-Nov-15	31-Dec-15
SIIA12120	Sec II A - CWB CW: Demolish Sheetpile Bulkhead at Concrete Plug	26	30-Nov-15	31-Dec-15
	CWB C(W) - Tunnel Structure			
SIIA12140	Sec II A - CWB CW: base, wall, OHVD & roof (bay 1)	45	02-Jan-16	29-Feb-16
SIIA12180	Sec II A - CWB CW: base, wall, OHVD & roof (bay 2)	45	14-Jan-16	11-Mar-16
	CWB C (E)			
	CWB C(E) & Enabling Work - Dwall Construction			
	SCL Enabling Work - Dwall Construction			
SIIA13085	Sec II A - CWB CE: Cut existing pipe piles (2 nos.)	30	30-Nov-15	06-Jan-16
SIIA15520	Sec II - SCL Enabling Works - construct Dwall - Remaining [7 panels]	76	18-Feb-15 A	05-Mar-16
	CWB C(E) - Pumping Test Preparation/ Pumping Test			
SIIA13060	Sec II A - CWB CE: Grout curtain for Dwall	45	25-Jan-16	22-Mar-16
SIIA13080	Sec II A - CWB CE: Dwall sonic test / interface core	45	25-Jan-16	22-Mar-16
	CWB C(E) - ELS & Tunnel Structure			
	CWB C(E) - ELS			
SIIA13160	Sec II A - CWB CE: Shoring & Excavation(Uppn Completion of MVB Structure - B2 Slab)	45	30-Nov-15	23-Jan-16
SIIA13170	Sec II A - CWB CE: Demolish Bulkhead at East End (adj. to bay 1)	26	22-Dec-15	23-Jan-16
SIIA13180	Sec II A - CWB CE: Demolish Bulkhead at MVB (adj. to bay 3)	30	17-Dec-15	23-Jan-16
	CWB C(E) - Tunnel Structure			
SIIA13220	Sec II A - CWB CE: base, wall, OHVD & roof (bay 1)	45	25-Jan-16	22-Mar-16
SIIA13260	Sec II A - CWB CE: base, wall, OHVD & roof (bay 2)	45	17-Feb-16	13-Apr-16
SIIA13280	Sec II A - CWB CE: base, wall, OHVD & roof (bay 3)	45	17-Feb-16	13-Apr-16
	CWB C - Exhaust Duct			
	CWB C - Exhaust Duct Piling			
SIIA12840	Sec II A - Exhaust Duct at Slip Rd3: Prebored H-pile	32	30-Nov-15	08-Jan-16



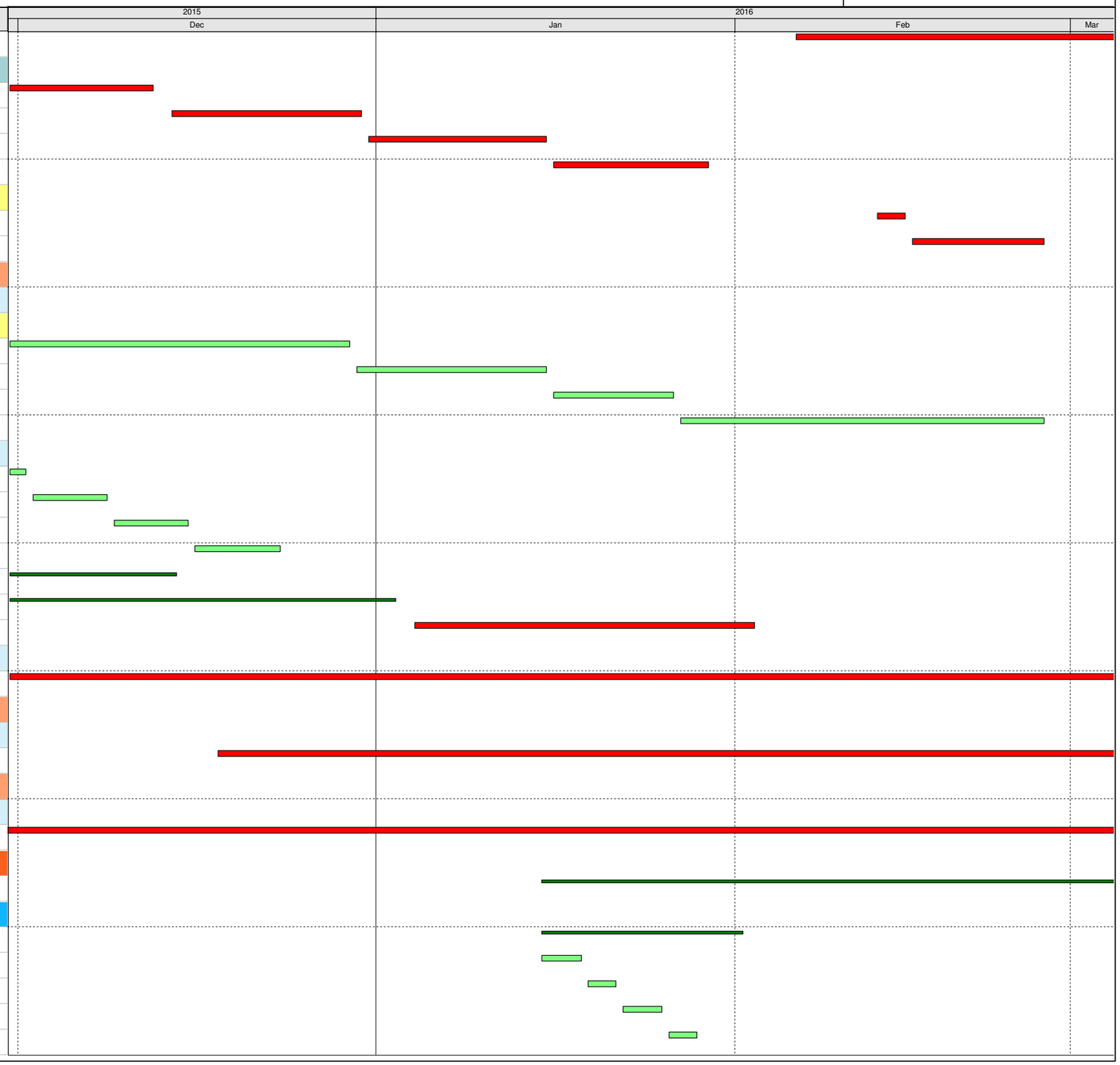
Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish
SIIA12860	Sec II A - Exhaust Duct at Slip Rd3: Loading Test	21	09-Jan-16	02-Feb-16
CWB C - Exhaust Duct Temp Work & ELS				
SIIA12880	Sec II A - Exhaust Duct at Slip Rd3: Temp. Sheetpiling	30	09-Jan-16	18-Feb-16
SIIA12900	Sec II A - Exhaust Duct at Slip Rd3: Excavation & Shoring	35	19-Feb-16	30-Mar-16
CWB D - Slip Road 1				
CWB D - Slip Road 1 - Dwall Construction & Piling				
SIIA12340	Sec II A - CWB SR1: Concrete Plug (MTR TWL)	32	12-Aug-15 A	08-Jan-16
CWB D - Slip Road 1 - Pumping Test Preparation/ Pumping Test				
SIIA12360	Sec II A - CWB SR1: Grout curtain / contact grout for Dwall	60	30-Nov-15	16-Feb-16
SIIA12380	Sec II A - CWB SR1: Dwall sonic test / interface core	60	30-Nov-15	16-Feb-16
SIIA12400	Sec II A - CWB SR1: Install dewatering/ recharging/ observation wells	45	31-Dec-15	27-Feb-16
CWB D - Slip Road 1 - ELS & Tunnel Structure				
CWB D - Slip Road 1 - ELS				
SIIA12460	Sec II A - CWB SR1: Shoring & Excavation	37	30-Nov-15	14-Jan-16
CWB D - Slip Road 1 - Tunnel Structure				
SIIA12480	Sec II A - CWB SR1: Demolish Sheetpile Bulkhead at Concrete Plug	45	30-Nov-15	23-Jan-16
SIIA12500	Sec II A - CWB SR1: base, wall & roof (bay 1)	40	15-Jan-16	07-Mar-16
SIIA12520	Sec II A - CWB SR1: base, wall & roof (bay 2)	40	27-Jan-16	18-Mar-16
SIIA12540	Sec II A - CWB SR1: base, wall & roof (bay 3)	40	13-Feb-16	30-Mar-16
SIIA12560	Sec II A - CWB SR1: base, wall & roof (bay 4)	40	25-Feb-16	15-Apr-16
CWB D - Slip Road 1 - Trough / Retaining Wall				
CWB D - Slip Road 1 - Trough/Retaining Wall Temp Work & ELS				
SIIA12740	Sec II A - CWB SR1 Trough & RW: Preboring for installing Sheetpile	14	29-Jan-16	19-Feb-16
SIIA12760	Sec II A - CWB SR1 Trough & RW: install sheetpile	21	20-Feb-16	15-Mar-16
Section III - Road D11 & Part of Road P2, Area 4, Implement 1st Stage ITA				
Roadwork & Utilities				
General				
SIII10485	Sec III - 1st Stage of Interim Traffic Arrangement - miscellaneous works	16	19-Jan-16	05-Feb-16
Section III A - Road A2, A4, A5, Area 11; Implement 2nd Stage ITA				
Roadwork & Utilities at A1				
SIIIA10260	Sec III A - roadwork and utilities (Zone A1) - Backfill to pavement founding level	70	18-Feb-16	16-May-16
Section VI A - Box Culvert La, L1 & FRP-L Construction				
Sec VI C - Box Culvert La bay 4 (North)				
CUL11660	Sec VI C - Culvert L - bay 4 - backfill	30	30-Nov-15	06-Jan-16
Box Culvert L1 & FRP-L Construction (Bay 5 - Bay 7)				
Box Culvert L1 & FRP-L - Bay 5 to 7 Structure				
Box Culvert L1 & FRP-L - Precast Unit Fabrication (Box Structure)				
CUL10872	Sec VI C - Culvert L - bay 4b - Construct precast culvert units with Bulkhead	11	29-Jun-15 A	11-Dec-15
CUL10873	Sec VI C - Culvert L - bay 4b, 5-7 - dismantle formwork and curing for precast culvert units	12	12-Dec-15	28-Dec-15
Box Culvert L1 & FRP-L - Bay 5 & 6 Backfill & Others				



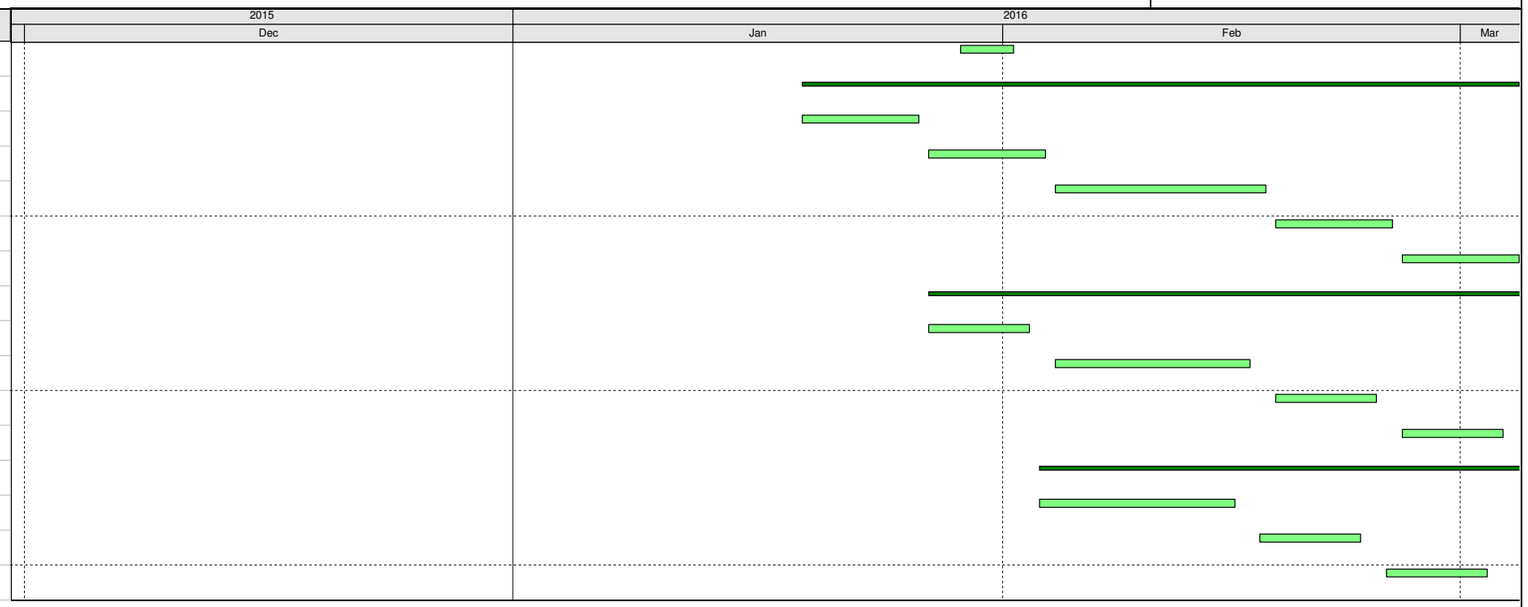
Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish
CUL10878	Sec VI C - Culvert L - bay 5, 6 - backfill to +4.0mPD	30	22-Oct-15 A	06-Jan-16
CUL10879	Sec VI C - Culvert L - bay 5, 6 - trim to formation level and handover Area 6	10	07-Jan-16	18-Jan-16
Box Culvert L1 & FRP-L - Bay 7 Backfill & Others				
CUL11785	Sec VI C - Culvert L - bay 7 - Diversion of flow from temp channel into Cul L	5	15-Feb-16*	19-Feb-16
CUL11800	Sec VI C - Culvert L - bay 7 - backfill to +4.0mPD	35	20-Feb-16	31-Mar-16
Box Culvert L1 & FRP-L - Bay 12 to 13				
Box Culvert L1 & FRP-L - Bay 12 to 13 Piling				
CUL12356	Culvert L - bay 13 - construct pre-bored H-pile (PC10 & PC11)	30	01-Dec-15*	07-Jan-16
Box Culvert L1 & FRP-L - Bay 12 to 13 Temp Work & ELS				
CUL12480	Culvert L - bay 12 & 13 - pile head treatment and construct pile cap PC9, PC10 & PC11	30	08-Jan-16	17-Feb-16
Box Culvert L1 & FRP-L - Bay 12 to 13 Structure				
CUL12545	Culvert L - bay 12 & 13 - Construct Precast Units (off site)	45	08-Dec-15*	01-Feb-16
CUL12548	Culvert L - bay 12 & 13 - Deliver and Install Precast Units	7	18-Feb-16	25-Feb-16
Section VI C - Area 3, 6, 8A & 8C				
Area 8A & 8C - Seawall Modification				
Modification of Seawall				
Modification of Seawall - Zone 1 & 2				
PRS10060	Sec VIC - Working Platform & P7 to P17, P18, P18A,P23,P24, P32 -P34 & P32A-P34A (DTH)	10	30-Nov-15	10-Dec-15
PRS10080	Sec VIC - Working Platform & P59, P59A, P60, P60A, P61, P61A, P62, P62A , P63-P66 (DTH)	39	21-Dec-15	06-Feb-16
PRS10085	Sec VIC - Curtain Grout (DTH)	49	11-Dec-15	15-Feb-16
Modification of Seawall - Zone 4				
PRS10160	Sec VIC - Working Platform (Zone 4)	8	30-Nov-15	08-Dec-15
PRS10180	Sec VIC - Pipe Pile P63 to P68 & P64A (Zone 4)	10	09-Dec-15	19-Dec-15
Area 8A - MTR Pump Room Clearance & Handover				
PRS-1060	Sec VI C - Clearance of pump house for Handover	5	04-Feb-16	15-Feb-16
Area 6 - Box Culvert bay 5-6				
SVIC10020	Sec VI C - backfill to formation level at Area 6	30	30-Nov-15	06-Jan-16
SVIC10040	Sec VI C - U-Channel and ug utilities at Area 6	18	07-Jan-16	27-Jan-16
Area 3 - Box Culvert bay 4 and Roadwork				
SVIC10240	Sec VI C - reinstate and compact sub-base above Culvert L Bay 4 in Area 3	7	07-Jan-16	14-Jan-16
SVIC10260	Sec VI C - reinstate road kerb in Area 3	6	07-Jan-16	13-Jan-16
SVIC10280	Sec VI C - reinstate flexible pavement in Area 3	6	14-Jan-16	20-Jan-16
SVIC10300	Sec VI C - reinstate footpath in Area 3	5	21-Jan-16	26-Jan-16
SVIC10320	Sec VI C - reinstate traffic sign and road marking in Area 3	1	26-Jan-16	26-Jan-16
Section VI D - Area 8B & 10				
WDII Box 1 Construction				
WDII Box 1 Submission and Approval / Material Procurement				
PCU60410	Sec VI D - WD II Box 1 - Prepare Subcontract for Box 1 structure	29	02-Jan-16*	04-Feb-16
WDII Box 1 Existing Pile Head and Dry Dock				
WD-C3030	Sec VI D - form dry dock / waterproofing for Box 1 structure	26	15-Oct-15 A	31-Dec-15



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish
WD-C3032	Sec VI D - Construct Box 1 (bottom slab and temp bulk head wall)	54	06-Feb-16	19-Apr-16
WDII Box I Existing Pile Head Treatment				
PRS10260	Sec VIC - Pile Head at Pile A3	12	30-Nov-15	12-Dec-15
PRS10280	Sec VIC - Pile Head at Pile A4	13	14-Dec-15	30-Dec-15
PRS10300	Sec VIC - Pile Head at Pile B3	13	31-Dec-15	15-Jan-16
PRS10320	Sec VIC - Pile Head at Pile B4	12	16-Jan-16	29-Jan-16
WDII Box 1 ELS				
WD-C3995	Sec VIC - Removal of Platform of Bored Pile	2	13-Feb-16	15-Feb-16
WD-C3998	Sec VIC - Install Column, C1, Struct S1 & RS1	11	16-Feb-16	27-Feb-16
Section VII - Remainder Works				
Landing Steps Construction				
Landing Steps BSW9				
SVII11100	Sec VII - Landing steps (BSW9) - construct mass concrete coping	24	30-Nov-15	29-Dec-15
SVII11120	Sec VII - Landing steps (BSW9) - curing and dismantle formwork	14	30-Dec-15	15-Jan-16
SVII11140	Sec VII - Landing steps (BSW9) - install vertical fender / step fender	9	16-Jan-16	26-Jan-16
SVII11160	Sec VII - Landing steps (BSW9) - install s.s. handrail / tactile / sign board / bollard	23	27-Jan-16	27-Feb-16
Demolition of Interim Landing Steps and Construct Permanent Seawall at CRIII				
SVII10220	Sec VII - remove interim landing steps - protect open cut slope	2	30-Nov-15	01-Dec-15
SVII10240	Sec VII - remove interim landing steps - remove old seawall wall blocks	6	02-Dec-15	08-Dec-15
SVII10260	Sec VII - seawall - remove old rubble mound and dredging	6	09-Dec-15	15-Dec-15
SVII10280	Sec VII - seawall - final hydrographic survey	7	16-Dec-15	23-Dec-15
SVII10300	Sec VII - seawall - [summary] fill rubble mound	13	02-Oct-15 A	14-Dec-15
SVII10320	Sec VII - seawall - [summary] place caisson seawall type 1B(4), 2D and 1	27	02-Nov-15 A	02-Jan-16
SVII10380	Sec VII - seawall - backfill behind seawall to pavement formation	26	04-Jan-16	02-Feb-16
Promenade Seawall Parapet Construction				
SVII10400	Sec VII - construct block seawall mass concrete coping & backfill to pavement formation	120	30-Nov-15*	30-Apr-16
Section VIII - Landscape Softworks				
Soft Landscaping Works				
SVIII10040	Sec VIII - Trees Planting	180	18-Dec-15	02-Aug-16
Section X - Protection & Preservation of Trees				
Soft Landscaping Works				
SX10020	Sec X - Protection & Preservation of Trees	600	31-Jan-13 A	21-Jul-17
VO : Construction of Box 4A & 4B				
1005	Summary of Variation Order: Box 4A & 4B	130	15-Jan-16	23-May-16
Box 4A				
A1010	Summary of concrete fill with 300 dia. carrier drain, 5 bays (ave. t = 1.875m x approx. 50m)	15	15-Jan-16	01-Feb-16
A1011	Concrete fill with 300 dia. carrier drain: bay 1	3	15-Jan-16	18-Jan-16
A1012	Concrete fill with 300 dia. carrier drain: bay 2	3	19-Jan-16	21-Jan-16
A1013	Concrete fill with 300 dia. carrier drain: bay 3	3	22-Jan-16	25-Jan-16
A1014	Concrete fill with 300 dia. carrier drain: bay 4	3	26-Jan-16	28-Jan-16

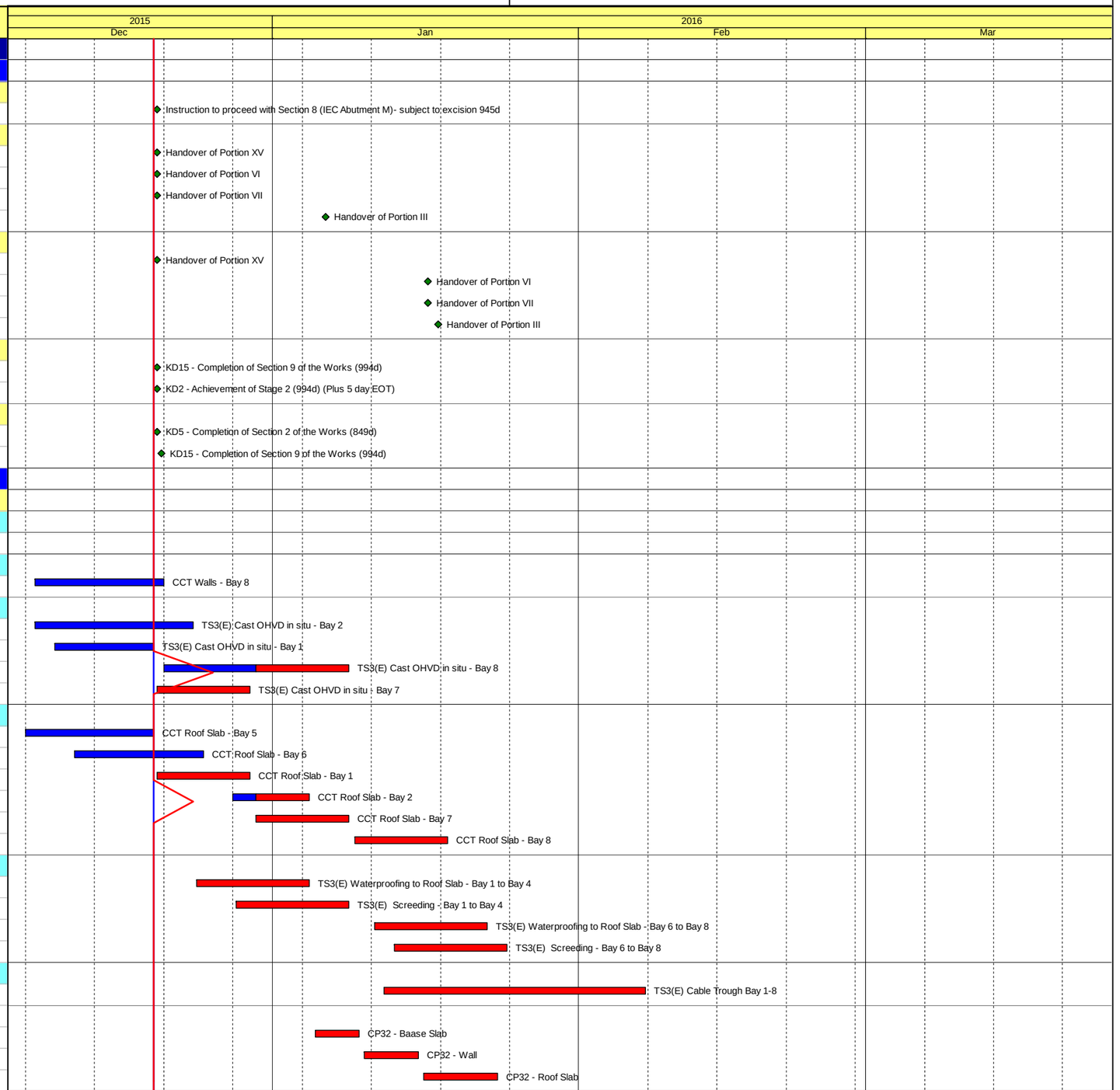


Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish
A1015	Concrete fill with 300 dia. carrier drain: bay 5	3	29-Jan-16	01-Feb-16
A1020	Summary of falseworks & fomworks for internal suspended slab	46	19-Jan-16	04-Mar-16
A1021	Falseworks & fomworks for internal suspended slab: bay 1	7	19-Jan-16	26-Jan-16
A1022	Falseworks & fomworks for internal suspended slab: bay 2	7	27-Jan-16	03-Feb-16
A1023	Falseworks & fomworks for internal suspended slab: bay 3	7	04-Feb-16	17-Feb-16
A1024	Falseworks & fomworks for internal suspended slab: bay 4	7	18-Feb-16	25-Feb-16
A1025	Falseworks & fomworks for internal suspended slab: bay 5	7	26-Feb-16	04-Mar-16
A1030	Summary of internal suspended slab, 5 bays (t = 200mm x approx. 50m)	45	27-Jan-16	11-Mar-16
A1031	Internal suspended slab - bay 1: rebars & casting	6	27-Jan-16	02-Feb-16
A1032	Internal suspended slab - bay 2: rebars & casting	6	04-Feb-16	16-Feb-16
A1033	Internal suspended slab - bay 3: rebars & casting	6	18-Feb-16	24-Feb-16
A1034	Internal suspended slab - bay 4: rebars & casting	6	26-Feb-16	03-Mar-16
A1040	Summary of internal wall, 5 bays (t = 200mm x approx. 50m)	45	03-Feb-16	18-Mar-16
A1041	Internal wall - bay 1: rebars, formworks & casting	6	03-Feb-16	15-Feb-16
A1042	Internal wall - bay 2: rebars, formworks & casting	6	17-Feb-16	23-Feb-16
A1043	Internal wall - bay 3: rebars, formworks & casting	6	25-Feb-16	02-Mar-16



SR8_DWP06(A)-MU33-3M | SR8 - Layout for 3MRP_2105_12 | **Appendix C.5**

Activity ID	Activity Name	Original Duration	Start	Finish
DWP-06 (A) - Three Months Rolling Programme_updated up to 20-Dec-15				
Key Dates				
Site Possession Dates				
IECM	Instruction to proceed with Section 8 (IEC Abutment M)- subject to excision 945d	0	20-Dec-15*	
Handover Dates (Contractual Date up to EOT-08)				
HXVC	Handover of Portion XV	0		20-Dec-15*
HVIC	Handover of Portion VI	0		20-Dec-15*
HVIIC	Handover of Portion VII	0		20-Dec-15*
HIIIIC	Handover of Portion III	0		06-Jan-16*
Handover Dates (Programmed Date)				
HXV	Handover of Portion XV	0		20-Dec-15
HVI	Handover of Portion VI	0		16-Jan-16
HVII	Handover of Portion VII	0		16-Jan-16
HIII	Handover of Portion III	0		17-Jan-16
Stage / Section Completion of Works (Contractual Date yp to EOT-08)				
KD15C	KD15 - Completion of Section 9 of the Works (994d)	0		20-Dec-15*
KD02C	KD2 - Achievement of Stage 2 (994d) (Plus 5 day EOT)	0		20-Dec-15*
Stage / Section Completion of Works (Programmed Date)				
KD5	KD5 - Completion of Section 2 of the Works (849d)	0		20-Dec-15
KD15	KD15 - Completion of Section 9 of the Works (994d)	0		20-Dec-15
Works in TS3				
Works in TS3-East				
Cut & Cover Tunnel Structure				
TS3-East CCT - Ch.4500.000 to Ch.4582.140				
TS3 East CCT - Walls + Removal of Struts 7 & 8				
TS3E_6720	CCT Walls - Bay 8	10	08-Dec-15 A	21-Dec-15 A
TS3-East CCT - OHVD Cast In-Situ				
TS3E_6870	TS3(E) Cast OHVD in situ - Bay 2	10	08-Dec-15 A	24-Dec-15 A
TS3E_6860	TS3(E) Cast OHVD in situ - Bay 1	10	10-Dec-15 A	20-Dec-15 A
TS3E_6930	TS3(E) Cast OHVD in situ - Bay 8	10	21-Dec-15 A	08-Jan-16
TS3E_6920	TS3(E) Cast OHVD in situ - Bay 7	10	23-Dec-15 A	29-Dec-15
TS3 East CCT - Roof Slab				
TS3E_6770	CCT Roof Slab - Bay 5	10	07-Dec-15 A	20-Dec-15 A
TS3E_6780	CCT Roof Slab - Bay 6	10	12-Dec-15 A	25-Dec-15 A
TS3E_6730	CCT Roof Slab - Bay 1	10	26-Dec-15 A	29-Dec-15
TS3E_6740	CCT Roof Slab - Bay 2	10	28-Dec-15 A	04-Jan-16
TS3E_6790	CCT Roof Slab - Bay 7	10	30-Dec-15	08-Jan-16
TS3E_6800	CCT Roof Slab - Bay 8	10	09-Jan-16	18-Jan-16
TS3 East CCT - Roof Slab Waterproofing + Screeding				
TS3E_6810	TS3(E) Waterproofing to Roof Slab - Bay 1 to Bay 4	12	24-Dec-15	04-Jan-16
TS3E_6840	TS3(E) Screeding - Bay 1 to Bay 4	12	28-Dec-15	08-Jan-16
TS3E_6820	TS3(E) Waterproofing to Roof Slab - Bay 6 to Bay 8	12	11-Jan-16	22-Jan-16
TS3E_6850	TS3(E) Screeding - Bay 6 to Bay 8	12	13-Jan-16	24-Jan-16
TS3 East - Cable Trough				
TS3E_6940	TS3(E) Cable Trough Bay 1-8	27	12-Jan-16	07-Feb-16
TS3 East - Cross Passage CP32 (CH4552 Westbound)				
TS3E_6830	CP32 - Baase Slab	5	05-Jan-16	09-Jan-16
TS3E_6950	CP32 - Wall	6	10-Jan-16	15-Jan-16
TS3E_6960	CP32 - Roof Slab	8	16-Jan-16	23-Jan-16



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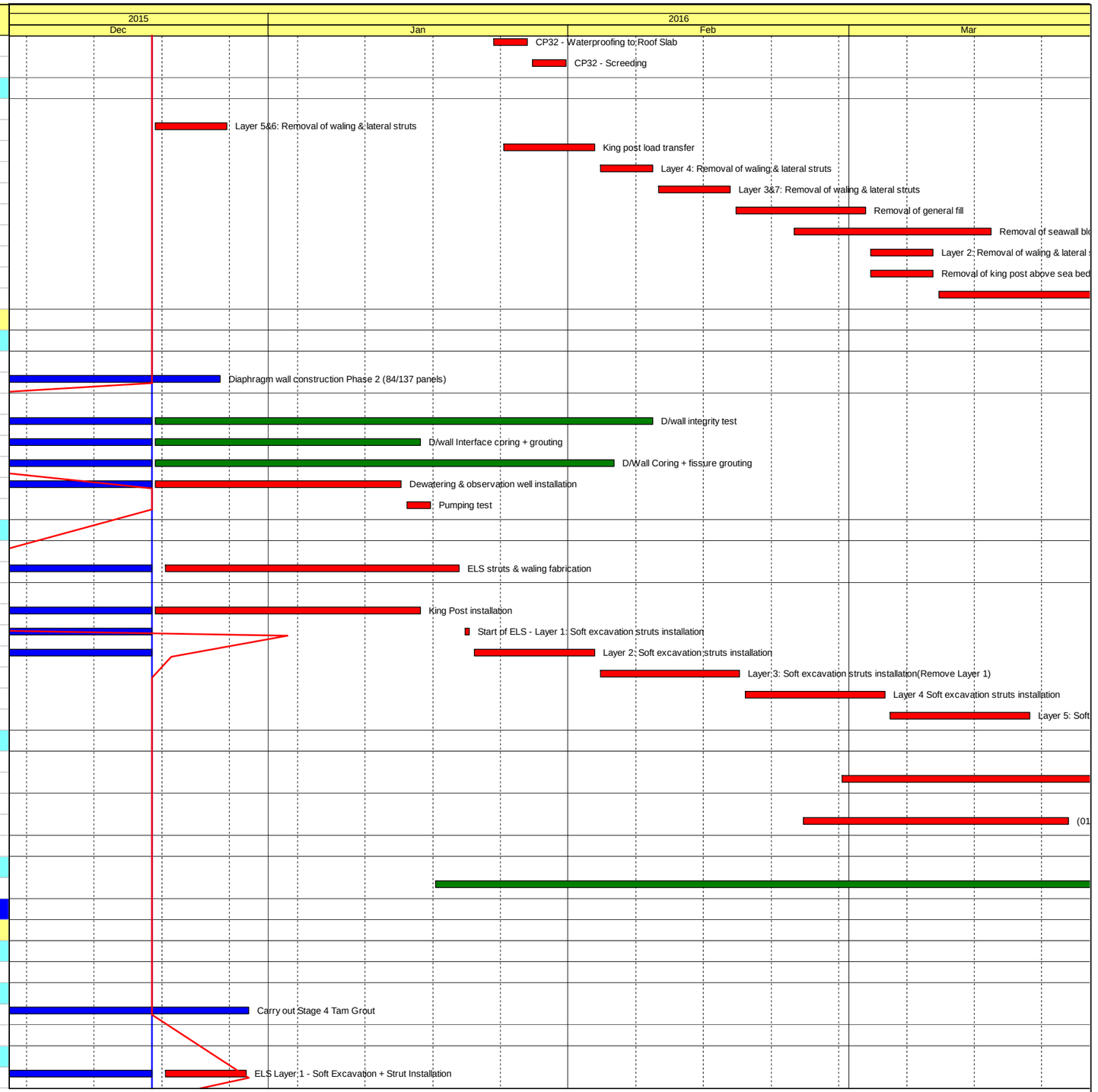
Activity ID	Activity Name	Original Duration	Start	Finish
TS3E_6970	CP32 - Waterproofing to Roof Slab	4	24-Jan-16	27-Jan-16
TS3E_6980	CP32 - Screeding	4	28-Jan-16	31-Jan-16
Removal of Reclamation				
TS3-East Removal of Reclamation				
TS3E_7540	Layer 5&6: Removal of waling & lateral struts	8	20-Dec-15	27-Dec-15
TS3E_6560	King post load transfer	10	25-Jan-16	03-Feb-16
TS3E_7550	Layer 4: Removal of waling & lateral struts	6	04-Feb-16	09-Feb-16
TS3E_7560	Layer 3&7: Removal of waling & lateral struts	8	10-Feb-16	17-Feb-16
TS3E_7590	Removal of general fill	14	18-Feb-16	02-Mar-16
TS3E_7600	Removal of seawall block	21	24-Feb-16	15-Mar-16
TS3E_7570	Layer 2: Removal of waling & lateral struts	7	03-Mar-16	09-Mar-16
TS3E_7580	Removal of king post above sea bed level	7	03-Mar-16	09-Mar-16
TS3E_7610	Sawcutting of diaphragm wall	21	10-Mar-16	30-Mar-16
Works in TS3-West				
Diaphragm Wall				
TS3-West Diaphragm Construction				
TS3W_3120	Diaphragm wall construction Phase 2 (84/137 panels)	152	03-Jun-15 A	27-Dec-15 A
TS3-West Post D/wall Works				
TS3W_3530	D/wall integrity test	100	04-Jun-15 A	09-Feb-16
TS3W_3510	D/wall Interface coring + grouting	100	06-Jun-15 A	16-Jan-16
TS3W_3520	D/Wall Coring + fissure grouting	100	24-Jun-15 A	05-Feb-16
TS3W_3540	Dewatering & observation well installation	26	23-Nov-15 A	14-Jan-16
TS3W_3550	Pumping test	3	15-Jan-16	17-Jan-16
ELS & Rock Excavation				
ELS Fabrication Works				
TS3W_4510	ELS struts & waling fabrication	75	17-Sep-15 A	20-Jan-16
TS3-West ELS Works				
TS3W_4515	King Post installation	45	18-May-15 A	16-Jan-16
TS3W_4520	Start of ELS - Layer 1: Soft excavation struts installation	15	04-Nov-15 A	21-Jan-16
TS3W_4530	Layer 2: Soft excavation struts installation	15	28-Nov-15 A	03-Feb-16
TS3W_4540	Layer 3: Soft excavation struts installation(Remove Layer 1)	15	04-Feb-16	18-Feb-16
TS3W_4550	Layer 4 Soft excavation struts installation	15	19-Feb-16	04-Mar-16
TS3W_4560	Layer 5: Soft excavation struts installation	15	05-Mar-16	19-Mar-16
Cut & Cover Tunnel Structure				
Temporary Works Design				
TS3W_2125	(01) RC Temp Work Design - submission	24	29-Feb-16	30-Mar-16
Method Statement				
TS3W_2135	(01)RC works method statement - submission	24	25-Feb-16	23-Mar-16
SR8 CCT - Sea Side Portion				
SR8 Works on Reclaimed Area				
SR8.MS.1010	ELS Works at SR8 (Marine Side)	90	18-Jan-16	16-Apr-16
Works in SR8 (Open Cut Method)				
SR8 - Cofferdam & Cut & Cover Tunnel Works				
SR8 East Bound - (Seaside to Victoria Road / IEC Central Divider)				
TTA Stage 2 - East Bound				
Stage 4 - East Bound (Ref. DRG. No.CDD/SR8/084)				
SR8.EB.1500	Carry out Stage 4 Tam Grout	14	16-Oct-15 A	30-Dec-15 A
Tunnel Ch.514.500 to Ch.459.000 (East Bound) - ELS / CCT / BF + Reinstatement Works				
ELS Works				
SR8.EB.1620	ELS Layer 1 - Soft Excavation + Strut Installation	12	21-Nov-15 A	29-Dec-15



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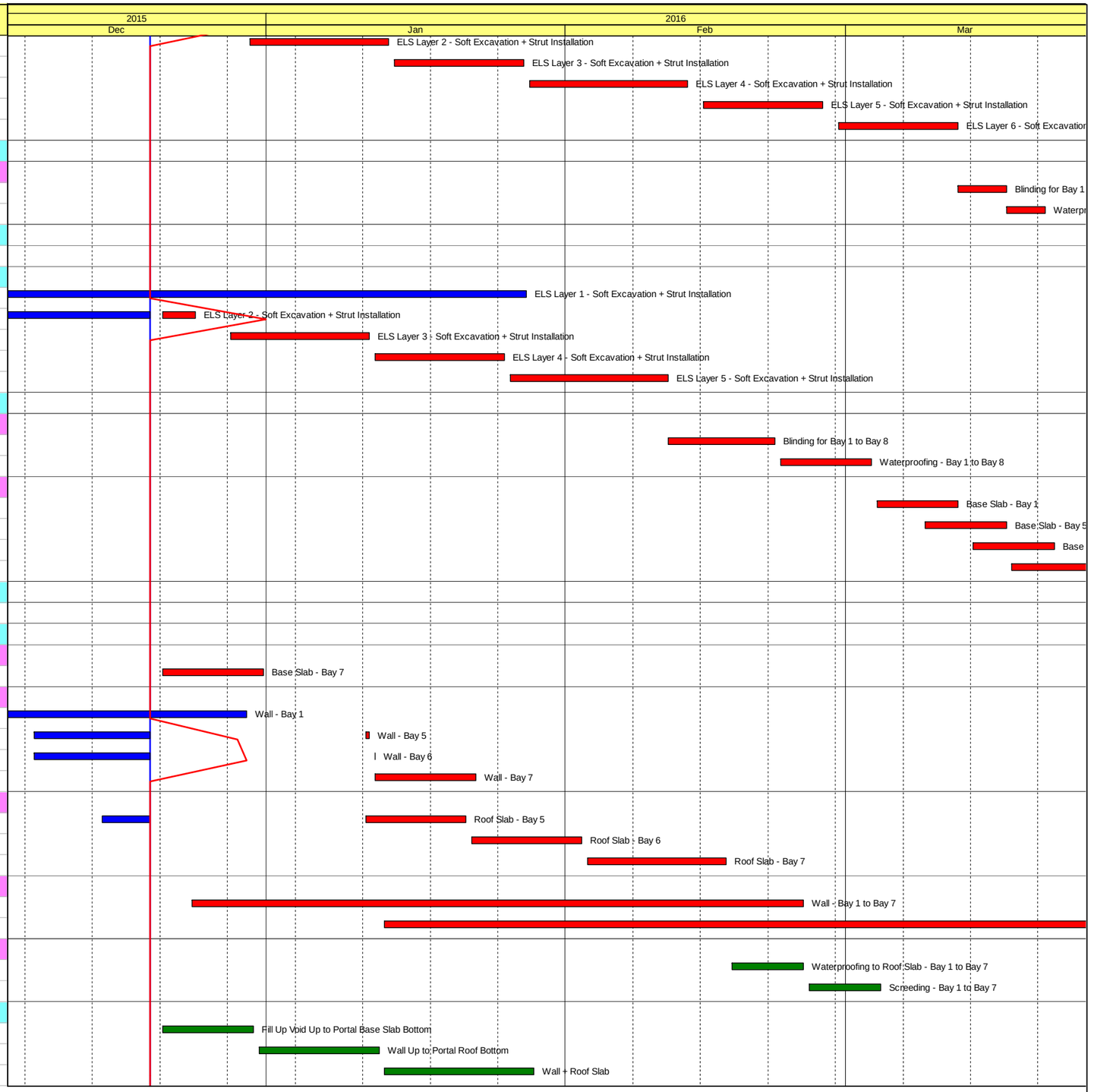
Date	Revision	Checked	Approved
20-Dec-15	Updated to 20th Dec 2015	DML/WC	

Activity ID	Activity Name	Original Duration	Start	Finish
SR8.EB.1621	ELS Layer 2 - Soft Excavation + Strut Installation	12	30-Dec-15	13-Jan-16
SR8.EB.1622	ELS Layer 3 - Soft Excavation + Strut Installation	12	14-Jan-16	27-Jan-16
SR8.EB.1623	ELS Layer 4 - Soft Excavation + Strut Installation	12	28-Jan-16	13-Feb-16
SR8.EB.1624	ELS Layer 5 - Soft Excavation + Strut Installation	12	15-Feb-16	27-Feb-16
SR8.EB.1625	ELS Layer 6 - Soft Excavation + Strut Installation	12	29-Feb-16	12-Mar-16
Structural Works				
Blinding + Waterproofing				
SR8.EB.1630	Blinding for Bay 1 to Bay 4	4	12-Mar-16	17-Mar-16
SR8.EB.1670	Waterproofing - Bay 1 to Bay 4	4	17-Mar-16	21-Mar-16
SR8 West Bound - Ch. 459.000 to 385.000 (Victoria Road / IEC Central Divider)				
Tunnel Ch.459.000 to 385.000 (West Bound) - ELS / CCT/ BF+Reinstatement Works				
West Bound - ELS				
SR8.WB.5080	ELS Layer 1 - Soft Excavation + Strut Installation	12	21-Nov-15 A	28-Jan-16 A
SR8.WB.5130	ELS Layer 2 - Soft Excavation + Strut Installation	12	30-Nov-15 A	24-Dec-15
SR8.WB.5140	ELS Layer 3 - Soft Excavation + Strut Installation	12	28-Dec-15	11-Jan-16
SR8.WB.5150	ELS Layer 4 - Soft Excavation + Strut Installation	12	12-Jan-16	25-Jan-16
SR8.WB.5160	ELS Layer 5 - Soft Excavation + Strut Installation	12	26-Jan-16	11-Feb-16
West Bound - CCT Structural Works				
Blinding + Waterproofing				
SR8.WB.5090	Blinding for Bay 1 to Bay 8	9	11-Feb-16	22-Feb-16
SR8.WB.5230	Waterproofing - Bay 1 to Bay 8	9	23-Feb-16	03-Mar-16
Base Slab + Drainage				
SR8.WB.5180	Base Slab - Bay 1	8	04-Mar-16	12-Mar-16
SR8.WB.5270	Base Slab - Bay 5	8	09-Mar-16	17-Mar-16
SR8.WB.5240	Base Slab - Bay 2	8	14-Mar-16	22-Mar-16
SR8.WB.5280	Base Slab - Bay 6	8	18-Mar-16	30-Mar-16
SR8 Ch.385.000 to Ch.317.500 - (Inside Victoria Park to Tunnel Portal)				
SR8 Tunnel - ELS / CCT / BF Works (7 Bays Ch. 385.000 to Ch.317.500)				
Portal Structure				
Base Slab + Drainage				
SR8.VP.5160	Base Slab - Bay 7	8	21-Dec-15	31-Dec-15
Wall + Removal of Strut				
SR8.VP.5170	Wall - Bay 1	10	21-Oct-15 A	30-Dec-15 A
SR8.VP.5210	Wall - Bay 5	10	08-Dec-15 A	11-Jan-16
SR8.VP.5220	Wall - Bay 6	10	08-Dec-15 A	12-Jan-16
SR8.VP.5230	Wall - Bay 7	10	12-Jan-16	22-Jan-16
Roof Slab				
SR8.VP.5280	Roof Slab - Bay 5	10	15-Dec-15 A	21-Jan-16
SR8.VP.5290	Roof Slab - Bay 6	10	22-Jan-16	02-Feb-16
SR8.VP.5300	Roof Slab - Bay 7	10	03-Feb-16	17-Feb-16
Gallery for EP01				
SR8.VP.5310	Wall - Bay 1 to Bay 7	49	24-Dec-15	25-Feb-16
SR8.VP.5320	Roof Slab - Bay 1 to Bay 7	70	13-Jan-16	11-Apr-16
Roof Slab Waterproofing + Screeding				
SR8.VP.5330	Waterproofing to Roof Slab - Bay 1 to Bay 7	7	18-Feb-16	25-Feb-16
SR8.VP.5340	Screeding - Bay 1 to Bay 7	7	26-Feb-16	04-Mar-16
Pump Sump E				
SR8.VP.5380	Fill Up Void Up to Portal Base Slab Bottom	7	21-Dec-15	30-Dec-15
SR8.VP.5390	Wall Up to Portal Roof Bottom	10	31-Dec-15	12-Jan-16
SR8.VP.5400	Wall + Roof Slab	14	13-Jan-16	28-Jan-16



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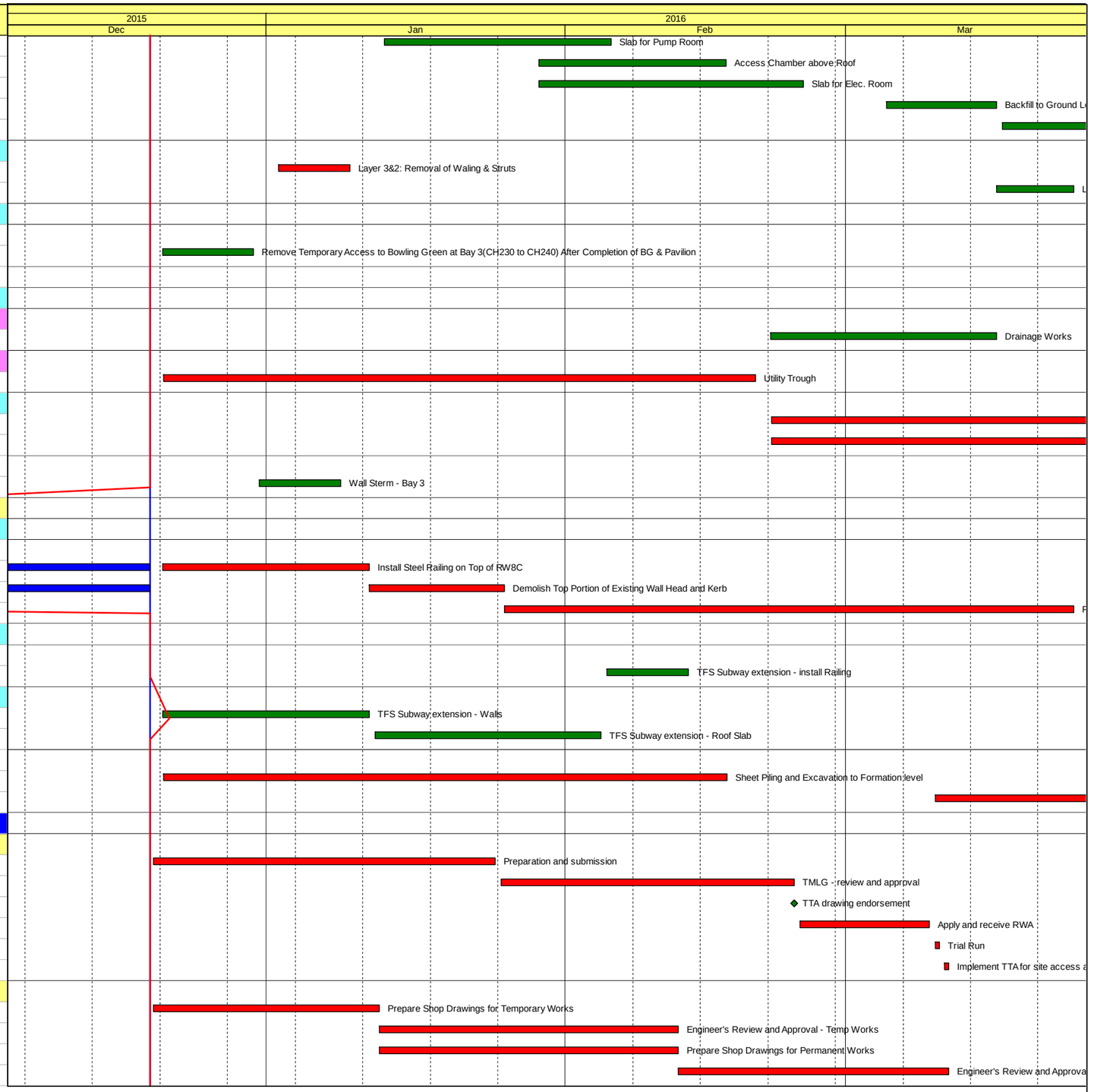
Activity ID	Activity Name	Original Duration	Start	Finish
SR8.VP.5440	Slab for Pump Room	21	13-Jan-16	05-Feb-16
SR8.VP.5410	Access Chamber above Roof	14	29-Jan-16	17-Feb-16
SR8.VP.5450	Slab for Elec. Room	21	29-Jan-16	25-Feb-16
SR8.VP.5420	Backfill to Ground Level	10	05-Mar-16	16-Mar-16
SR8.VP.5430	Construct Two Discharge Manholes	10	17-Mar-16	31-Mar-16
Backfill & Reinstatement Works Including Removal of Strutingss				
SR8.VP.5050	Layer 3&2: Removal of Waling & Struts	7	02-Jan-16	09-Jan-16
SR8.VP.5350	Layer 1: Removal of Waling & Struts	7	16-Mar-16	24-Mar-16
SR8 Ch 317.500 to Ch 210.000 - U-Structure & Slab (Victoria Park)				
Excavation and Lateral Support				
SR8_2320	Remove Temporary Access to Bowling Green at Bay 3(CH230 to CH240) After Completion of BG & Pavilion	7	21-Dec-15	30-Dec-15
RC CCT & Backfill Ch317.5000 to Ch240.000				
Structure				
Wall				
SR8_2120	Drainage Works	21	22-Feb-16	16-Mar-16
Utility Through				
SR8_2050	Utility Trough	48	21-Dec-15	20-Feb-16
Backfill & Reinstatement Works Including Removal of Struts				
SR8_1920	SR8 U structure - Backfilling & Compaction + Removal of Struts & Sheet Pile	60	22-Feb-16	05-May-16
SR8_1920.10	Backfill and Compaction to North side and South side of U- Structure & Remove Struts by layer	60	22-Feb-16	05-May-16
SR8 Structural Slab Ch.240.000 to Ch.210.000				
SR8_2090B	Wall Sterm - Bay 3	7	31-Dec-15	08-Jan-16
Tsing Fung St - RW & Subway Extension & Toe Wall at Hing Fat St				
Ret. Wall & TF Subway Extension (Portion V)				
Retaining Wall RW8C at Tsing Fung Street (Portion V)				
VP_1770	Install Steel Railing on Top of RW8C	14	20-May-15 A	11-Jan-16
VP_1390	Demolish Top Portion of Existing Wall Head and Kerb	18	05-Jun-15 A	25-Jan-16
VP_1400	Road Formation - Subbase + Kerb + U-shape Channel	48	25-Jun-16	24-Mar-16
Retaining Wall + Toe Wall at Hing Fat Street				
Subway Extension at Tsing Fung Street (Portion VIII)				
VP_1375.50	TFS Subway extension - install Railing	8	05-Feb-16	13-Feb-16
East Side				
VP_1375.60.40	TFS Subway extension - Walls	18	21-Dec-15 A	11-Jan-16
VP_1375.60.50	TFS Subway extension - Roof Slab	21	12-Jan-16	04-Feb-16
RC Works - Toe Wall (RW8E)				
VP_6160	Sheet Piling and Excavation to Formation level	45	21-Dec-15	17-Feb-16
VP_6180	Blinding layer	36	10-Mar-16	25-Apr-16
Protection Works for IEC Abutment M				
TTA (Submissions, Approvals and Implementation)				
ABUTM_0910	Preparation and submission	36	20-Dec-15	24-Jan-16
ABUTM_0915	TMLG - review and approval	24	25-Jan-16	24-Feb-16
ABUTM_0920	TTA drawing endorsement	0		24-Feb-16
ABUTM_0925	Apply and receive RWA	12	25-Feb-16	09-Mar-16
ABUTM_0930	Trial Run	1	10-Mar-16	10-Mar-16
ABUTM_0935	Implement TTA for site access and piling works	1	11-Mar-16	11-Mar-16
Design Submissions				
ABUTM_0945	Prepare Shop Drawings for Temporary Works	24	20-Dec-15	12-Jan-16
ABUTM_0955	Engineer's Review and Approval - Temp Works	24	12-Jan-16	12-Feb-16
ABUTM_0965	Prepare Shop Drawings for Permanent Works	24	12-Jan-16	12-Feb-16
ABUTM_0975	Engineer's Review and Approval - Permament Works	24	12-Feb-16	11-Mar-16



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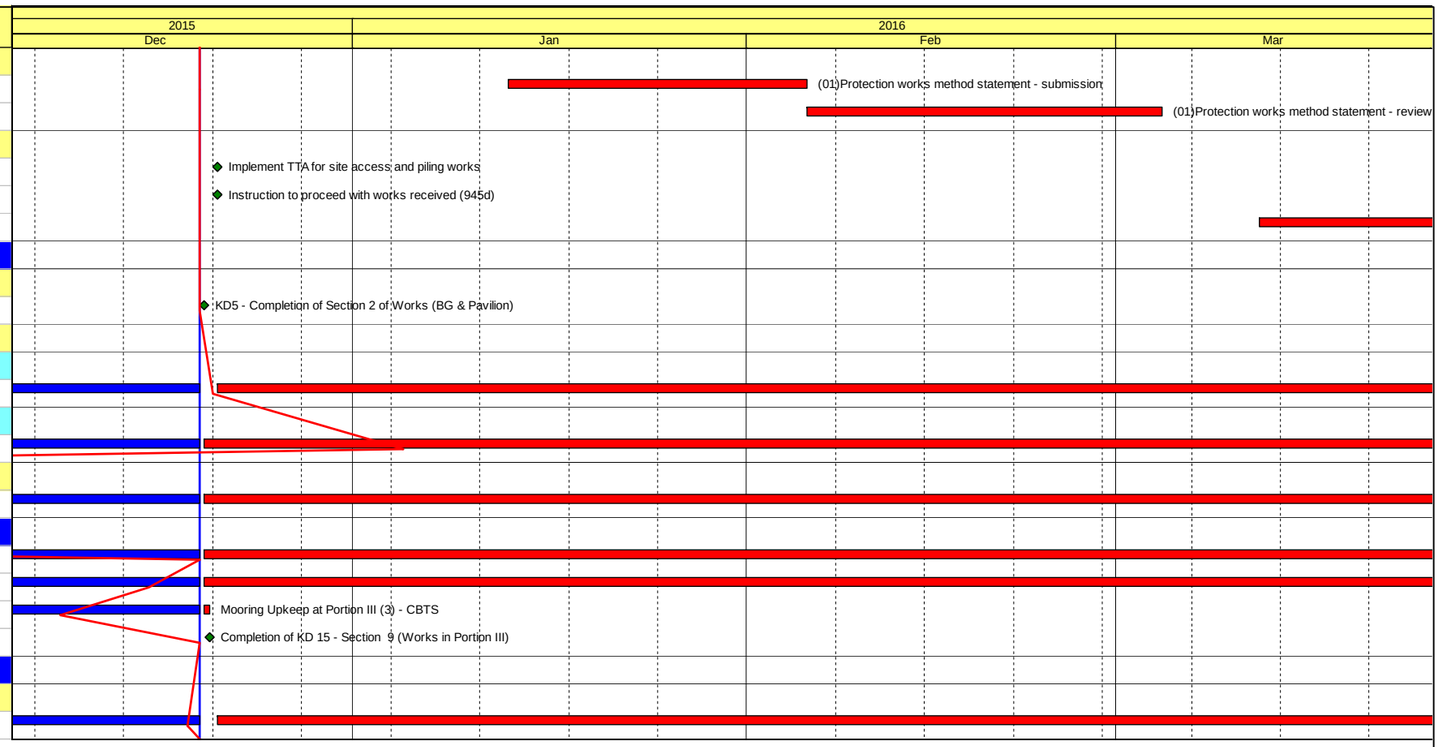
Critical Remaining Work
Milestone

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

Date	Revision	Checked	Approved
20-Dec-15	Updated to 20th Dec 2015	DML/WC	

Activity ID	Activity Name	Original Duration	Start	Finish
Method Statement				
ABUTM_0900	(01)Protection works method statement - submission	24	13-Jan-16	05-Feb-16
ABUTM_0940	(01)Protection works method statement - review and approval by AECOM	24	05-Feb-16	04-Mar-16
Protection Works				
ABUTM_1060	Implement TTA for site access and piling works	0	21-Dec-15	
ABUTM_1000	Instruction to proceed with works received (945d)	0	21-Dec-15	
ABUTM_1020	Pre Bored H-pile at Victoria Rd - mobilization, set up + piling	30	12-Mar-16	20-Apr-16
Works in Victoria Park				
Re-Provisioning Works				
VP_1560	KD5 - Completion of Section 2 of Works (BG & Pavilion)	0		20-Dec-15
Establishment Works for Landscape Softworks				
KD11 - Section 7A: Portion XIV & XV (Victoria Park Open Space)				
EW_1000	Establishment Works - for Landscape Softworks and transplanted trees in Portion XIV & XV	901	23-Feb-15 A	13-Feb-18
KD12 - Section 7B: Portion VI & VII (Reprov. Bowling Green Area)				
EW_1010	Establishment Works - for Landscape Softworks and transplanted trees in Portion VI & VII	365	03-Dec-15 A	02-Dec-16
Preservation and Protection of Trees				
PPT_0000	Preservation and Protection of Existing Trees	1088	21-Mar-13 A	20-Nov-16
Mooring Components Upkeep (CBTS and ATS)				
MAR_2000	Mooring Upkeep at Portion XIX(19) & XX(20) - ATS (if instructed by Engineer)	1399	21-Mar-13 A	17-Jan-17
MAR_3020	Mooring Upkeep at Portion X(10) & XVI(16) - CBTS	979	15-May-14 A	21-Jan-17
MAR_1000	Mooring Upkeep at Portion III (3) - CBTS	574	15-May-14 A	20-Dec-15
MAR_1010	Completion of KD 15 - Section 9 (Works in Portion III)	0		20-Dec-15
Works for Public Works Regional Laboratory (North Lantau)				
Maintenance and Upkeep of New PWRL (Portion XVII)				
PWRL_1050	Maintenance/ Upkeep of New PWRL	1301	19-Jul-13 A	21-Nov-17



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

Actual Work
Remaining Work
Critical Remaining Work
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